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# The Carlisle District Local Plan 2015-2030

## Habitats Regulations Assessment Carlisle District Local Plan 2015-2030 Proposed Submission Draft



Images courtesy of Andrew Paterson, D&H Photographers and Jason Friend

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## **Carlisle District Local Plan 2015 – 2030 (Publication) Habitats Regulations Assessment screening report.**

### **1.0 Introduction**

- 1.1 Carlisle City Council has produced a proposed submission draft (Publication) Local Plan, (the Carlisle District Local Plan 2015 – 2030) (referred to throughout this document as the ‘Local Plan’). The Local Plan contains strategic policies for growth, detailed development management policies and allocations of land for development. When adopted, the Local Plan will form the Council’s statutory policy framework for planning, and will shape and guide future development to 2030.
- 1.2 The Conservation of Habitats and Species Regulations 2010 provide for the designation and protection of European sites. Under the Regulations, competent authorities have a general duty, in the exercise of any of their functions, to have regard to the EC Habitats Directive, (the Council Directive 92/43/EEC on the Conservation of Natural Habitats and of the Wild Flora and Fauna). The HRA of plans is undertaken in stages (as described below) and should conclude whether or not a proposal or policy in a plan would adversely affect the integrity of any relevant European site. This is judged in terms of the implications of the plan for a site’s qualifying features (i.e. those Annex I habitats, Annex II species, and Annex I bird populations for which it has been designated) and are measured with reference to the conservation objectives for those qualifying features as defined by Natural England.
- 1.3 The Local Plan has evolved from an initial core strategy (which underwent both a ‘key issues’ and an ‘issues and options’ stage), to a full Local Plan which has involved a two stage preferred options version, leading to the current proposed submission draft Local Plan. The HRA represents the screening stage of the process to determine whether the Local Plan is likely to have a significant effect on a European site. The HRA has been updated at each stage of the Local Plan to take account of changes to the Plan such as deleted or amended or new policies and site allocations. The HRA has also been made available for consultation alongside the Local Plan at each stage.
- 1.4 The proposed submission draft version of the Local Plan represents that considered by the local planning authority to be ‘sound’, which means that the Local Plan must meet the following tests:
- positively prepared – the plan should be prepared based on a strategy which seeks to meet objectively assessed development and infrastructure requirements;

- justified – the plan should be the most appropriate strategy, when considered against the reasonable alternatives, based on proportionate evidence;
- effective – the plan should be deliverable over its period and based on effective joint working on cross boundary strategic priorities; and
- consistent with national policy – the plan should enable the delivery of sustainable development in accordance with the policies in the NPPF.

## 2.0 Consultation

- 2.1 The HRA has been an ongoing process carried out for all stages of the Local Plan preparation, and has helped inform each stage of evolving policy. For the preferred options (stage 2) version of the Local Plan, Natural England agreed with Carlisle Council's conclusion that stages 2 and 3 of the Habitats Regulations Assessment, requiring a full Appropriate Assessment, was not required. This was accompanied by the proviso that it does not remove the need for consideration of Habitats Regulations Assessment screening for schemes and projects which may be adjacent to or in close proximity to Natura 2000 sites, should they be proposed.
- 2.2 Prior to this, and pre-publication of the National Planning Policy Framework (NPPF), the Council undertook a first draft HRA of the Issues and Options stage of the then Core Strategy. (Post NPPF the Council made a decision to produce a full Local Plan). The approach taken in the first draft was endorsed by Natural England who commended the proactive approach of considering the requirements of the Regulations during the early stages of the development of the plan.
- 2.3 This report sets out the next stage of the HRA process for the Local Plan. The aim of the report is to show that the plan making process complies with the Habitats Directive, identifies any policies and proposals that are likely to have a significant effect on European Site(s) and ensure that policies within the Plan avoid any likely significant effect on European sites.
- 2.4 The Habitats Regulations require that the appropriate nature conservation statutory body is consulted (Natural England). In addition the Council has consulted Scottish Natural Heritage as the District borders Scotland, and the Solway Firth SAC/SPA and Upper Solway Flats and Marshes SPA and Ramsar site lies partially within Scotland. The HRA is also available for wider public consultation. Any responses received will be submitted to the Secretary of State for Communities and Local Government together with the Local Plan and accompanying documents. These comments will then be taken into account during an examination by an appointed independent Inspector. Details of any responses made will be made publicly available.
- 2.5 Comments on the HRA can be made as follows: by e-mail to [lpc@carlisle.gov.uk](mailto:lpc@carlisle.gov.uk)  
By post to – Investment and Policy Team,  
Carlisle City Council,  
Civic Centre, Carlisle, CA3 8QG.

### 3.0 Methodology

3.1 Notwithstanding the legal requirements prescribed in the Habitats Directive and transposed in the Regulations, there is no standard methodology published by either DCLG or Natural England for how HRA should be carried out. Therefore this document has had regard to ‘Habitats Regulations Appraisal of Plans: Guidance for Plan-Making Bodies in Scotland’ (August 2012), produced for Scottish Natural Heritage (SNH). Whilst the SNH guidance is aimed at all types of plans, the methodological process of assessing the policies and proposals in a plan are applicable to a local plan. The guidance includes the following stages:

- *evidence gathering*: collecting information on the European sites within and outside the Plan area (including their characteristics and conservation objectives), and other relevant plans or projects;
- *screening*: this stage is not a single stage in the preparation of the Plan. It is a stage that is likely to need repeating, for example as the Plan changes through the consultation process, and perhaps again towards the end of the Plan making process when modifications are considered for inclusion after the examination of the Plan;
- *if necessary, appropriate assessment*: this stage will be carried out if the screening stage finds likely significant effects on European sites of a particular policy option or part of the Plan. The Appropriate Assessment will be of the implications of the particular policy or allocations in the Plan for the European site in view of the site’s conservation objectives;
- *mitigation measures and alternative solutions*: if a policy option or part of the Plan has been found to have adverse effects on the integrity of a European site, the option will normally require modification until the adverse effects are cancelled out or sufficiently reduced;
- if the likely impacts identified during the screening stage are considered unlikely to have a significant impact on a European site, Appropriate Assessment and other subsequent stages will not be needed. The Boggis\* judgement in the Court of Appeal ruled that there should be:

*“...credible evidence that there was a real, rather than a hypothetical, risk”.*

- 3.2 What the HRA therefore concentrates on is assessing those aspects of the Plan that could, realistically, be likely to have a significant effect.<sup>1</sup>
- 3.3 The HRA has evolved to inform each stage of the Local Plan from the start of the process to the current Publication version in order to be compliant with the Habitats Regulations. The current HRA provides an assessment of the Local Plan in its most up-to-date form.

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<sup>1</sup> Peter Charles Boggis and East Bavants Conservation v Natural England and Waveney District Council, High Court of Justice Court of Appeal case C1/2009/0041/QBACF 20<sup>th</sup> October 2009.

#### 4.0 Deciding whether a plan should be subject to Habitats Regulations Assessment

- 4.1 The first stage in the appraisal process is to establish whether the relevant plan should be subject to a HRA.
- 4.2 Regulation 102 of the Conservation of Habitats and Species Regulations 2010 (the Habitats Regulations) requires local planning authorities to undertake a Habitats Regulations Appraisal for all land use plans. The Local Plan is a land use plan that will be subject to such an assessment.
- 4.3 The Regulations require that any potential effects on European sites arising out of the implementation of policies and proposals in a land use plan are considered in an iterative process from the earliest stage of plan making.
- 4.4 The HRA is required to ensure the protection of sites identified under the Natura 2000 network as sites of exceptional importance in respect of rare, endangered or vulnerable natural habitats and species within the European community. These sites are collectively known as European sites and European Offshore Marine Sites. They consist of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). As a matter of policy the Government expects listed Ramsar sites to be assessed as if they were fully designated European sites.
- 4.5 The purpose of an HRA is to ensure that the proposals of any plan or project, or the cumulative effect of a number of plans or projects, will not adversely affect the integrity of any European sites. The 'integrity' of the site is defined in ODPM Circular 06/2005: (Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System) as *the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or levels of populations of species for which it was classified.*
- 4.6 Article 6(3) of the Habitats Directive requires that any plan or project which is not directly connected with, or necessary to the management of, a European site, but would be likely to have a significant effect on such a site, either individually or in combination with other plans and projects, shall be subject to an 'appropriate assessment' of its implications for the European site in view of the site's 'conservation objectives'. An Appropriate Assessment is only one particular stage in the process of Habitats Regulations Appraisal.

- 4.7 Not all of the policies and site allocations will reach the stage of Appropriate Assessment, because many of the policies and allocations would not be likely to have a significant effect on a European site.
- 4.8 The purpose of the HRA is to determine whether or not significant effects are likely and to suggest ways in which they could be avoided. An effect is significant if it could adversely affect the integrity of the site in terms of its nature conservation objectives. Where potential negative effects are identified, other policy options should be examined to avoid any potential damaging effects. The appraisal is therefore carried out having regard to the conservation objectives for which a European site has been designated, and its integrity in relation to its ability to support those objectives.

## 5.0 Identifying European Sites that should be considered in the HRA

5.1 As part of the process, the HRA identifies the European sites that should be considered in the appraisal, both within and adjacent to Carlisle District.

5.2 It is important to ensure that all sites that are potentially affected are considered as part of the appraisal, but it has been equally important to avoid excessive data gathering about sites that are not likely to be affected. European sites that meet the following criteria have therefore been identified for the purposes of this HRA:

- sites within the Local Plan area;
- sites upstream or downstream of the River Eden SAC;
- peatland and other wetland sites with hydrological links to the Local Plan area;
- sites with significant ecological links, for example sites used by migratory birds, which may be outside the Plan area but link with sites in the Plan area;
- sites within a reasonable travel distance of the Plan area that may be affected by local recreational or other visitor pressure from within the Plan area, (for example sites which are also National Nature Reserves);
- sites that are used for, or could be affected by, water abstraction, for example the River Eden at Cumwhinton Water Treatment Works at Wetheral Pastures;
- sites used for, or affected by, discharge of effluent from wastewater treatment works, e.g. the River Eden in Carlisle (Willowholme Sewage Works);
- sites that could be affected by transport or other infrastructure;
- sites that could be affected by increased deposition of air pollutants arising from the proposals, including emissions from significant increases in traffic; and
- sites that are part of a coastal ecosystem.

5.3 The following is a list of European sites within or partially within the Local Plan boundary:

- Upper Solway Flats and Marshes Ramsar;
- Upper Solway Flats and Marshes SPA;
- Solway Firth SAC;

- River Eden SAC;
- Border Mires, Kielder-Butterburn SAC;
- Irthinghead Mires Ramsar;
- North Pennines Moors SAC;
- North Pennine Moors SPA;
- North Pennine Dales Meadow SAC; and
- Walton Moss SAC.

5.4 The following sites lie outside the Carlisle District boundary.

- Moorhouse-Upper Teasdale SAC;
- Roman Wall Loughs SAC;
- Langholm-Newcastleton Hills SPA;
- Raeburn Flow SAC;
- South Solway Mosses SAC; and
- Tyne and Allen River Gravels SAC.

5.5 However, these sites have been screened out of further consideration as there is no realistic pathway linking them to development likely to arise as a result of the delivery of the Local Plan. Pathways can include water, air, direct land take, habitat/species disturbance and increased recreation pressure. The EA has advised that most operations with the potential of causing direct water and/or air pollution impacts that are located more than 5 km from the boundary of a European site are considered very unlikely to have a significant effect on the special interest of that site.

5.6 Definitions:

- A Special Area of Conservation (SAC) is an area which has been given special protection under the European Union's Habitats Directive. SACs provide increased protection to a variety of wild animals, plants and habitats and are a vital part of global efforts to conserve the world's biodiversity.

- A Special Protection Area (SPA) is an area of land, water or sea which has been identified as being of international importance for the breeding, feeding wintering or the migration of rare and vulnerable species of birds found within the European Union. SPAs are European designated sites, classified under the European Wild Birds directive which affords them enhanced protection.
- A Ramsar Site is a wetland of international importance, designated under the Ramsar convention.

## 6.0 Information gathering about the European Sites

- 6.1 This stage has involved obtaining, examining and understanding the citation (or equivalent document) and map of each European site and the conservation objectives for each qualifying interest of each site potentially affected. In addition the site vulnerabilities have been recorded, together with any available information on the condition of each site.
- 6.2 This information has been gathered from the Joint Nature Conservation Committee (JNCC) (statutory advisor to UK government), Natural England and Scottish Natural Heritage. Many of the conservation objectives are generic information from the natural England web-site, as more detailed site specific objectives were not available. This information is contained within Table 1 in Appendix 1.

## 7.0 The Screening Process

- 7.1 A key part of the Habitats Regulations Assessment is the 'screening process'. This determines whether an 'appropriate assessment' is required. It is important to remember that an 'appropriate assessment' is only required where the plan making body determines that the plan is likely to have a significant effect on a European site, either alone or in combination with other plans or projects.
- 7.2 In screening the Local Plan, it is important to be aware of the nature of the Plan. The Plan sets out a spatial portrait of the District which describes what the area is like now, and identifies the key economic, social and environmental characteristics of both the rural and urban parts of the area. It also sets out the Council's planning policies in the following areas:
- Spatial Strategy and Strategic Policies;
  - Economy;
  - Housing;

- Infrastructure;
- Climate Change and Flood Risk;
- Health, Education and Community;
- Historic Environment;
- Green Infrastructure.

- 7.3 The Local Plan also sets out allocations of land for housing and other development. The level and scope of detail regarding development that will be delivered as part of the Local Plan strategy, and therefore guided by its policies, is unknown at this stage, and it is therefore not possible to make a detailed assessment of the significance of effects on European sites beyond a basic assessment of level of risk.
- 7.4 The purpose of this screening is to identify whether, and if so which, aspects of the Plan should be subject to further appraisal, because they would be likely to have a significant effect on one or more European sites, taking account of mitigation measures which can be incorporated into the Plan as part of the appraisal process.
- 7.5 Interpretation of a likely significant effect – a likely effect is one that cannot be ruled out on the basis of objective information. The test is a ‘likelihood’ of effects rather than a ‘certainty’ of effects. In case law (Waddenzee) it has been ruled that a project should be subject to appropriate assessment *“if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site, either individually or in combination with other plans and projects”*. Therefore ‘likely’ for the purpose of this appraisal has been interpreted as meaning whether a significant effect can objectively be ruled out.
- 7.6 The European Commission in its own guidance on the application of the test of whether a policy is likely to have a ‘likely significant effect’ accepts that policies in a plan that are no more than general policy statements or which express the general political will of an authority can not be likely to have a significant effect on a site (EC 2000 Managing Natura 2000 Sites: the provision of article 6 of the Habitats Directive 92/43/EEC section 4.3.2).
- 7.7 Therefore a policy is likely to have a significant effect if it may reasonably be predicted to affect the conservation objectives of the features for which a European site was designated. Determining whether there would be a likely significant effect does not imply that there will be such an effect.

7.8 The following table records the categories which have been used to screen the policies and proposals of the Local Plan.

**Table 1 – policies screened out as not likely to have a significant effect on a European site**

Aspects of the Local Plan which would <u>not</u> be likely to have a significant effect on a European site.	Identified parts of the Local Plan
<p>General policy statements:</p> <p>The policies listed are general policy statements or aspirations for growth either across the district, or in more specific locations such as Carlisle City Centre, and have been screened out of the appraisal because they are unlikely to have a significant effect on a European site.</p>	<p>Vision; Objectives;            Policy SP 1 – Sustainable Development;            Policy SP 2 – Strategic Growth and Distribution;            Policy SP 4 – Regeneration and Strategic Retail in the City Centre and Botchergate;            Policy SP 5 – Sustainable Transport;            Policy SP 9 – Healthy and Thriving Communities;            Policy SP 10 – Supporting a Skilled and Prosperous Workforce;            Policy CC 3 – Energy Conservation, Efficiency and Resilience;</p>
<p>Parts of the Local Plan excluded from the appraisal because they are not proposals generated by this Plan:</p> <p>This section screens out references to other plans and strategies, and specific proposals for projects referred to in, but not proposed by, the Local Plan.</p>	<p>Para 5.29 – Cumbria County Council ‘Extra Care Housing Strategy 2011-2029’.            Para 5.87 - Cumbria County Council ‘Adult Social Care in Carlisle District Plan 2012-14’            Elements of Policy SP 5 – Sustainable Transport, which relate to the Cumbria Local Transport Plan;            Elements of Policy IP 6 – Foul Water Drainage on Development Sites, which relate to the future development of Wetheral and Great Corby treatment works by United Utilities.            Policy CC 2 – Energy from Wind para 7.4 Cumbria County Council ‘Cumbria Renewable Energy Capacity and Deployment Study Sept 2011’.</p>

<p>Policies in the Local Plan which protect the natural environment, including biodiversity, or conserve or enhance the natural, built or historic environment:</p>	<p>Policy SP 7 – Valuing our Heritage and Cultural Identity  Policy SP 8 – Green and Blue Infrastructure;  Policy CM 5 – Environmental and Amenity Protection;  Policy HE 1 – Hadrian’s Wall World Heritage Site;  Policy HE 3 – Listed Buildings;  Policy HE 4 – Historic Parks and Gardens;  Policy HE 5 – Historic Battlefields;  Policy HE 6 – Locally Important Heritage Assets;  Policy HE 7 – Conservation Areas;  Policy GI 1 – Landscapes;  Policy GI 2 – Areas of Outstanding Natural Beauty;  Policy GI 3 – Biodiversity and Geodiversity;  Policy GI 4 – Public Open Space;  Policy GI 5 – Public Rights of Way;  Policy GI 6 – Trees and Hedgerows.</p>
<p>Policies in the Local Plan which will not themselves lead to development or other change:</p> <p>This section screens out policies because they relate to design or other qualitative criteria for development or other kinds of change.</p>	<p>Policy SP 6 – Securing Good Design;  Policy HO 4 – Affordable Housing;  Policy IP 2 – Transport and Development;  Policy IP 4 – Broadband Access;  Policy IP 5 – Waste Minimisation and the Recycling of Waste;  Policy IP 6 – Foul Water Drainage on Development Sites;  Policy IP 8 – Planning Obligations;  Policy CC 4 – Flood Risk and Development;  Policy CC 5 – Surface Water Management and Sustainable Drainage Systems;  Policy CM 3 – Sustaining Community Facilities and Services;  Policy CM 4 – Planning out Crime.</p>
<p>Policies in the Local Plan which promote development that could not have any conceivable effect on a European site:</p> <p>This section screens out policies because there is no link or pathway between them and the qualifying interests, or would not otherwise undermine the conservation objectives for the site</p>	<p>Policy EC 3 – Primary Shopping Areas and Frontages;  Policy EC 5 – District and Local Centres;  Policy EC 7 – Shop Fronts;  Policy EC 8 – Food and Drink;  Policy HO 9 – Large Houses in Multiple Occupation and the Subdivision of Dwellings;  Policy IP 3 – Car Parking.</p>

<p>Policies for which effects on any particular European site can not be identified, because the policy is too general:</p> <p>This section screens out policies where it is not known where, when or how the aspect of the Plan may be implemented, or where any potential effects may occur, or which European sites, if any, may be affected.</p> <p>This section includes general, topic related policies, listing general criteria against which planning applications will be judged.</p>	<p>Policy EC 9 – Arts, Culture, Tourism and Leisure Development;  Policy EC 10 – Caravan, Camping and Chalet Sites;  Policy EC 11 – Rural Diversification;  Policy HO 3 – Housing in Residential Gardens;  Policy HO 6 – Other Housing in the Open Countryside;  Policy HO 7 – Housing as Enabling Development.  Policy HO 8 – House Extensions;  Policy HO 10 – Housing to Meet Specific Needs;  Policy HO 12 – Other Uses in Primary Residential Areas;  Policy IP 1 – Delivering Infrastructure;  Policy CM 1 – Health Care Provision;  Policy CM 2 – Educational Needs;  Policy CM 6 – Cemetery and Burial Ground Provision.</p>
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- 7.9 Table 2 below sets out a number of policies which could have the potential to result in significant effects on a European site as the policies promote development of a specific type in a specific location. This enables a more accurate assessment of the effects of the proposals, and more specific mitigation can be advised. The aim of this part of the process has been to apply mitigation measures within the draft Local Plan at the screening stage to avoid likely significant effects.
- 7.10 Policy GI 3 provides overarching protection to European sites as it states that development which would adversely affect or harm the integrity of such sites will be resisted except in exceptional circumstances. However, in line with good practice it is not appropriate to rely entirely on this policy to ensure that the Local Plan meets the requirements of the Habitats Directive. Therefore Local Plan specific mitigation measures are required for some policies in order to ensure that the integrity of European sites is protected. Mitigation and avoidance measures are further expanded upon after Table 2.

**Table 2 – Policies requiring further explanation before being screened out, or where mitigation measures are proposed.**

<p>Remaining aspects of the Local Plan which require more detailed assessment or further information to eliminate the likelihood of a significant effect on a European site.</p> <p>Identified parts of the Local Plan:</p>	<p>Potential Impacts on European Sites:</p>	<p>Mitigation measures proposed; or</p> <p>Objective information provided to enable policy to be screened out:</p>	<p>Screened In/Out</p>
<p>Policy SP 3 – Broad Location for Growth: Carlisle South</p> <p>This policy makes provision for development from 2025 onwards in a broad location to the south of Carlisle. The development is focused on housing, but supporting infrastructure will be required such as schools, employment, retail, open space etc.</p>	<p>The River Caldew (part of the River Eden SAC) passes through the broad location in a south to north direction before it joins the River Eden in Carlisle.</p> <p>Likely impacts of development in this location will vary with distance from the river environment. There will be no direct land take of the European site, as land either side lies in a flood zone. However, other impacts are likely to include:</p> <ul style="list-style-type: none"> <li>• recreational impacts; there are existing public rights of way along both sides of the River Caldew;</li> <li>• water quality impacts; diffuse pollution, run-off, changes in nutrient levels;</li> <li>• atmospheric pollution impacts; growth in road traffic.</li> </ul>	<p>Carlisle South is a broad location for growth that is not projected to be delivered until after 2025. The development of this area will be in accordance with a masterplan which will aim to:</p> <ul style="list-style-type: none"> <li>• provide more detail on how the strategic requirements set out in this policy will be delivered;</li> <li>• set a framework to guide the preparation of future planning applications;</li> <li>• provide a framework against which future planning applications will be assessed;</li> <li>• enable and support the co-ordination and timely delivery of infrastructure provision;</li> <li>• facilitate the delivery of land release to help address the imbalance of employment land between the north and south of the city.</li> </ul> <p>A Habitats Regulations Assessment of the Masterplan and the subsequent Local Plan will be required which will detail the potential impacts, and determine the most effective mechanism for avoiding or mitigating those</p>	<p>Addressed in Masterplan</p> <p>Masterplan will inform a specific Local Plan for the area.</p>

<p>Policy SP 3 continued.</p>		<p>effects. The HRA and proposed mitigation will cover the following areas:</p> <p>Recreational impacts</p> <ul style="list-style-type: none"> <li>• gather information on patterns and levels of recreational activity to understand how people use and value the environment around the River Caldew, so that impacts on the site can be more easily established;</li> <li>• aim to establish recreation trends from monitoring, and predict recreational impacts on site, i.e. dog walking, fishing, swimming;</li> <li>• produce guidance and interpretation for users of the footpaths adjacent to the site. Such guidance to highlight both the biodiversity importance of the site, and the potential impacts, therefore help users to understand impacts and encourage responsible behaviour;</li> <li>• provide information to help inform site managers and landowners;</li> <li>• aim to build a sense of identity for the River Caldew and build a sense of identity and why it is important;</li> <li>• provide attractive alternatives – new open space and other green infrastructure within the growth area to dilute recreational impacts on the River Caldew.</li> </ul> <p>Water quality impacts:</p> <ul style="list-style-type: none"> <li>• significant areas either side of the River Caldew are flood zone and will therefore not be allocated for any form of development;</li> <li>• Cumbria Coast railway line runs close to River</li> </ul>	
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<p>Policy SP 3 continued.</p>		<p>Caldew from Dalston to Carlisle. This line would require a buffer therefore further excluding areas from development;</p> <ul style="list-style-type: none"> <li>• Sustainable urban drainage systems to be used on development sites in accordance with Policy CC 5 (Surface water management and sustainable drainage systems);</li> <li>• each parcel of development within the overall growth area to be subject to a construction environment management;</li> </ul> <p>Atmospheric pollution impacts:</p> <ul style="list-style-type: none"> <li>• strategic Policy SP 5 Strategic Connectivity aims to increase the provision for walking and cycling, including improved connectivity across the district. Policy also aims to retain and enhance public transport services, and secure a modal shift in the transport of freight from road to rail;</li> <li>• the implementation of these measures will mitigate or offset any increase in atmospheric pollution and should lead to gradual improvements in air quality;</li> <li>• the masterplanning process as a whole and proposals for individual site developments within the wider area will be required to demonstrate evidence of likely impacts and mitigation measures by submitting an air quality impact assessment. Depending on the conclusions of the impact assessment it may be necessary to proceed to a detailed assessment should the predicted impacts be sufficient to warrant further detailed investigation;</li> <li>• since the opening of the western bypass in February 2012 there has been an overall</li> </ul>	
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<p>Policy EC 1 – Employment Land Allocations:</p> <p>This policy makes provision for specific sites to be developed for employment uses over the Plan period, at Brunthill and Morton.</p>	<p>The allocation at Morton is crossed by Fairy Beck, a tributary of the River Eden SAC.</p> <p>The allocation at Brunthill lies 1.5km from the River Eden SAC.</p> <p>Potential impacts could arise from reduced air quality through increased commuting or freight, which passes within 200m of the River Eden SAC. Both allocations have good accessibility to the western bypass which crosses the River Eden at Knockupworth.</p> <p>Both these allocations already have the benefit of planning permission.</p>	<p>reduction in nitrogen dioxide levels along the A7 within the City. Assessment also shows that the opening of this road has had a significant positive impact on air quality on the A595;</p> <ul style="list-style-type: none"> <li>• Policy SP 3 makes provision for the future development of a southern relief road linking junction 42 of the M6 with the southern end of the A 689.</li> </ul> <p>Both these sites already have the benefit of planning permission as follows:</p> <p>Brunthill 09/0170 B1, B2 and B8 development with associated infrastructure and minor relocation of previously consented hotel and pub/restaurant; 11/0484 renewal for proposed hub development, small scale retail/cafe, crèche, restaurant, pub, petrol filling station, B1 offices, infrastructure, servicing and parking. Natural England supported the approach that had been adopted to safeguard the biodiversity both on and outwith the site.</p> <p>Morton: 09/0413 application including 40 000 sq m of employment floorspace. The application included an Environmental Statement. Natural England were involved in the evolution of the ES and had no outstanding objections.</p> <p>If these permission are not implemented and further applications are received the following will apply:</p> <p>If planning applications are approved in accordance with all relevant Local Plan policies, including in particular GI 3, it is clear that no development will be permitted which may have an adverse effect on the integrity of a European site.</p> <p>Development would be unlikely to have a significant effect on the interest features of the SAC provided that a</p>	<p>Out</p>
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		<p>planning condition is imposed on any application that required a 'Construction Environmental Management Plan' (CEMP). The CEMP would include bio-security measures to prevent the introduction of disease and invasive species into the nearby watercourses, and comprehensive measures to protect the water quality of the River Eden catchment.</p>	
<p>Policy EC 2 – Primary Employment Areas:</p> <p>This policy makes provision for B1, B2 and B8 uses within existing areas defined as being for primary employment purposes. Whilst there will be some change of use applications with no potential for impact on a European site, the policy also makes provision for redevelopment of land and buildings.</p> <p>Primary Employment Areas are located at Kingstown Industrial Estate, Kingmoor Park, Rosehill Industrial Estate, Durranhill Industrial Estate, Pirelli's on Dalston Road, Newtown Industrial Estate, Willowholme and various locations within or close to Denton Holme.</p> <p>Within the rural area Primary Employment Areas are indicated in</p>	<p>Primary Employment Areas are located mainly in Carlisle and all lie within 1km of either the River Petteril, which flows into the River Eden SAC, the River Caldew, (part of the River Eden SAC), or the River Eden itself, with potential secondary effects to the Solway Firth SAC, Upper Solway Flats and Marshes Ramsar and Upper Solway Flats and Marshes SPA. Within Longtown there are three main Primary Employment Areas, including the livestock auction mart, which lies immediately adjacent to the River Esk, which flows into the Solway Firth SAC, Upper Solway Flats and Marshes Ramsar and SPA.</p> <p>Within Brampton there is one main Primary Employment Area, Townfoot Industrial Estate. This site drains into Brampton Beck which is a tributary of the River Irthing, which is part of the River Eden SAC.</p> <p>Site features which are sensitive to air pollution are as follows:</p> <ul style="list-style-type: none"> <li>- white clawed crayfish;</li> <li>- sea lamprey;</li> <li>- brook lamprey;</li> <li>- river lamprey;</li> </ul>	<p>Policy CC5 ensures that sufficient pollution prevention measures are included in the detailed surface water drainage plans, and employed on site both during the construction period, and on completion of the development. In particular the policy requires a drainage strategy to be submitted which should detail pollution prevention and water quality treatment measures with details of pollutant removal capacity. On greenfield sites applicants are required to demonstrate that the likely natural discharge after development will be no greater than the existing discharge rate. On brownfield land, applicants are expected to target a reduction in surface water discharge.</p> <p>The justification to the policy recognises that Suds can help to prevent the settlement of contaminants such as dust, oil litter and organic matter.</p> <p>This policy therefore ensures that potentially contaminated runoff is intercepted via SUDs ponds so that only clean runoff enters watercourses;</p> <p>Mitigation measures during construction would include temporary facilities to prevent dirty water flowing off site.</p> <p>The identified impacts can be mitigated by ensuring that</p>	<p>Out</p>

<p>Brampton. Longtown and Dalston, together with a number of smaller locations in the open countryside which have historic employment use rights.</p>	<ul style="list-style-type: none"> <li>- Atlantic salmon;</li> <li>- Bullhead;</li> <li>- Otter.</li> </ul> <p>The types of industries with the potential to lead to an increase in air pollution are as follows:</p> <ul style="list-style-type: none"> <li>- electrical generating industries;</li> <li>- factories that use large industrial air conditioners;</li> <li>- meat or dairy producing plants;</li> <li>- the timber industry;</li> <li>- cement and concrete production;</li> <li>- aluminium and steel production;</li> <li>- plants that synthesize plastics or make other chemicals;</li> <li>- any industry with the potential to generate large amounts of traffic.</li> </ul> <p>Potential impacts both during construction and operation phases could include:</p> <p>Air pollution – temporary local air pollution during construction and potential increase in emissions once development is completed if end use is more intensive than original use in terms of traffic movement.</p> <p>Water pollution – potential pollution of local water courses from e.g. fuel residue or increased surface water run-off.</p> <p>Habitats and species damage/disturbance – potential for increased noise during construction, increased artificial light both during construction and on completion.</p>	<p>sustainable methods of surface drainage are used, by requiring developers to include SUDS in new developments to mitigate against localised flooding, promote water conservation and help protect water quality, by controlling pollution from urban run-off. Contaminated water would be expected to drain to a foul sewer or to a storage tank, and clean rainwater would have to be kept separate.</p> <p>In addition to this developers will be required to achieve pre-development greenfield surface water run-off rates when developing greenfield sites, (there are a limited number of greenfield sites within the Primary Employment Area at Kingmoor Park, and Longtown), and a betterment (i.e. improvement of the current situation) on brownfield sites.</p> <p>There are no water supply issues in the district, and only limited issues with waste water treatment capacity. The Council works closely with United Utilities and the Environment Agency to ensure that clean water supply and waste water issues are adequately addressed. UU currently advise that there are two locations within the District with potential capacity issues with waste water treatment (Dalston and Wetheral). There are no Primary Employment Areas within Wetheral, and the identified areas within Dalston are fully developed and operational, with no current know proposals for redevelopment. Ongoing dialogue with UU indicates that there is available headroom at the treatment works.</p> <p>Policy IP 6 – Foul Water Drainage on Development Sites ensures that foul and surface water drainage will be managed through two different systems, and that the quality of groundwater and surface water, and associated water based recreation, fishers and biodiversity will be protected against the risk of pollution.</p>	
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<p>Policy EC 6 – Retail and Main Town Centre Uses Outside Defined Centres.</p> <p>This is a criteria based policy which makes provision for retail proposals outside the city centre and other town and defined centres only in certain controlled circumstances.</p>	<p>The location of any potential developments arising from this policy are unknown, although in the first instance retail proposals are directed to city, district and local centres.</p>	N/A	Out
<p>Policy EC 4 – Morton District Centre:</p> <p>This policy makes provision for a foodstore with a capacity of 8175sq m, on a specifically allocated site at Morton.</p> <p>The site already has the benefit of planning permission and the Policy simply safeguards that permission. Natural England was consulted on the planning application and their comments are recorded in column 3.</p>	<p>Fairy Beck which is a tributary of the River Eden SAC, lies 200m to the south of the site.</p>	<p>The allocation has planning permission for a foodstore with a capacity of 8 175 sq m. As part of the application, Natural England (NE) was consulted as Fairy Beck lies 200 m to the south of the site.</p> <p>NE (as a consultee on the application) confirmed that in its opinion the proposal would be unlikely to have a significant effect on the interest features of the SAC provided that there was a planning condition imposed that required a 'Construction Environmental Management Plan' (CEMP). The CEMP must include bio-security measures to prevent the introduction of disease and invasive species into the nearby watercourses, and comprehensive measures to protect the water quality of the River Eden catchment.</p> <p>In addition, NE has advised that the mitigation measures (in the planning application EIA) for the reduction of operational impacts on the water environment are also incorporated in the surface water drainage strategy. It is of particular importance to ensure that no pollutants, contaminants or sediments enter water course and impact on the water quality of the River Eden.</p>	Out
<p>Policy EC 12 – Agricultural Buildings:</p> <p>Carlisle has a large rural area</p>	<p>This policy has the potential to result in:</p> <ul style="list-style-type: none"> <li>increased land take which could lead to the loss and fragmentation of habitats;</li> <li>farm waste leaking into habitats, rivers and</li> </ul>	<p>The Water resources (control of pollution) (silage, slurry and agricultural fuel oil) (England) regulations 2010 and as amended 2013 (SSAFO) aim to prevent water pollution</p>	Out

<p>where farming is the predominant industry. This policy makes provision for new farm buildings and extensions to existing buildings.</p>	<p>streams which could reduce habitat quality, and water quality and levels;</p> <ul style="list-style-type: none"> <li>• increased numbers of livestock impacting on habitats;</li> <li>• increased use of agri-chemicals including fertilisers.</li> </ul> <p>Nitrogen deposition leads to over-enrichment and acidification of sensitive soils, habitats and fresh waters comes from agricultural ammonia. Defra statistics show that nitrogen losses from agricultural land are estimated to account for over half of nitrogen entering surface waters. Pollution of water courses by nitrogen arises from the application of organic manures and inorganic fertilizers to pasture and arable land.</p> <p>Given the distribution of European sites within the rural areas of the district, this policy has the potential to lead to development which may have a likely significant effect on a European site.</p> <p>The potential for habitat fragmentation to impact on designated sites as a result of implementing this policy is low. Data from planning application records shows that the implementation of this policy has resulted in the majority of new farm buildings being located within the built envelope of the existing holding, or on immediately adjacent arable land, where habitats are generally of low ecological value. Furthermore the policy directs new buildings to integrate with existing buildings and take advantage of natural screening, (paragraph 4.51 of the Plan states that any woodland, trees or mature hedgerows have the potential to provide natural screening). The siting controls within the policy can be used to avoid fragmentation of habitat.</p>	<p>from stores for silage, slurry and agricultural fuel oil.</p> <p>They set out requirements for the design, construction and maintenance of new, substantially reconstructed or substantially enlarged facilities for storing these substances. Storage facilities should be sited at least 10 metres from inland freshwater or coastal water and have a 20 year life expectancy.</p> <p>The Environment Agency (EA) must be notified in writing about any new, substantially enlarged or substantially reconstructed system at least 14 days before any construction begins.</p> <p>The EA carry out checks on water quality of rivers and streams, and are able to prosecute where necessary.</p> <p>Most new large scale agricultural buildings will also need to meet high standards of design and operation that are required in order to obtain an Environmental Permit (EP) (as required by the Environment Agency). The requirement to meet EP standards (including emissions to air, land and water, energy efficiency, noise, vibration etc) should ensure that the design and operation of such buildings minimises pollution. Therefore significant effects arising from the implementation of Policy EC 12, which makes provision for the development of agricultural buildings, are considered unlikely to occur.</p>	
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	<p>Whilst farms are found in dispersed locations across the district, in reality the majority are located well away from Natura 2000 sites except from those within the catchment of the River Eden SAC. However, most farm complexes are close to roadside locations where they can be easily accessed. This significantly reduces the potential for impacts, as the majority of impacts from new buildings are likely to be contained within the existing envelope of the farm holding.</p>		
<p>Policy EC 13 – Equestrian Development:</p> <p>This policy makes provision for development relating to the development of stables, horse riding arenas and riding centres in the rural areas of the district.</p>	<p>Carlisle district contains a large rural area. Horse riding and keeping is a popular leisure and business activity.</p> <p>This policy has the potential to result in:</p> <ul style="list-style-type: none"> <li>equestrian waste leaking into habitats, rivers and streams which could reduce habitat quality, and water quality and levels.</li> </ul>	<p>The Environment Agency issue permits for the disposal of horse manure and other types of waste. Such waste is regulated through the Environmental Permitting (England and Wales) Regulations 2010.</p> <p>horse manure, while subject to certain controls, is not considered waste if it is used as soil fertiliser; its use is part of a lawful practice of spreading on clearly identified parcels of land; or its storage is limited to the needs of those spreading operations to be carried out on agricultural holdings.</p> <p>The storage or spreading of horse waste near to water has to comply with Nitrate Vulnerable Zones (NVZ) and groundwater legislation in two small areas in the south and east of the district where the land falls under their remit, when spreading either manure or slurry. This regime is outwith the planning system.</p>	Out
<p>Policy HO 1 – Housing Strategy and Delivery:</p> <p>The policy allocates 21 sites within Carlisle and 21 sites within the rural area for housing development.</p> <p>The River Eden SAC is the only</p>	<p>The River Eden SAC enters the District on its southern boundary and crosses the city from east to west before it enters the Upper Solway Flats and Marshes SAC/SPA Ramsar site. As such there are a number of tributaries which are either part of the SAC or drain into the SAC which are also within or on the edge of the district.</p>	<p>The majority of European sites referred to in this HRA are located considerable distances from main population centres where additional housing is proposed. These sites are not currently under pressure from recreational use, or accessible to the public. Border Mires, Kielder-Butterburn SAC, Irthinghead Mires Ramsar, Bolton Fell Moss and Walton Moss have no public access, whilst the North Pennines Dales Meadows are a series of isolated</p>	Out

<p>European site within the urban area of Carlisle, whilst the Upper Solway Flats and Marshes SAC/SPA Ramsar site, lies approximately 7km to the west. The other European sites within the District, as shown on the map appended to this document, are considerable distances from any settlement with an allocated housing site, and the following do not have any public access (Border Mires, Kielder Butterburn SAC, Irthinghead Mires Ramsar, Bolton fell Moss and Walton Moss SAC). Of those sites allocated for housing development in the Local Plan, the following are considered to require further assessment, due either to their location directly adjacent to the River Eden, or directly adjacent to a tributary of the River Eden.</p> <p>U 8 – land north of Burgh Road;  R 19 – Wetheral South;  R 20 – land west of Steele’s Bank;  R 17 – Warwick Bridge/Little Corby north;  R 13 – Linstock north;  R 14 – land at Tower Farm, Rickerby.</p>	<p>Development enabled by this policy has the potential to result in:</p> <ul style="list-style-type: none"> <li>• land take leading to fragmentation and loss of habitats;</li> <li>• atmospheric pollution through increased traffic, which could reduce air quality. Traffic emissions contribute to atmospheric nitrogen deposition levels. Therefore whilst housing development on greenfield sites has the potential to reduce agricultural nitrogen deposition levels, there is likely to be an increase in traffic. This can lead to the eutrophication and/or acidification of sensitive ecosystems;</li> <li>• increased levels of disturbance - recreational activity, noise and light pollution.</li> </ul> <p>The accepted distance below which air pollution from traffic is likely to be an issue for a European site is 200m. Whilst there are no proposed housing allocations accessed from roads which lie within this distance, there are two existing bridges which cross the River Eden SAC, (Eden Bridge just north of the City Centre, and the western bypass crossing at Knockupworth). Housing increases generally across the city will have the potential to increase traffic on these routes.</p> <p>The 2012 Air Quality Action Plan (AQAP) for Carlisle states that nitrogen dioxide levels are monitored across the district, and there is one continuous analyser on Eden Bridge which monitors NO2 concentrations every hour. As a result of NO2 exceedences there are 6 air quality management areas across the city. The AQAP sets out measures that the Council intends to take, along with its partners, in order</p>	<p>fields. The North Pennine Moors SPA/SAC are largely open access land, but the site is not listed as vulnerable to recreational pressures. The potential for recreation to increase on this site is limited due to the distance from the main centres of population (where housing sites are allocated) of Carlisle, (17km) or Brampton (8km).</p> <p>However, the River Eden SAC crosses the City from east to west and is incorporated into the two main public parks, Rickerby Park and Bitts Park. Rickerby Park is a natural park grazed by cattle and sheep. There is both pedestrian and vehicular access. Activities include walking, fishing, cycling and very occasional informal swimming. Bitts Park is a formal park accessible on foot. Whilst most of the activities such as play areas, tennis, bowling, putting green etc take place well away from the river, there is a riverside walk, and the Hadrian’s Wall National Trail passes through the park. Mitigation measures will include creating attractive areas of open space on the larger development sites to create opportunities for recreation in the locality that won’t impact on the European site, and using section 106 contributions to improve the quality of existing larger areas of public open space, to dilute the recreational impacts on the site.</p> <p>The Solway Firth SAC/SPA, and the Upper Solway Flats and Marshes SPA/Ramsar lie approximately 8km from the edge of Carlisle. The northern part of this designation (Rockcliffe Marsh) has no public access. The southern part, (Burgh Marsh), is open access land, and is grazed by cattle and sheep. However, deep water channels which dissect the marsh, lack of parking or any other facilities, and the mud flats at the shoreline mean that this location is not especially attractive to walkers, or for other recreation purposes, as it can be both difficult and dangerous terrain.</p> <p><u>Atmospheric pollution mitigation</u> - Local Plan Policy SP 5 aims to develop more sustainable transport measures across the district. To reduce reliance on the private car,</p>	
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	<p>to achieve a reduction in nitrogen dioxide concentrations. These measures include:</p> <ul style="list-style-type: none"> <li>• improvements to the road network and traffic management;</li> <li>• reducing overall emissions from road vehicles</li> <li>• implementation of land use and development control policies</li> <li>• reducing emissions from non-transport related sources</li> <li>• raising awareness of air quality issues</li> <li>• encouraging walking, cycling and the use of public transport;</li> <li>• increased levels of abstraction; surface water run-off and sewerage discharge, which could reduce water quality and levels;</li> </ul> <p>U 8 - land north of Burgh Road: detailed pre-application discussions have taken place regarding the site and an application has been submitted. The site boundary lies within 200m of the River Eden SAC. Development on this site has the potential, both during construction and operational phases to lead to increased levels of disturbance through recreational activity, noise and light pollution, and increased diffuse pollution run off. In addition, the public footpath along the southern edge of the river could potentially be more heavily used, leading to greater impacts on the site.</p> <p>R 13 – Linstock; this site lies within 300m of the River Eden. The EA has advised that there is only minor risk of surface water flooding, whilst UU has advised that the development should look to land to the south east to discharge water. There is no public access to the River Eden in this area, as it is contained within private farmland. The site is separated from the Eden</p>	<p>new development is expected to provide safe and convenient access to cyclists and pedestrians, together with convenient access to public transport. In addition, Policy IP 2 encourages developers will be encouraged to include sustainable vehicle technology such as electric vehicle charging points within a development.</p> <p>Policy CC5 ensures that sufficient pollution prevention measures are included in the detailed surface water drainage plans, and employed on site both during the construction period, and on completion of the development.</p> <p>It also ensures that on greenfield sites applicants will be expected to demonstrate that the likely natural discharge solution from a site once developed will be no greater than the existing discharge rate. On previously developed land applicants should target a reduction in surface water discharge. The policy also requires that runoff rates from the sites remain at greenfield rates and that potentially contaminated runoff is intercepted via SUDs ponds so that only clean runoff enters tributaries or the River Eden;</p> <p>Policy CM 5 Environmental and Amenity Protection states that development will not be permitted where it would generate or result in exposure to, either during construction or on completion, unacceptable levels of pollution (from contaminated substances, odour, noise, dust, vibration, light and insects) which can not be satisfactorily mitigated within the development proposal or by means of compliance with planning condition.</p> <p>Policy IP 5 Waste Minimisation and the Recycling of Waste states that all new development must include details of facilities for the storage, collection, and recycling of waste produced on site both during and after construction. Paragraph 6.30 of the justification to this policy in the Local Plan refers to SWMPs. This text will be amended as SWMPs are no longer a requirement. However, the Plan will continue to encourage their use in</p>	
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	<p>by a number of properties, farmland, and a farm access road. Therefore it is unlikely that there will be habitat fragmentation, or disturbance by noise or light pollution either during or after construction. The only likely potential impacts could be through increased diffuse pollution run-off.</p> <p>R 14 – Rickerby; this site lies within 150m of the River Eden SAC. There are unlikely to be any recreational impacts arising out of the development of this site as there are no public footpaths on this side of the river. The site is currently in residential and agricultural use. The agricultural use will be replaced by 10 houses. Therefore there is potential for impact on the River Eden during the construction phase of the site, through noise, light pollution and diffuse pollution run-off.</p> <p>R 17 – Warwick Bridge; the site lies approx 150 metres from the River Eden SAC, and is separated from the river by Little Corby Road, and a field, before a steep slope drops down to the river. There is no public access to the river in the vicinity of the site, and therefore there are unlikely to be recreational impacts. The road forms a physical barrier, and dense vegetation fringes the multiple channels in this location. It is considered that this combination of physical and natural barriers will limit the potential for impacts arising out of construction and operation of the site.</p> <p>R 19 and R 20 – Wetheral; these sites lie either side of the B6263 access road into Wetheral from the south. Ongoing and regular discussions are taking place with UU regarding surface water drainage and waste water treatment in this location. A surface water</p>	<p>order to reduce construction waste, keep it out of landfill and reduce fly tipping.</p> <p>Policy IP 6 – Foul Water Drainage on Development Sites ensures that foul and surface water drainage will be managed through two different systems, and that the quality of groundwater and surface water, and associated water based recreation, fishers and biodiversity will be protected against the risk of pollution.</p> <p>There are no water supply issues in the district, and only limited issues with waste water treatment capacity. Increases in rural housing can lead to capacity issues in existing waste water treatment works. However, the Council works closely with United Utilities and the Environment Agency to ensure that clean water supply and waste water issues are adequately addressed. UU currently advise that there are two locations within the District with potential capacity issues with waste water treatment (Dalston and Wetheral). Ongoing dialogue with UU indicates that the development in these locations will not exceed the available headroom at either treatment works.</p> <p>Increasing the capacity of the waste water treatment works at Wetheral forms part of the current UU funding plan as submitted to the regulator (Ofwat) and is due to be determined this year. The plan sets out the UU preferred projects for funding, and the expected delivery of the project is anticipated by 2020.</p> <p>It is considered that the proposed mitigation measures which are incorporated into a range of policies in the Local Plan will minimise the risk of a likely significant effect on the river's interest features.</p>	
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	<p>drainage solution has been identified to the west of both sites, (away from the River Eden, which lies approx 500m to the east of the B 6263), and UU have confirmed that there is available headroom at the waste water treatment works. Whilst there is a public footpath adjacent to the River Eden in this location, the scale of the development is unlikely to lead to potential increase in recreational impacts on the site. The physical barriers of two roads and residential properties on the edge of the village, and the natural features of farmland and woodland which are between the site and the River Eden limit the potential for impacts arising from the construction and operational phases of the site.</p>		
<p>Policy HO 2 – Windfall Housing Development.</p> <p>This policy makes provision for windfall housing development, i.e. on sites that are not specifically allocated in Policy HO 1. The scale of such housing is likely to be significantly smaller than that of the allocated sites above.</p>	<p>As the location of any proposals arising out of this policy are unknown, likely impacts on European sites can not be assessed. Development enabled by this policy has the potential to result in very small scale levels of the following:</p> <ul style="list-style-type: none"> <li>• atmospheric pollution through increased traffic, which could reduce air quality;</li> <li>• increased levels of disturbance - recreational activity, noise and light pollution;</li> <li>• increased levels of abstraction; surface water run-off and sewerage discharge, which could reduce water quality and levels; and</li> <li>• land take, which could lead to the loss and fragmentation of habitats.</li> </ul>	<p>Previous planning applications for housing have been successfully conditioned so that the proposals have not been likely to have a significant effect on the interest features for which any nearby designated sites have been classified.</p> <p>It is considered that the proposed mitigation measures which are incorporated into a range of policies in the Local Plan will minimise the risk of a likely significant effect on the interest features of European sites.</p> <p>The Local Plan directs housing to sustainable locations, primarily villages, and contains a policy presumption against housing development in the open countryside. The Border Mires, Kielder-Butterburn SAC, Irthinghead Mires Ramsar, Bolton Fell Moss SAC, Walton Moss SAC and North Pennines Dales Meadows are all in isolated locations with no public access. Whilst there is some access to the Solway Firth and North Pennine Moors, housing is not likely to be developed in such locations under the policies in the Local Plan.</p>	<p>Out</p>

		<p>There are no water supply issues in the district, and only limited issues with waste water treatment capacity. Increases in rural housing can lead to capacity issues in existing waste water treatment works. However, the Council works closely with United Utilities and the Environment Agency to ensure that clean water supply and waste water issues are adequately addressed. UU currently advise that there are two locations within the District with potential capacity issues with waste water treatment (Dalston and Wetheral). Ongoing dialogue with UU indicates that the development in these locations will not exceed the available headroom at either treatment works.</p> <p>Increasing the capacity of the waste water treatment works at Wetheral forms part of the current UU funding plan as submitted to the regulator (Ofwat) and is due to be determined this year. The plan sets out the UU preferred projects for funding, and the expected delivery of the project is anticipated by 2020.</p>	
<p>Policy HO 5 – Rural Exception Sites.</p> <p>This policy makes provision for affordable housing on small sites where open market housing would not be acceptable, subject to certain qualifying criteria.</p>	<p>As the location of any proposals arising out of this policy are unknown, likely impacts on European sites can not be assessed.</p> <p>Any development under this policy is likely to be relatively small in scale in relation to any supporting habitat for European sites, and likely effects such as increased levels of abstraction; surface water run-off and sewerage discharge, which could reduce water quality and levels; and land take, which could lead to the loss and fragmentation of habitats is likely to be insignificant and therefore ‘minor residual’ in nature or so restricted or remote from the site that they would not undermine the conservation objectives for the site.</p>	<p>Previous planning applications for housing have been successfully conditioned so that the proposal have not been likely to have a significant effect on the interest features for which nearby designated sites have been classified</p>	<p>Out</p>

<p>Policy HO 11 – Traveller and Travelling Showpeople Provision</p> <p>This policy aims to meet the accommodation needs of gypsies, travellers and travelling showpeople, through the allocation of a specific site, and through criteria to guide the assessment of proposals on other sites.</p>	<p>The allocated site is at Low Harker Dene which lies 2.5 km from the River Eden SAC. The site is adjacent to the M6 motorway, which lies between the site and the River Eden. The policy makes provision for nine pitches over the plan period, and is therefore small in scale. Effects such as surface water run-off, sewerage discharge and water useage are controlled by other policies in the Local Plan, and effects are likely to be minimal and insignificant.</p> <p>Proposals for additional provision of transit, permanent and temporary pitches, (i.e. not on the allocated site at Low Harker Dene) are subject to the need to meet the 10 criteria set out in the policy.</p>	<p>As the locations of proposals arising out of the second part of this policy are unknown, it is considered that proposed mitigation measures which are incorporated into a range of policies in the Local Plan will minimise the risk of a likely significant effect on European sites.</p> <p>Any planning application received for the development of pitches under this policy, and which is in a location where there is potential to have an effect on a European site, and which is likely to be approved, will be conditioned so that the proposal will not be likely to have a significant effect on the interest features for which any nearby designated sites have been classified.</p>	
<p>Policy IP 7 – Carlisle Airport</p> <p>This policy makes provision for development within the boundary of Carlisle Airport that is related to airport activities, or for enabling development that would facilitate the ongoing or further operational development of the airport.</p>	<p>The likely effects of any proposal on the River Eden SAC (of which the River Irthing is a tributary and lies to the east of the site) may be summarised as:</p> <ul style="list-style-type: none"> <li>• water quality issues and sources of pollution (the mid Irthing section of the SAC was recently upgraded from ‘unfavourable no change’ to ‘unfavourable recovering’);</li> <li>• noise, vibration, lighting and general activity (including increased traffic) as disturbance factors;</li> <li>• habitat modification and loss.</li> </ul> <p>Within the airport boundary planning permission has been granted for erection of a distribution centre, ancillary works and raised and re-profiled runway. There are no other proposals beyond the existing planning permission.</p>	<p>The HRA and AA undertaken for the airport planning application concluded that there were not likely to be any major barriers to ensuring that the proposed development will not have an adverse effect on the integrity of the River Eden SAC. However, to be certain of no adverse impacts on the integrity of the River Eden SAC, a number of issues regarding potential impacts on the River Eden were conditioned in the planning permission.</p> <p>Natural England concluded that providing the issues as highlighted in this assessment are adequately conditioned, the proposed development (either alone or in combination with other plans or projects) will not lead to an adverse effect on the integrity of the River Eden SAC.</p>	Out
<p>Policy CC 1 – Renewable Energy</p> <p>This policy reflects the Council’s commitment to enabling renewable</p>	<p>As the location of any proposals arising out of this policy are unknown, likely impacts on European sites can not be assessed.</p>	<p>Any proposals must satisfy the policy requirement that,</p> <p>“Proposals will be supported where they can demonstrate, through identifying and thoroughly appraising any</p>	Out

<p>energy proposals to come forward. Such proposals have to satisfy a number of criteria.</p>		<p>potential individual and cumulative effects, that any associated impacts are or can be made acceptable”.</p>	
<p>Policy CC 2 – Energy from Wind</p> <p>This policy allows the development of wind turbines, subject to such proposals satisfying a number of criteria.</p>	<p>As the location of any proposals arising out of this policy are unknown, likely impacts on European sites can not be assessed.</p> <p>However, large parts of the District are covered by safeguarding zones relating to civil or military aviation and/or other defence assets such as RAF Spadeadam, the Eskdalemuir Seismic Recording Station, and the VLF transmitter at Skelton.</p>	<p>Any proposals for wind turbines will be assessed against a range of criteria in the policy, of which criteria 3 states:</p> <p><i>“effects on nature conservation features, habitats, biodiversity and geodiversity, including sites, habitats and species”.</i></p> <p>Para 7.20 of the policy states:</p> <p><i>Any impacts on the Districts biodiversity, geo-diversity and heritage assets will be considered in the context of the relevant policy coverage set out elsewhere within the Plan. The RSPB will be consulted where development has the potential to impact significant populations of sensitive bird species or their habitats.</i></p>	<p>Out.</p>

## 8.0 Mitigation/Avoidance

- 8.1 Certain activities arising during both the construction and operation phases of development arising out of the implementation of policies in the Local Plan may have the potential to impact on European sites, in particular through increased traffic, people, run-off, recreation, nitrogen deposition and agriculture. However, the Local Plan as a whole has policies which aim to mitigate or avoid these impacts, as set out below. In addition, there is ongoing work with the North Pennines Partnership, and both Local Nature Partnerships which operate in the area, (the Northern Upland Chain LNP, and the Cumbria LNP), who work to ensure sympathetic management is in place involving positive measures to maintain existing good ecological conditions, or to improve them, using a landscape scale approach to improving ecological networks.
- 8.2 Traffic: increased traffic from new development can lead to increased air pollution, and is most likely to affect sites where plant, soil or water habitats are the qualifying features. Within the district the only European site where this is potentially an issue is the River Eden, in particular where it passes through Carlisle, as the City is where 70% of new housing development and employment allocations is proposed. In terms of vehicle traffic, nitrogen oxides are considered to be the key pollutants, as they can lead to soil and freshwater acidification, and cause eutrophication of soils and water. However, air pollution from roads is unlikely to be significant beyond 200m from the road itself. The only European site within the District which meets this key threshold is the River Eden SAC.
- 8.3 There are no proposed housing allocations accessed from roads which lie within 200m of the River Eden. However, there are two existing bridges which cross the River Eden SAC (Eden Bridge, just north of the city centre, and the western bypass crossing at Knockupworth). However, planned housing growth in general across the city will have the potential to increase traffic across these routes.
- 8.4 In 2012 an Air Quality Action Plan (AQAP) was drawn up for Carlisle. The Plan ensures that nitrous oxide levels are monitored across the district, and there is one continuous analyser on Eden Bridge which monitors NO<sub>2</sub> concentrations every hour. As a result of NO<sub>2</sub> levels being exceeded there are 6 air quality management areas across the city. The AQAP sets out measures that the Council will take, along with its partners, in order to achieve a reduction in nitrogen dioxide concentrations. These measures include:

- improvements to the road network and traffic management;
- reducing overall emissions from road vehicles;
- implementation of land use and development control policies;
- reducing emissions from non-transport related sources;
- raising awareness of air quality issues;
- encouraging use of walking, cycling and use of public transport.

- 8.5 The Carlisle Local Plan Transport Study has been undertaken to assess the traffic impacts of the Local Plan proposals. The objective of the study is to identify locations on the highway network where there would be significant increases in congestion without mitigation. The study estimates traffic demands in the future by considering the traffic generation of existing and proposed developments alongside other potential changes in traffic growth. The results of the study will be used to help identify potential measures to mitigate the impact of the Local Plan proposals.
- 8.6 This package of mitigation measures is set out in the Transport Improvements Study and aims to reduce vehicle delay by increasing capacity or reducing traffic demand at locations predicted to suffer from congestion. Mitigation measures include highways and sustainable transport improvements, modal shift, walking and cycling links and passenger transport improvements.
- 8.7 Recreation: the majority of European sites within or adjacent to Carlisle District are located some distance from the main population centres, do not have public access, and those that do are not under pressure from recreational activities. It is therefore considered unlikely that increases in population due to the scale of development outlined in the Local Plan are likely to place such additional pressures on European sites through demand for recreation that the integrity of sites would be threatened. However, it is recognised that future Carlisle residents will take part in recreational activity, possibly on public footpaths or within parks close to the River Eden SAC and the Upper Solway Flats and Marshes SPA, as these are the two sites which are close to the largest centres of population, (Carlisle) and which have some accessibility to the public.
- 8.8 The River Eden SAC crosses the City and is enveloped by two main public parks, Rickerby Park and Bitts Park. Rickerby Park is a natural park grazed by cattle and sheep, with both pedestrian and vehicular access. Activities include walking, fishing, bike riding, and the Hadrian's Wall National Trail passes through the park. Bitts Park is a more formal park and is only accessible on

foot. Whilst most of the activities such as play areas, tennis, bowling, putting green etc take place well away from the river, there is a surfaced riverside walk, and the Hadrian's Wall National trail passes through the park.

- 8.9 The Solway Firth SAC/SPA (and Upper Solway Flats and Marshes SPA/Ramsar) lies approximately 8km from the edge of Carlisle. The northern part of this site is known as Rockcliffe Marsh, and is privately owned and has no public access. Burgh Marsh, further to the west, whilst open access land, is a relatively foreboding environment away from the few public footpaths which exist, due to the expanse of marsh, the deep dendritic drainage channels and the livestock grazing in the area.
- 8.10 There is very limited current data available on visitor usage of these areas, and therefore it is not currently possible to quantify the likely increase in walkers that might be expected as a result of the planned level of growth in the Local Plan. A management strategy for the site has been produced by the Solway Firth Partnership. The strategy addresses threats to the SPA interest on the site and sets out the means by which it is proposed to secure the sustainable use of the Firth. There is very little built land use of the site. The cockle fishery has been closed for a number of years due to over exploitation, and other commercial, traditional and shell fisheries are regulated to ensure that they are carried out in a sustainable way, and their impact on bird feeding areas are not significant. Roosts and feeding areas are vulnerable to disturbance and the management strategy addresses the need to avoid disturbance.
- 8.11 The recently published 'Site Improvement Plan for the Solway Firth', drawn up by Natural England, indicates that for the Solway Firth, the scale of disturbance from the public, and recreational use and its impact on bird species is currently unknown, but though to be localised. Other studies show that only some activities by people cause disturbance to birds, and many activities may only result in minor reactions such as pauses in feeding or short flights. The effects of people on birds in estuaries are highly variable and whilst they may be sensitive to routine activities such as baitdiggers and cyclists in some estuaries, they may ignore them in others. There is also evidence that resident birds are less responsive to human activity than newly arrived migrants.
- 8.12 Recreational activity in the form of walking and cycling can lead to erosion of vegetation and disturbance to wildlife, especially birds. Where the River Eden passes through the City, adjacent footpaths are mainly hard surfaced and integrated within the two main parks (Rickerby and Bitts). This will therefore minimise any damage to vegetation and river bank through trampling and erosion.

- 8.13 In addition to measures in the Local Plan, the City Council works proactively in partnership with the Saving Eden Coalition which is hosted by the Eden Rivers Trust. The coalition aims to better coordinate action to address the threats to the River Eden arising from development, recreation and agriculture. The partners are drawn from four key groups of farmers and land managers; communities; politicians and planners; and investors.
- 8.14 Agriculture: it is not possible to fully assess the likelihood of impacts arising from the development of new agricultural buildings as many new buildings of a certain scale and size do not require full planning permission, and instead require an 'Agricultural Determination' from the City Council. The purpose of this arrangement is to enable the Council to comment on the siting and design of particular proposals, whilst not obliging the applicant to submit formal applications for planning permission.
- 8.15 Agriculture can impact on air and water quality through the spreading of slurries and manures, and housed livestock. The main emission of concern is ammonia, as high levels can cause localised nutrient enrichment, which is of harm to plants that require nutrient poor conditions. The JNCC data form under 'vulnerability' notes that the River Eden SAC is vulnerable to nutrient run-off and that water crowfoot communities are sensitive to water quality. It further states that this is being addressed by a number of measures including a conservation strategy with actions to address river quality issues, and a partnership approach to funding habitat improvements. Also of concern is methane and nitrous oxide. Agricultural methane results from the digestive processes of livestock and animal waste. Nitrous oxide arises from the use of inorganic fertilisers and the storage of manures. Acknowledged methods of reducing these emissions, such as reducing protein in livestock diet, using extra straw for bedding or covering manure stores with straw, lie outside the planning regime.
- 8.16 However, most new large scale agricultural buildings will also need to meet high standards of design and operation that are required in order to obtain an Environmental Permit (EP) (as required by the Environment Agency). The requirement to meet EP standards (including emissions to air, land and water, energy efficiency, noise, vibration etc) should ensure that the design and operation of such buildings minimises air pollution. Therefore significant effects arising from the implementation of Policy EC 12, which makes provision for the development of agricultural buildings, are considered unlikely to occur.
- 8.17 Water supply/waste water capacity: there are no water supply issues in the district, and only limited issues with waste water treatment capacity. Increases in rural housing can lead to capacity issues in existing waste water treatment works. However, the Council works closely with United Utilities and the Environment Agency to ensure that clean water supply and waste water issues

are adequately addressed. UU currently advise that there are two locations within the District with potential capacity issues with waste water treatment (Dalston and Wetheral). The housing allocations in the Local Plan have been selected with this in mind, and ongoing dialogue with UU indicates that the development of these allocations will not exceed the available headroom at either treatment works.

- 8.18 Increasing the capacity of the waste water treatment works at Wetheral forms part of the current UU funding plan as submitted to the regulator (Ofwat) and is due to be determined this year. The plan sets out the UU preferred projects for funding, and the expected delivery of the project is anticipated by 2020.
- 8.19 The Local Plan includes measures to avoid or mitigate potential effects on European sites, by providing a policy framework which makes provision for such matters as (for example) more efficient use of water in new development, and sustainable transport initiatives. Due to advice from Natural England made at the previous stages of the HRA, in relation to impacts through construction, car parking, increased traffic, people, water abstraction and run-off, (where further detail was requested to explain how such impacts could be avoided or mitigated for), additional mitigation measures have been included or strengthened within a range of Local Plan policies. The following policies therefore help to implement the mitigation measures described above and therefore avoid potential significant effects on European sites. Such policies include:
- SP 1 – Sustainable Development, which aims to protect and enhance the natural, built and historic environment;
  - SP 5 – Strategic Connectivity, which aims to develop more sustainable transport measures across the district and increase the priority afforded to walking and cycling. In addition the policy aims to expand a safe, attractive, integrated and continuous green and rights of way network; secure a modal shift in the transport of freight from road to rail; increase the use of sustainable modes of transport;
  - SP 6 – Securing Good Design, which aims to ensure the retention and enhancement of existing trees, shrubs, hedges and other wildlife habitats on development sites. The policy also aims to ensure that if the loss of environmental features cannot be avoided, appropriate mitigation measures should be put in place and on-site replacement of those features will be sought; furthermore the policy makes provision for landscaping schemes on development sites to assist the integration of new development into existing areas and ensure that development on the edge of settlements is fully integrated into its surroundings;

- SP 8 – Green and Blue Infrastructure, which aims to afford the highest level of protection and stewardship to key blue and green assets, and also seeks to secure new or enhanced green or blue infrastructure assets; the policy further makes provision for mitigation/avoidance of effects as it makes a commitment to work with neighbouring authorities and other partners to develop a holistic approach to protection of the district’s green and blue infrastructure. This includes the River Eden and the Solway Coast;
- IP 2 - encourage developers to include sustainable vehicle technology such as electric vehicle charging points within new development;
- IP 5 – which makes provision for sustainable waste management both during and after construction;
- IP 6 – Foul Water Drainage on Development Sites, which aims to protect the quality of groundwater and surface waters and associated water-based recreation, fisheries and nature conservation against the risk of pollution by ensuring adequate provision of foul water sewerage and sewage treatment facilities;
- CC 3 – Energy Conservation, Efficiency and Resilience, which aims to ensure that new development addresses a reduction in carbon emissions;
- CC 5 – Surface Water Management and Sustainable Drainage Systems, which aims to reduce surface water discharge on brownfield development sites and ensure that on greenfield sites the run-off rate is no greater than existing. The policy also aims to ensure that SUDS are implemented on every new development site;
- CM 5 – Environmental and Amenity Protection, aims to prevent development where it would generate or result in exposure to, either during construction or on completion, unacceptable levels of pollution (from contaminated substances, odour, noise, dust, vibration, light and insects) which cannot be satisfactorily mitigated within the development proposal or by means of compliance with planning conditions; development that would cause demonstrable harm to the quality, quantity and associated ecological features of groundwater and surface waters or impact on human health; and development that would be on contaminated or unstable land which would pose an unacceptable risk to human health or the environment, unless suitable mitigation and/or remediation is or can be carried out to ensure safe development;
- GI 3 – Biodiversity and Geodiversity, which specifically aims to afford the highest levels of protection to European Sites;
- GI 4 – Public Open Space, which makes provision for the creation of new open space on new housing developments which are above a certain size.

8.20 In order to comply with the Habitats Regulations it is important to ensure that the implementation of policies in the Local Plan would not lead to direct and/or indirect or in-combination adverse impacts on qualifying features of Natura 2000 sites. Natural

England has previously advised that in order to achieve that compliance there would need to be a stated commitment to meeting the requirements of the Habitats Regulations incorporated within the Local Plan. It is considered that Policy GI 3 in particular meets this requirement, (in conjunction with the policies listed above).

- 8.21 The Local Plan is intended to be read as a whole, rather than as a series of self contained policies. A range of policies will apply to every development proposal. For this reason, repetition of criteria within policies is generally avoided, and, for example, development proposals which are likely to have an impact on biodiversity will be expected to comply with Policy GI 3, and the Plan therefore does not seek to insert a biodiversity criterion into every criteria based policy. The relevant weight to be attached to each policy will depend on the circumstances of the proposal to which it is applied, along with any other material considerations.
- 8.22 In this context it is considered that Policy GI 3 is instrumental in protecting European sites, and that its use will mean that development arising as a result of the Local Plan will not be likely to have a significant effect on a European site. This is consistent with the approach taken in the current adopted Local Plan, and endorsed by the Inspector following the Local Plan inquiry. The relevant text of Policy GI 3 is set out below:

*“Internationally designated sites identified under the Natura 2000 network (European Sites), which consist of Special Areas of Conservation (SAC), Special Protection Areas (SPA), and Ramsar sites, will be afforded the highest levels of protection, as they are of exceptional importance in respect of rare, endangered or vulnerable natural habitats and species.*

*Development which is likely to have a significant effect on the integrity of such sites, and is not directly connected with or necessary to the management of the site, will be resisted unless an overriding public interest can be demonstrated, and no alternative solutions are available, and necessary compensatory measures are taken to ensure that the overall coherence of Natura 2000 is protected. Proposals which may have an impact upon a Natura 2000 site must be accompanied by a Habitats Regulation Assessment (HRA). Where the HRA identifies the need for an Appropriate Assessment, the presumption in favour of sustainable development will not apply.*

9.0 Consideration of likely significant effects in combination

9.1 The requirement in the Directive is to undertake an appropriate assessment of a plan if it would be likely to have a significant effect on a European site *“either individually or in combination with other plans or projects”*. The Directive recognises that in some cases the effects of a plan on its own would be either unlikely or insignificant. Nevertheless the Directive also recognises that there may be a number of plans or projects, each of which would be unlikely to have a significant effect alone, but which, if their individual effects were to be added together, the effects in combination would be likely to be significant. The ‘in-combination’ test is therefore about assessing cumulative effects.

9.2 The following table screens other plans and policies for likely significant effects, in combination with the Local Plan, on a European site:

**Table 3 – Potential in-combination effects with other plans or projects**

Plan or project	Summary	HRA completed for Plan?	Potential for in-combination effects
Draft Cumbria Minerals and Waste Local Plan 2013	This plan considers municipal waste management, sand and gravel extraction, coal mining, radioactive waste, wastewater treatment and quarrying etc for the County of Cumbria.	Yes	<p>Identifies Willowholme, Carlisle as a waste treatment facility; Kingmoor Park East as Energy from Waste plant; Hespin Wood, Todhills, as landfill; Cardewmires, Cardewlees as a sand and gravel quarry, and Silvertop Quarry, Hallbankgate, Brampton as a limestone quarry with a proposed area of search for a small extension.</p> <p>There is the potential for new development allocated in the Carlisle District Local Plan to increase the use of these sites.</p> <p>The HRA concludes that both quarries would not adversely affect the integrity of the adjacent European sites.</p> <p>For the other sites the HRA concludes that drainage mitigation measures and containment of wastes, and habitat surveys with maintenance and enhancement measures are needed to avoid contaminated water flowing into the River Eden SAC.</p> <p>No in combination effects with the Local Plan are predicted.</p>

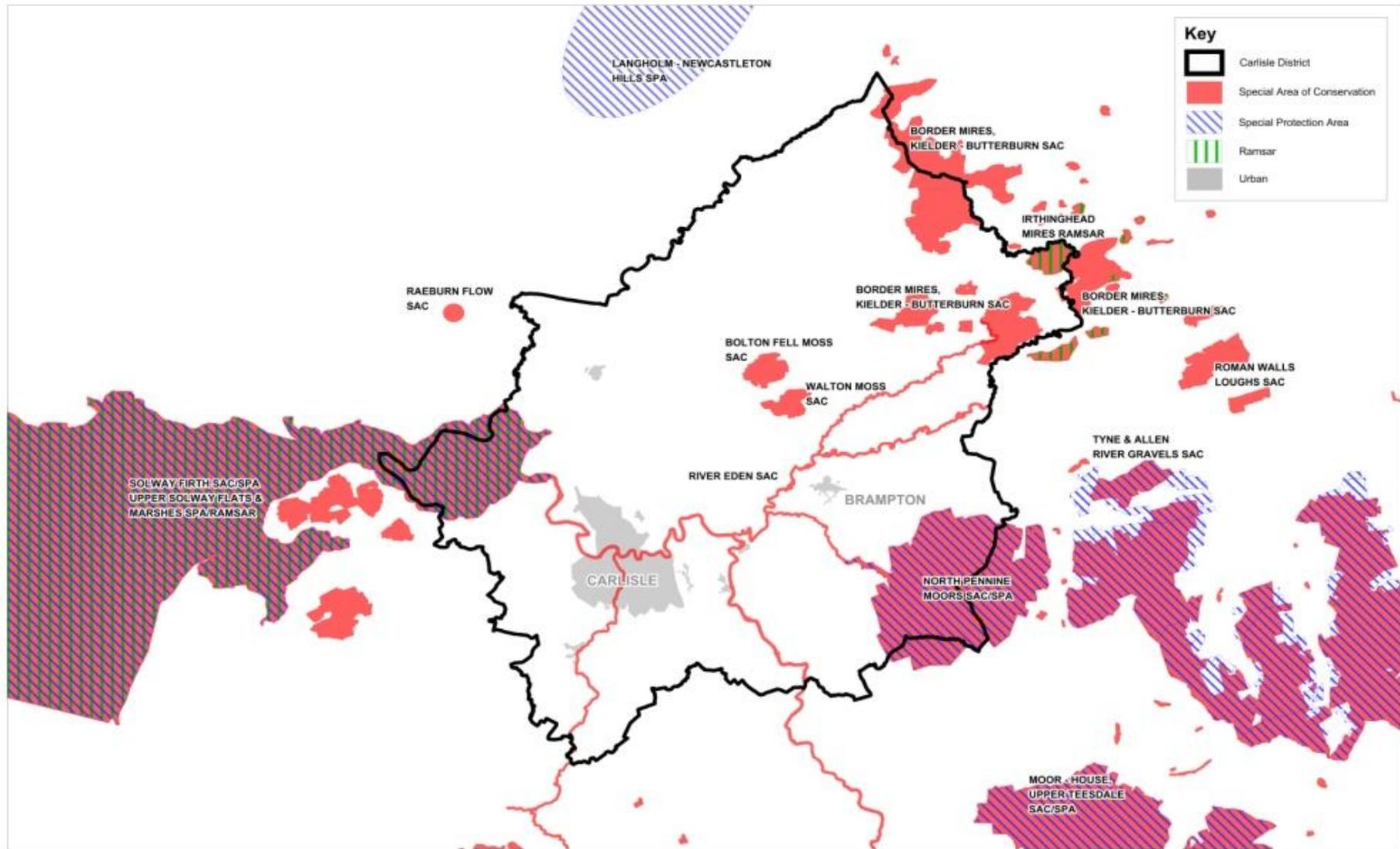
Cumbria Wind Energy SPD	Adopted by the City Council in 2008 to help guide the siting and design of turbines, and to indicate the capacity of each landscape character type within Cumbria for wind energy.	No	None. Local Plan Policy CC 2 – Energy from Wind was drafted having regard to the SPD. Paragraph 7.16 of the Local Plan states that development proposals should take into account the policies in the SPD.  No in combination effects with the Local Plan are predicted.
North Pennines AONB Management Plan	Statutory Plan for formulating policy for management of AONB and for carrying out local authority functions in relation to it.	No	The Management Plan aims to ensure that any plans or projects do not have a significant adverse impact on the important features of SACs/SPAs therefore no in combination effects with the Local Plan are predicted.
Solway Coast AONB Management Plan	Statutory Plan for formulating policy for management of AONB and for carrying out local authority functions in relation to it.	No	The Plan seeks to address the issues associated with managing the biodiversity interest found throughout the AONB. Therefore no in combination effects with the Local Plan are predicted.
Carlisle Air Quality Management Plan 2012	This action plan fulfils Carlisle City Council's responsibility to act in pursuit of the achievement of air quality objectives in the designated Air Quality Management Areas.	No	The Plan sets out measures to achieve a reduction in nitrogen dioxide (NO <sub>2</sub> ) concentrations, required in order to meet the annual average objectives for this pollutant set by the government. The action plan measures seek to manage and continuously improve air quality at a local level whilst providing the level of access and development needed to maintain a vibrant, attractive and prosperous city.  Therefore no in-combination effects with the Local Plan are predicated.
The Hadrian's Wall Management Plan 2008-2014	Provides a framework for the management of the site. Addresses the issues, challenges and opportunities that face the site.	None found	None – plan aims to protect the integrity of the heritage asset and its setting therefore no in combination effects with the Local Plan are predicted.
Dumfries and Galloway Interim Planning Policy – Wind Energy Development 2012;	The Policy identifies a number of areas which could be suitable for wind turbines over 50 meters in height subject to a number of considerations which are outlined and which against proposals will be assessed	Yes	Specific caveats included in Policies WEP2 and WEP3, (which are all supportive of wind energy developments), as follows: Proposals will be considered favourably provided they have no adverse effects either alone or in combination on the integrity of any Natura site. Therefore no in combination effects with the Local Plan are predicted.

Cumbria Local Transport Plan 2011-2026	Statutory planning document that sets out the County Council's vision, strategy and policies for transport. It also describes the approaches and measures that will be taken to implement these policies in each of the Council's Local Committee areas over the course of the Plan	Sustainability Appraisal of the Plan undertaken.	<p>The key priority in the LTP for the city of Carlisle is to encourage development that supports diversification of the city's economy, as a key employment area (including Kingmoor Park and Durranhill), and as an important shopping centre (extending the quality of retail offer).</p> <p>The Local Plan is the vehicle for delivering the spatial aspects of the LTP, and these aspects have therefore been considered as part of the HRA process. Therefore no in combination effects with the Local Plan are predicted.</p>
Allerdale Local Plan (Part 1) 2013	The Allerdale Local Plan contains planning policies for the use and development of land up to 2028. The Plan covers the parts of Allerdale that are outside the Lake District National Park.	Yes	<p>The Solway Firth SAC/SPA and the Upper Solway Flats and Marshes Ramsar crosses the boundary between Allerdale and Carlisle district.</p> <p>The Allerdale Local Plan does not allocate sites for development. The spatial aspects of the strategic and DM policies in the Plan have been assessed as part of the Allerdale Plan HRA process, and no in combination effects with Carlisle Local Plan have been identified.</p>
Eden Draft Housing and Employment Preferred Sites and Policies 2013 – this document will be added to the Core Strategy to form a full Local Plan	These plans allocate sites for housing and employment in Eden outside the Lake District National Park. They also include a number of policies which will be used to determine planning applications for housing and employment development.	Yes	<p>The River Eden SAC flows through Eden District and into Carlisle District, crossing the City. There are a number of villages along the Eden in both districts which either have small housing allocations identified, or where windfall housing would be acceptable. There are therefore implications for water abstraction and pollution. Drainage mitigation measures for allocated sites would prevent contaminated water flowing into the River Eden SAC.</p> <p>In combination effects are unlikely due to the locations of the sites and the scale of the proposals, together with the mitigation measures proposed in the Plan.</p>
Dumfries and Galloway Proposed Local Development Plan	Provides planning guidance on the type and location of development that can take place in the region.	Yes	Policies ED3 The Crichton Quarter and ED4 Chapelcross, individually may have minor residual effects on the Solway Firth SAC, but in combination with other plans and projects may have a likely significant effect. The potential effect arises from run-off from development on these sites, contaminating watercourses that flow into the SAC and adversely affecting populations of river and/or sea lamprey. The boundary of the SAC is over 1km away from the potential development site at The Crichton and over 4km at Chapelcross, both fish species are likely to use watercourses outwith the boundary of the SAC, closer to the development sites. The individual effects are considered minimal

			in both cases because there is existing legislation in place to limit contamination of watercourses, the area of the SAC is very small in relation to the entire designated site, and no important lamprey watercourses are known at either location. All of these mitigating factors would still apply in the event of development taking place at both sites simultaneously. Therefore the in-combination effects remain only minor residual effects.
County Durham Plan Preferred Options	The Plan allocates sites for various types of development, sets criteria for determining planning applications, and establishes how community and other corporate plans and strategies will be implemented through local spatial planning, including waste and minerals.	Yes	The North Pennines Moors SAC and SPA, and the North Pennines Dales Meadows SAC both comprise a large number of individually designated sites which cross a number of local planning authority boundaries. Whilst there are no housing allocations in either local plan within at least 10km of these sites, there is the potential for increased visitor pressure from policies encouraging tourism and tourist related facilities.  Due to the remoteness of these sites and general lack of public access, no in combination effects are predicted.
Northumberland Local development Plan, (Core Strategy) preferred options.	Will be the overarching spatial plan for County, excluding the Northumberland National Park, guiding future development and land use planning decisions to 2030.	Yes	The Border Mires SAC and Irthinghead Mires Ramsar. Whilst there are no housing allocations in either local plan within at least 10km of the above sites, there is the potential for increased visitor pressure from policies encouraging tourism and tourist related facilities.  Due to the remoteness of these sites and general lack of public access, no in combination effects are predicted.
Eden and Esk Catchment Abstraction Management Strategy 2006	Includes whole of Carlisle Local Plan area, together with Eden District and parts of Allerdale.	No	Strategy states the need to assess the effects of existing abstraction licences and any new applications to make sure they are not adversely impacting on internationally important nature conservation sites.  Therefore no in combination effects predicted.
Eden Catchment Flood Management Plan	Includes part of Carlisle Local Plan area	No	Plan makes reference to European sites, most significant being the River Eden itself and the Upper Solway Flats & Marshes SAC; these lie at the confluence of the Eden with the Solway Firth. No in-combination effects predicted.

## 10.0 Conclusion

- 10.1 This appraisal has been undertaken in accordance with the Conservation of Habitats and Species Regulations 2010, which states that competent authorities must undertake a formal assessment of the implications of land use plans which are capable of affecting the designated interest features of European sites. This must be done before deciding whether to adopt and implement the Plan.
- 10.2 The appraisal has comprised several distinct stages, (the Habitats Regulations Assessment), which collectively have led to the screening of the Plan for any likely significant effects. This screening assessment has been carried out throughout the Plan making process from Preferred Options Stage 1, to Preferred Options Stage 2, and to inform the proposed submission draft of the Local Plan. As a consequence of consultation on each stage of the Local Plan, a number of policies and the site allocations have, at each stage, been refined or altered. These changes have been captured and screened at each iteration of the HRA, for determining whether there is a likely significant effect on a European site.
- 10.3 We have concluded that the Carlisle District Local Plan as a whole is unlikely to have any significant negative effects on any European sites, and as such does not need any further assessment under the Habitats Regulations. This conclusion does not remove the need for later Habitats Regulations assessments of any other plans, projects or planning applications arising as a result of the policies set out in this Local Plan. It is concluded that no policies within the Local Plan are likely to have a significant effect on the integrity of any European site, (either individually or in combination with other plans and projects) and no Appropriate Assessment is necessary. This was due to the absence of realistic pathways for potential impacts, and/or the existence of avoidance or mitigation measures to negate such impacts. These conclusions are made for each individual policy, for the whole plan, and for the combination of this plan with any other relevant plans or projects.



MAP SHOWING CARLISLE DISTRICT BOUNDARY & LOCATIONS OF EUROPEAN SITES (SAC/SPA/RAMSAR) THAT ARE WITHIN, PARTLY WITHIN AND OUTSIDE OF THIS BOUNDARY



## Appendix 1

### European Sites

Site	Designation Status and date	Qualifying interests	Conservation Objectives	Site summary
Upper Solway Flats and Marshes	Ramsar. 30/11/1992  Carlisle District; Allerdale District; Dumfries and Galloway	<p><b>Ramsar criterion 2</b> Supports over 10% of the British population of natterjack toad <i>Bufo calamita</i> (Habitats Directive Annex IV species (S1202))</p> <p><b>Ramsar criterion 5</b> Assemblages of international importance: Species with peak counts in winter: 135720 waterfowl (5 year peak mean 1998/99-2002/2003)</p> <p><b>Ramsar criterion 6</b> Species/populations occurring at levels of international importance. Eurasian oystercatcher. <b>Species with peak counts in winter:</b> Whooper swan, Pink-footed goose , Barnacle goose, Northern pintail , Greater scaup, Red knot, Bar-tailed godwit, Eurasian curlew, Common redshank.</p>	<p>For the wetland which hosts internationally important populations of natterjack toad <i>Bufo calamita</i>: Subject to natural change, maintain the habitats which host the endangered populations of natterjack toad <i>Bufo calamita</i> in favourable condition, in particular:</p> <ul style="list-style-type: none"> <li>• Saltmarsh communities.</li> </ul> <p>For the internationally important wetland, regularly supporting 20,000 or more waterbird: Subject to natural change, maintain the wetland regularly supporting 20,000 or more waterfowl in favourable condition, in particular:</p> <ul style="list-style-type: none"> <li>• Saltmarsh communities</li> <li>• Intertidal mudflats and sandflats</li> <li>• Intertidal rocky scar ground</li> <li>• Subtidal sandbanks</li> </ul> <p>For the internationally important wetland, regularly supporting 1% or more of the individuals in a population of one species or subspecies of waterfowl: Subject to natural change, maintain the wetland regularly supporting 1%</p>	<p>The site lies on the west coast on the border between England and Scotland. The flats and marshes of the Upper Solway form one of the largest continuous areas of intertidal habitat in Britain. The geomorphology and vegetation of the estuarine saltmarshes or merses are of international importance, with broad transitions to mature 'upper-marsh' being particularly well represented. The whole estuarine complex is of importance for wintering wildfowl (ducks, geese and swans) and waders, and is a vital link in a chain of west coast UK estuaries used by migrating waterbirds. The SPA supports virtually all of the Svalbard population of Barnacle Goose <i>Branta leucopsis</i> over the winter.</p>

			<p>or more of the individuals in a population of one species or sub-species of waterfowl in favourable condition, in particular:</p> <ul style="list-style-type: none"> <li>• Saltmarsh communities</li> <li>• Intertidal mudflats and sandflats</li> <li>• Intertidal rocky scar ground</li> <li>• Subtidal sandbanks.</li> </ul>	
<p><b>Factors currently influencing the site/site condition:</b>  Changes to water quality. Increasing recreational use. Changes in habitat or agricultural management within or adjacent to site.  The site is divided into a large number of units for condition assessment purposes. The last condition assessments were carried out over the period 2006 – 2010, at which time the majority of units were classified as in favourable condition with some unfavourable recovering.</p>				
<p><b>Vulnerabilities to change/potential effects of the Local Plan:</b></p> <ul style="list-style-type: none"> <li>• Potential death or injury to SPA birds and Marine Conservation area mammals through installation and operation of offshore wind farms; (this is beyond the jurisdiction of the Local Plan)</li> <li>• Overgrazing of salt meadows – though this impact is not considered to be relevant to Policies in the Local Plan;</li> <li>• Natural coast processes – these may be interfered with as a result of works such as flood defence works;</li> <li>• Disturbance of bird roosts and foraging areas by human activity – as a result of increased housing, employment,(although the Local Plan directs the majority of new development to the City of Carlisle), tourism along the coastal area;</li> <li>• Water-based recreation resulting in injury or death to wildlife, pollution, litter and erosion of habitats;</li> <li>• Fisheries – potential for increased pressure on resources as a result of increased population, and hence increases in fishing, and damage of marine benthic habitat directly through fishing methods</li> </ul> <p>Unlikely to be vulnerable to recreational impacts as remoteness and relative inaccessibility of this site makes this unlikely.</p>				

Site	Designation Status and date	Qualifying interests	Conservation Objectives	Site summary
Solway Firth	SAC 20/05/2004	<p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>• Sandbanks which are slightly covered by seawater all the time;</li> <li>• estuaries;</li> <li>• mudflats and sandflats not covered by seawater at low tide;</li> <li>• <i>Salicornia</i> and other annuals not colonising mud and sand;</li> <li>• Atlantic salt meadows.</li> </ul> <p>Annex 1 habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>• reefs;</li> <li>• perennial vegetation of stony banks;</li> <li>• fixed dunes with herbaceous vegetation, (grey dunes) *priority feature;</li> </ul> <p>Annex II species that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>• Sea lamprey;</li> <li>• River lamprey.</li> </ul>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> <li>- The extent and distribution of qualifying natural habitats and habitats of qualifying species</li> <li>- The structure and function (including typical species) of qualifying natural habitats</li> <li>- The structure and function of the habitats of qualifying species</li> <li>- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely</li> <li>- The populations of qualifying species, and,</li> <li>- The distribution of qualifying species within the site.</li> </ul>	<p>Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins) (90%) Salt marshes. Salt pastures. Salt steppes (10%).</p>

**Factors currently influencing the site:**

Changes to water quality. Increasing recreational use. Changes in habitat or agricultural management within or adjacent to site.

The site is divided into a large number of units for condition assessment purposes. The last condition assessments were carried out over the period 2006 – 2010, at which time the majority of units were classified as in favourable condition with some unfavourable recovering.

**Vulnerabilities to change**

This large site is subject to a number of activities. These include flood defence and coastal erosion work, fishing and shellfisheries (including a cockle fishery which is currently closed to allow stocks to recover), wind turbine development, saltmarsh/merse grazing, and oil and gas exploration.

Unlikely to be vulnerable to recreational impacts as remoteness and inaccessibility of the site makes this unlikely.

Site	Designation Status and date	Qualifying interests	Conservation Objectives	Site summary
Upper Solway Flats and Marshes	SPA 30/11/1992	<p>This site qualifies under <b>Article 4.1</b> of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:</p> <p><b>Over winter;</b> Bar-tailed Godwit <i>Limosa lapponica</i>; Barnacle Goose <i>Branta leucopsis</i>; Golden Plover <i>Pluvialis apricaria</i>; Whooper Swan <i>Cygnus cygnus</i>.</p> <p>This site also qualifies under <b>Article 4.2</b> of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:</p> <p><b>On passage;</b> Ringed Plover <i>Charadrius hiaticula</i>;</p> <p><b>Over winter;</b> Curlew <i>Numenius arquata</i>; Dunlin <i>Calidris alpina alpina</i>; Knot <i>Calidris canutus</i>; Oystercatcher <i>Haematopus ostralegus</i>; Pink-footed Goose <i>Anser brachyrhynchus</i>; Pintail <i>Anas acuta</i>; Redshank <i>Tringa totanus</i>.</p> <p><b>Assemblage qualification: A wetland of international importance.</b></p> <p>The area qualifies under <b>Article 4.2</b> of the Directive (79/409/EEC) by</p>	<p>Subject to natural change, maintain in favourable condition the habitats of the internationally important populations of the regularly occurring Annex 1 species, in particular:</p> <ul style="list-style-type: none"> <li>• extent and sward height of saltmarsh communities;</li> <li>• intertidal mudflats and sandflats as roosting and feeding grounds.</li> </ul> <p>Subject to natural change, maintain in favourable condition the habitats of the regularly occurring internationally important migratory waterfowl present during the winter, in particular:</p> <ul style="list-style-type: none"> <li>• extent and sward height of saltmarsh communities;</li> <li>• extent and species diversity of intertidal mudflat and sandflat communities;</li> <li>• extent and species diversity of intertidal rocky scar communities.</li> </ul> <p>Subject to natural change, maintain in favourable condition the habitats of the internationally important assemblage of waterfowl, in particular:</p> <ul style="list-style-type: none"> <li>• extent and sward height of saltmarsh communities;</li> <li>• extent and species diversity of intertidal mudflat and sandflat communities;</li> <li>• extent of pioneer saltmarsh</li> </ul>	<p>The site lies on the west coast on the border between England and Scotland. The flats and marshes of the Upper Solway form one of the largest continuous areas of intertidal habitat in Britain. The geomorphology and vegetation of the estuarine saltmarshes or merses are of international importance, with broad transitions to mature 'upper-marsh' being particularly well represented. The whole estuarine complex is of importance for wintering wildfowl (ducks, geese and swans) and waders, and is a vital link in a chain of west coast UK estuaries used by migrating waterbirds. The SPA supports virtually all of the Svalbard population of Barnacle Goose <i>Branta leucopsis</i> over the winter.</p>

		regularly supporting at least 20,000 waterfowl.	communities; <ul style="list-style-type: none"> <li>• extent and species diversity of intertidal rocky scar communities;</li> <li>• extent and species diversity of subtidal sandbank communities.</li> </ul>	
<p><b>Factors currently influencing the site:</b>  Changes to water quality. Increasing recreational use. Changes in habitat or agricultural management within or adjacent to site.</p> <p>The site is divided into a large number of units for condition assessment purposes. The last condition assessments were carried out over the period 2006 – 2010, at which time the majority of units were classified as in favourable condition with some unfavourable recovering.</p>				
<p><b>Vulnerabilities to change</b>  There has been relatively little land claim compared with most other estuaries in the UK but some established and new flood defence and coastal erosion works may exacerbate erosion elsewhere within the site. The cockle fishery has been closed for a number of years due to overexploitation and the other commercial, traditional and shell fisheries are regulated by Government to ensure that they are carried out in a sustainable way and that their impact on bird feeding areas are not significant. Roosts and feeding areas are vulnerable to disturbance.</p> <p>Unlikely to be vulnerable to recreational impacts as remoteness and inaccessibility of the site makes this unlikely.</p>				

Site	Designation Status and date	Qualifying interests	Conservation Objectives	Site summary
River Eden	SAC April 2005	<p>Annex I habitats that are a primary reason for selection of this site: Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoeto Nanojuncetea</i>; Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation; Alluvial forests with <i>Alnis glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>).</p> <p>Annex II species that are a primary reason for selection of this site: white clawed (Atlantic stream) crayfish; sea lamprey; brook lamprey, river lamprey; Atlantic salmon; bullhead; otter.</p>	<p>Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.</p> <p>Subject to natural change, to maintain or restore:</p> <ul style="list-style-type: none"> <li>• the extent and distribution of qualifying natural habitats and habitats of qualifying species;</li> <li>• the structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;</li> <li>• the supporting processes on which qualifying natural habitats and habitats of qualifying species rely;</li> <li>• the populations of qualifying species;</li> <li>• The distribution of qualifying species within the site.</li> </ul>	<p>Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins) (1%) Inland water bodies (standing water, running water) (93.4%) Bogs. Marshes. Water fringed vegetation. Fens (3%) Broad-leaved deciduous woodland (2.6%).</p>

**Factors currently influencing the site/site condition:**

Changes to water quality. Water abstraction. Increasing recreational use. Changes in habitat or agricultural management within or adjacent to site. Changes to river channel including artificial reinforcement of banks. Housing and other development within catchment. Climate change including increased rainfall.

Floating formations of water crowfoot – unfavourable condition.

**Vulnerabilities to change**

The maintenance of breeding and nursery areas for the species on this site depends on the habitat quality of streams and their margins. Many of the streams within the site suffer from overgrazing of riverbanks and nutrient run-off. This is being addressed by a number of measures, including a conservation strategy with actions to address river quality issues, and a partnership approach to funding habitat improvements. The water-crowfoot communities as well as the species are sensitive to water quality, particularly eutrophication. Again, actions have been identified for getting improvements in water quality and they will be carried forward in the periodic reviews of water company expenditure and reviews of consents under the Habitats Regulations. Practices associated with sheep-dipping pose a potential threat at this site, and are currently under investigation. Much of the alluvial forest cover is fragmented and/or in poor condition. It is hoped to address this through management agreements or Woodland Grant Schemes with individual owners.

Site	Designation Status and date	Qualifying interests	Conservation Objectives	Site summary
Border Mires, Kielder/Butterburn	SAC April 2005	<p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>• blanket bogs;</li> <li>• transition mires and quaking bogs.</li> </ul> <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>• Northern Atlantic wet heaths with <i>Erica tetralix</i>;</li> <li>• European dry heaths;</li> <li>• Petrifying springs with tufa formation (<i>cratoneurion</i>)* priority feature.</li> </ul>	<p>Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.</p> <p>Subject to natural change, to maintain or restore:</p> <ul style="list-style-type: none"> <li>➤ the extent and distribution of qualifying natural habitats and habitats of qualifying species;</li> <li>➤ the structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;</li> <li>➤ the supporting processes on which qualifying natural habitats and habitats of qualifying species rely;</li> <li>➤ the populations of qualifying species;</li> <li>➤ the distribution of qualifying species within the site.</li> </ul>	<p>Bogs. Marshes. Water fringed vegetation. Fens (80%) Heath. Scrub. Maquis and garrigue. Phygrana (18%) Coniferous woodland (1%) Other land (including towns, villages, roads, waste places, mines, industrial sites) (1%).</p>
<p><b>Factors currently influencing the site/condition status:</b> Climate change including increased rainfall, or prolonged dry periods leading to increased risk of fires.</p> <p>Unfavourable recovering.</p>				

**Vulnerabilities to change/potential effects of the Local Plan:**

Forestry drainage and conifer planting (including natural seeding) has encroached onto the bogs. This has resulted in drying-out and degradation of the habitat in places. A programme of rehabilitation of bogs damaged by forestry is underway, based on management plans covering a large proportion of the SAC. The sites within the Kielder Forest are largely ungrazed and are not burnt. This improves their condition and nature conservation value. However a small area (c. 10%) on the forest margins and on the highest elevation parts of the site are overgrazed by livestock and suffer some damage from burning. Future management will address this issue. Part of the SAC is within the Royal Air Force Spadeadam Base. Drains created in the bog in the past to form a dummy runway have caused some damage but rehabilitation has now been agreed with Ministry of Defence and plans to redevelop the RAF base will result in long-term improvements for the bogs and their catchments. This is one of the most remote parts of the District and has limited public access, and therefore there are not likely to be any significant effects arising from the Local Plan.

Site	Designation Status and date	Qualifying interests	Conservation Objectives	Site summary
Irthinghead Mires	<p>Ramsar Oct 1986</p> <p>A composite site embracing seven separate areas of mire, within Carlisle District and Northumberland.</p>	<p><b>Ramsar criterion 1:</b> Supports an outstanding example of undamaged blanket bogs which are characteristic of the vegetation of upland north-western Britain. Most English (and many Scottish) blanket bogs have been extensively degraded by afforestation, burning, agricultural drainage and overgrazing. The Irthinghead Mires are one of few examples of this vegetation type in a near-natural state. There is also good representation of different topographic mire type and surface patterning.</p> <p><b>Ramsar criterion 2</b> A notable variety of <i>Sphagnum</i> mosses.</p> <p><b>Ramsar criterion 3</b> Butterburn Flow several rare plants, whilst a rare spider, <i>Eboria caliginosa</i>, has been recorded at Coom Rogg Moss.</p>	<p>Appropriate grazing</p> <ul style="list-style-type: none"> <li>• No burning on bog habitat;</li> <li>• Maintenance of water levels and hydrological conditions;</li> <li>• Absence of nutrient enrichment</li> <li>• Absence of atmospheric pollution</li> <li>• High rainfall and low Evapotranspiration;</li> <li>• Bracken and scrub control;</li> <li>• Avoidance of erosion resulting from trampling, vehicles etc.</li> </ul>	<p>Irthinghead Mires comprises a series of five high quality blanket mires, Butterburn Flow, Haining Head Moss, Hummel Knowe Moss, Coom Rigg Moss and Felicia Moss. They occupy various topographical situations including extensive valley-side flows, saddle mires and convex watershed mires. The undamaged state of these mires together with the range of vegetation and morphological mire type makes this an outstanding complex.</p>
<p><b>Factors currently influencing the site/condition status</b></p> <p>The 1990 UK National Report stated that research carried out since 1987 had shown the mires to be gradually drying-out as a result of nearby afforestation. Management actions aimed at tackling this problem were being implemented in conjunction with the Forestry Commission.</p>				

**Vulnerabilities to change/potential effects of the Local Plan:**

Climate change. Latest information shows no adverse factors reported.

No potential effects arising from the implementation of the Local Plan.

Site	Designation Status and date	Qualifying interests	Conservation Objectives	Site summary
North Pennines Moors	SAC  Composite site comprising 11 separate sites in Carlisle District, Northumberland, Durham and North Yorkshire.	<p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>• European dry heaths;</li> <li>• <i>Juniperous communis</i> formations on heaths or calcareous grasslands;</li> <li>• blanket bogs;</li> <li>• petrifying springs with tufa formations;</li> <li>• siliceous rocky slopes with chasmophytic vegetation;</li> <li>• old sessile oak woods with <i>ilex</i> and <i>blechnum</i>.</li> </ul> <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>• Northern Atlantic wet heaths with <i>Erica tetralix</i>;</li> <li>• Calaminarian grasslands of the <i>violetalia calaminariae</i>;</li> <li>• <i>Siliceous alpine and boreal grasslands</i>;</li> <li>• semi-natural dry grasslands and scrubland facies: on calcareous substrates;</li> <li>• alkaline fens;</li> <li>• siliceous scree of the montane to snow levels (<i>androsacetalia alpinae</i> and <i>galeopsietalia ladani</i>);</li> <li>• calcareous rocky slopes with</li> </ul>	<p>Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.</p> <p>Subject to natural change, to maintain or restore:</p> <ul style="list-style-type: none"> <li>• the extent and distribution of qualifying natural habitats and habitats of qualifying species;</li> <li>• the structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;</li> <li>• the supporting processes on which qualifying natural habitats and habitats of qualifying species rely;</li> <li>• the populations of qualifying species;</li> <li>• the distribution of qualifying species within the site.</li> </ul>	<p>Bogs. Marshes. Water fringed vegetation. Fens (41%) Heath. Scrub. Maquis and garrigue. Phygrana (32%) Dry grassland. Steppes (26.5%) Broad-leaved deciduous woodland (0.5%).</p>

		<p>chasmophytic vegetation.</p> <p>Annex II species present as a qualifying feature, but not a primary reason for site selection;</p> <ul style="list-style-type: none"> <li>marsh saxifrage.</li> </ul>		
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**Factors currently influencing the site/condition status:**  
 Excessive livestock grazing. Drainage of bogs. Over intensive and inappropriate burning.

**Vulnerabilities to change**  
 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 dependant 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. 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. Within this large site there is scope to enhance many of the more natural habitats and species whilst maintaining the core SPA interests.

Site	Designation Status and date	Qualifying interests	Conservation Objectives	Site summary
North Pennines Moors	SPA Feb 2001  Composite site within Carlisle District, Northumberland, Durham and North Yorkshire.	ARTICLE 4.1 QUALIFICATION (79/409/EEC) During the breeding season the area regularly supports: Hen harrier ( <i>Circus cyaneus</i> ) 2.2% of the GB breeding population Count as at 1993 and 1994 Merlin ( <i>Falco columbarius</i> ) 10.5% of the GB breeding population Estimated population Peregrine ( <i>Falco peregrines</i> ) 1.3% of the GB breeding population Count as at 1991 Golden plover <i>Pluvialis apricaria</i> (North-western Europe - breeding) at least 6.2% of the GB breeding population Estimated population	Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive. Subject to natural change, to maintain or restore: <ul style="list-style-type: none"> <li>• The extent and distribution of the habitats of the qualifying features;</li> <li>• The structure and function of the habitats of the qualifying features;</li> <li>• The supporting processes on which the habitats of the qualifying features rely;</li> <li>• The populations of the qualifying features;</li> <li>• The distribution of the qualifying features within the site.</li> </ul>	The site is situated in Cumbria, County Durham, Northumberland and North Yorkshire and includes parts of the moorland massif between the Tyne Gap (Hexham) and the Ribble-Aire corridor (Skipton). It encompasses extensive tracts of semi-natural moorland habitats. The site is of European importance for several upland breeding species, including birds of prey and waders. The southern end of the SPA is within 10 km of the South Pennine Moors SPA which supports a similar assemblage of upland breeding species. North Pennine Moors subsumes Moor House SPA, a site subject to separate classification.
<b>Factors currently influencing the site/condition status:</b> North Pennine Moors SAC and SPA comprises sixteen component SSSI's. During the most recent Condition Assessment process, 9.8% of the component SSSI's combined were classified as 'area favourable,' 89.22% were classified as 'unfavourable recovering,' 0.5% were classified as 'unfavourable no change' and 0.4% were classified as unfavourable declining.' Between the condition assessments of 2011 and 2012 the following sites have either improved or declined.				
<b>Vulnerabilities to change/potential effects of the Local Plan:</b> 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 dependant 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. 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. Within this large site there is scope to enhance many of the more natural habitats and species whilst maintaining the core SPA interests.

Site	Designation Status and date	Qualifying interests	Conservation Objectives	Site summary
North Pennine Dales Meadow	<p>SAC April 2005</p> <p>Carlisle District, Durham; Lancashire; North Yorkshire; Northumberland.</p>	<p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>• mountain hay meadows.</li> </ul> <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>• <i>molinia</i> meadows on calcareous peaty or clayey-silt-laden soils.</li> </ul>	<p>Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.</p> <p>Subject to natural change, to maintain or restore:</p> <ul style="list-style-type: none"> <li>• the extent and distribution of qualifying natural habitats and habitats of qualifying species;</li> <li>• the structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;</li> <li>• the supporting processes on which qualifying natural habitats and habitats of qualifying species rely;</li> <li>• the populations of qualifying species;</li> <li>• the distribution of qualifying species within the site.</li> </ul>	<p>The site comprises a total area of approximately 497 hectares. Individual designated sites are located across the administrative boundaries of Cumbria, Durham, North Yorkshire, Northumberland and Lancashire</p> <p>The series of isolated fields that comprise this SAC encompass the range of variation exhibited by Mountain hay meadows in the UK and contains the major part of the remaining UK resources of this habitats type. The grasslands included within the SAC exhibit very limited effects of agricultural improvement and show good conservation of structure and function. A wide range of rare and local meadow species are contained within the meadows.</p>

**Factors currently influencing the site/condition status:**

The North Pennine Dales Meadows SAC comprises nine component SSSI's. During the most recent Condition Assessment process, 77% of the component SSSI's combined were classified as 'area favourable,' 18% were classified as 'unfavourable recovering,' and 5% were classified as 'unfavourable no change.' The status of the SSSI's have not changed between the condition assessments of 2011 and 2012 and no reason has been recorded for adverse condition.

However, from examination of the UK Air Pollution Information System it can be seen that North Pennine Dales Meadows SAC is currently subject to poor air quality.

**Vulnerabilities to change**

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.

Site	Designation Status/date; Location	Qualifying interests	Conservation Objectives	Site summary
Walton Moss	SAC April 2005  Carlisle District.	Annex I habitats that are a primary reason for selection of this site: <ul style="list-style-type: none"> <li>• active raised bogs (priority feature);</li> <li>• degraded raised bogs still capable of natural regeneration.</li> </ul>	Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: <ul style="list-style-type: none"> <li>➤ The extent and distribution of qualifying natural habitats and habitats of qualifying species;</li> <li>➤ The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;</li> <li>➤ The supporting processes on which qualifying natural habitats and habitats of qualifying species rely;</li> <li>➤ The populations of qualifying species;</li> <li>➤ The distribution of qualifying species within the site.</li> </ul>	Bogs. Marshes. Water fringed vegetation. Fens (99%) Humid grassland. Mesophile grassland (1%)  Active raised bogs for which this is considered to be one of the best areas in the United Kingdom. Degraded raised bogs still capable of natural regeneration for which this is considered to be one of the best areas in the United Kingdom.

**Factors currently influencing the site/condition status:**

Management of the unit appears to be favourable. The site is a National Nature Reserve. The whole of the NNR and the wider SSSI is open access land (under the Countryside and Rights of Way Act 2000 (CROW), the public can walk freely on mapped areas of mountain, moor, heath, downland and registered common land without having to stick to paths).

**Vulnerabilities to change**

Significant portions of this site support mire vegetation in near-favourable condition. Walton Moss includes land managed as a National Nature Reserve. Remedial measures will be necessary to enable its recovery to favourable conservation status from damage caused by previous land-drainage operations and inappropriate grazing regimes. A hydrological monitoring regime is in preparation to inform remedial measures and grazing on the site has been tackled by enclosure and by Countryside Stewardship agreements.

Site	Designation Status/date; Location	Site summary
Bolton Fell Moss	<p>Site of Community Importance, and cSAC 2009. This accords European wide importance to Bolton Fell Moss and places duties on the UK government to restore the moss in accordance with its obligations under European law.</p> <p>Carlisle District, parishes of Hethersgill, Walton and Stapleton.</p>	<p>In 2009 Bolton Fell Moss was designated as a Site of Community Importance (SCI) by the European Union. This means it will ultimately become a Special Area of Conservation (SAC), placing a duty on the UK Government - under European Law - to restore it.</p> <p>In November 2013 planning permission was granted to Natural England for:</p> <ul style="list-style-type: none"> <li>(i) the change of use of the land from active mineral operation, agricultural grazing land or no formal use to use as a nature reserve for the restoration of degraded peat to favourable conservation status including a small car park at Kernahill and</li> <li>(ii) Engineering works to provide ground form and drainage to retain water within cells which will be used to support the growth of sphagnum</li> </ul>
<p><b>Factors currently influencing the site/condition status:</b></p> <p>Much of Bolton fell Moss has been cut-over or milled leaving a bare peat surface.</p> <p>The aim of restoration on Bolton Fell Moss is, through the manipulation of hydrology, removal of non-target vegetation and the reintroduction of target vegetation, to re-establish an active peat forming mire surface within 30 years. The key to achieving this is to stop peat extraction and to re-establish a water table which will range between 10cm below and 10cm above ground level.</p>		
<p><b>Vulnerabilities to change</b></p> <p>Afforestation, agriculture or visitor pressure. All of these damaging operations compromise the hydrological integrity of the bog leading to further degradation.</p>		

