Eden District Council

Local Plan Review 2014

Habitats Regulations Assessment Scoping Report

Contents

Page

1. Introduction **3**

1.2 Habitats Regulations Assessment (HRA) 3

1.3 This Report 3

2. Approach **3**

2.1 Overview 3

2.2 Screening 4

2.3 Assessment 5

2.4 Uncertainty 5

3. Baseline Summary **5**

3.2 **Table 1** - Overview of European Sites 6

3.4 **Table 2** - European Sites 8

4. Assessment **21**

4.1 Assessment of Draft Policies 21

4.1.2 **Table 3** - Policies Screened Out 21

4.1.3 **Table 3.1** - Policies Screened Out: Adequate Safeguards 22

4.1.4 **Table 3.2** - Policies Screened Out: Additional Protection 23

4.1.5 **Table 4** - Policies Considered Further 23

4.2 Assessment of Proposed Sites 24

4.2.1 **Table 5** - Summary of Potential Effects of Proposed Preferred Allocations on European Site Due to Scale and Location: Employment 26

Table 5.1 - Summary of Potential Effects of Proposed Preferred Allocations on European Site Due to Scale and Location: Housing 29

Table 6 - Summary of Likely Effects on European Sites 46

4.3 Allocations with Potential for Significant Effects 51

4.4 In-Combination Effects 53

5. Summary **53**

6. Consultation **54**

Appendix 1 ..... **55**

Screening Report for Draft Habitats Regulation Assessment

Eden District Local Plan 2014-2031 Preferred Options

1. Introduction

1.1.1 Eden District Council (EDC) is currently drafting a districtwide Local Plan (LP). The LP will contain strategic policies for growth, detailed development management policies and allocations of land. When adopted, the LP will form the Council's statutory framework for decision making until 2031.

1.1.2 The LP must undergo a number of statutory environmental assessments including Sustainability Assessment (SA) and Strategic Environmental Assessment (SEA). This ensures that the plan provides for a high level of protection of the environment and contributes to the integration of environmental considerations into the preparation and ultimate adoption of the Plan. One of these assessments is the Habitats Regulations Assessment (HRA) which is required by the Conservation of Habitats and Species Regulations 2010 (the Habitats Regulations).

1.2 Habitats Regulations Assessment (HRA)

1.2.1 Regulation 61 of the Conservation of Habitats and Species Regulations 2010 (as amended) requires that competent authorities assess the potential impacts of plans and programmes on the Natura 2000 network of European protected sites to determine whether there will be any 'likely significant effects' (LSE) on any European site as a result of the Plan, either on its own or in combination with other plans or projects. Further, it requires consideration of whether these effects will result in any adverse effects on a site's integrity. This process of assessing the impacts of the Plan against the conservation objectives of a European site is known as the Habitats Regulations Assessment (HRA). Eden District Council has the statutory responsibility for producing the LP and therefore is the Competent Authority for the purposes of the HRA.

1.3 This Report

1.3.1 Although the LP and any component plans must be subject to a HRA, this is ultimately a test for the final document to pass and there is no statutory requirement for any of the draft stages to undergo the HRA process themselves. However, as with the SA and the SEA, it is best practice for the HRA to be run as an iterative process alongside the Plan development to allow modification if necessary to help ensure that subsequently developed policies and proposals do not result in significant effects.

2. Approach

2.1 Overview

2.1.1 The HRA determines whether there will be any likely significant effects on any European site as a result of the Plan's implementations (either on its own or in combination with other plans and projects) and, if so, whether these effects will result in any adverse impact on the site's integrity. The current guidance details a four stage process for an HRA, although not all stages will necessarily be a requirement.

Box 1 Stages of HRA
Stage 1- Screening This stage identifies the likely impacts upon a European site of a project or plan, either alone or in combination with other projects or plans, and determines whether these impacts are likely to be not significant (inconsequential), significant or whether this is uncertain. **Stage 2 - Appropriate Assessment** Where there are likely significant effects, or the effects are uncertain, the Plan should be subject to appropriate assessment. This stage considers the impacts of the Plan or project on the integrity of the relevant European sites, either alone or in conjunction with other projects or plans, with respect to the sites structures and function and their conservation objectives. Where there are adverse impacts, it also includes an assessment of the potential mitigation for those impacts. **Stage 3 - Assessment of Alternative Solutions** Where adverse impacts are predicted, this stage examines alternative ways of achieving the objectives of the Plan that avoids adverse impacts on the integrity of European sites. **Stage 4 - Assessment Where No Alternative Solutions Exist and Where Adverse Impacts Remain** This stage assesses compensatory measures where it is deemed that the project or Plan should proceed for imperative reasons of overriding public interest.

2.1.1 This report is concerned with Stage 1 - Screening. The outcomes are:

- Collect information on Natura 2000 sites
- Determine whether the Plan has potential to have a significant effect on any Natura 2000 sites
- Identify any other plans or projects with potential for 'in combination' effects (these are listed in Appendix 1)

2.2 Screening

2.2.1 The screening will consider all Natura 2000 sites within the Plan limits and any sites which lie outside the boundary of Eden District but could potentially be impacted by the Plan through hydrological linkages. The Report identifies the conservation objectives for European sites, factors which are important for the maintenance of the qualifying features etc. This will enable the report to identify issues which are likely to require consideration in the evaluation of LSE.

2.2.2 The screening involves consideration of all the Plan policies and allocations in relation to potential impacts on the natural environment either alone or in combination with other plans and policies. This will form the basis of the next stage of the HRA which will look in more detail at any potential LSE. The Report is not a HRA of the final document and therefore the LP will be subject to further review and refinement.

2.3 Assessment

2.3.1 One of the purposes of the plan is to identify and allocate specific sites to meet the identified needs of the District in terms of housing, employment and a cemetery extension. The Sites have been previously subject to some levels of testing through the previous work carried out on Development Plan Documents prior to the change to the planning system moving away from Local Development Frameworks and back to Local Plans.

2.3.2 The HRA considers whether the proposed site allocations are likely to have an impact on European site interest features and identifying reasonable impact pathways by which the allocations could affect them. The sites submitted were therefore assessed in detail to identify those sites that are likely to be:

- Unacceptable from an HRA perspective (ie unavoidable significant or adverse effects on a European site likely); or
- Which may require additional assessment or investigation; or
- Which may require specific mitigation to be identified and included in the plan to ensure no significant or adverse effects are likely if the site is developed.

The process will be repeated for the final plan.

2.4 Uncertainty

2.4.1 Although the LP includes specific allocations and policies, there will inevitably be some uncertainty. For some allocations, it will only be possible to fully assess potential effects at the pre-project planning stage when specific details are known such as development type, construction work details. However, it is likely that most potential construction effects could almost certainly be avoided or mitigated at a project level using best practice. It has been assumed therefore that where measures which are typically successful can be put in place, this will be the case at the project stages.

3. Baseline Summary

3.1 The following table provides a summary of the baseline information on the European Sites, the sensitivities and vulnerabilities of the interest features. The table provides a broad indication of the type of impact that each site is likely to be susceptible to. The information has been primarily obtained from available data from Natural England. In addition, the assessment considers the potential for impacts on the Solway Firth sites which are downstream of the receptors. Sites within the Plan area and those considered to have a direct hydrological linkage into the sites within the Plan have been considered.

3.2 All sites within the boundary of Eden District have been included in the assessment. In addition, sites outwith the boundaries but considered to have a hydrological link have also been included. The sites included in the assessment are as follows:

Table 1 - Overview of European sites

Site Name	Location	Type
Asby Complex	Within LP area	SAC
Borrowdale Woodland Complex	Within LP area	SAC
Clints Quarry	Within LP area	SAC
Cumbria Marsh Fritillary Site	Within LP area	SAC
Esthwaite Water	Within 15km of Plan Area	Ramsar
Helbeck and Swindale Woods	Within LP area	SAC
Lake District High Fells	Within LP area	SAC
Moor House - Upper Teasdale	Within LP area	SAC
Morecambe Bay Pavements	Over 15km from Plan Area	SAC
Naddle Forest	Within 5km	SAC
North Pennines Meadows	Within LP area	SAC
North Pennines Moors	Within LP area	SAC
North Pennines Moors	Within LP area	SPA
River Derwent and Bassenthwaite Lake	Within 5km	SAC
River Eden	Within LP area	SAC
River Kent	Within 5km	SAC
Solway Firth	30km from Plan Area	SAC
Tarn Moss	Within 5km	SAC
Tyne and Nent	Within LP area	SAC
Tyne and Allen Rivers Gravels	Within LP area	SAC
Ullswater Oakwoods	Within 15km of Plan Area	SAC
Upper Solway Flats and Marshes	Over 15km from Plan Area	Ramsar
Upper Solway Flats and Marshes	Over 15km from Plan Area	SPA

3.3 Conservation objectives are published by Natural England. Current objectives are broadly the same for all sites and are therefore following rather than being replicated throughout the table:

- 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:
    - The extent and distribution of qualifying natural habitats and habitats of qualifying species;
    - The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;
    - The supporting processes on which qualifying natural habitats of qualifying species rely;
    - The populations of qualifying species; and
    - The distribution of qualifying species within the site.

3.4 Table 2 - European Sites

Site	Interest Features	Summary of site sensitivities/vulnerabilities
Asby Complex SAC	**Annex I habitats that are a primary reason for selection of this site:** • Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia) • Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) • Petrifying springs with tufa formation (Cratoneurion)* • Alkaline fens • Limestone pavements* **Annex I habitats present as a qualifying feature:** • Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. • European dry heaths • Calcareous fens with Cladium mariscus and species of the Caricion davallianae* **Annex II species that are a primary reason for selection of this site:** • Geyer`s whorl snail Vertigo geyeri • Slender green feather-moss Drepanocladus (Hamatocaulis) vernicosus	Limestone pavements have been extensively damaged in the past for supply of decorative rockery stone. The damage has been reduced in recent years by protective Limestone Pavement Orders. Unauthorised damage still continues as a minor and local problem. Asby Complex SAC suffers from overgrazing. The limestone pavement flora and the dry heathland are particularly affected, though the fen and spring habitats appear tolerant of the grazing levels. Management agreements are being sought but may be difficult to achieve on common land. There has been some agricultural pressure on the fen and tufa springs but damage from drainage and fertiliser application is being addressed through management agreements on some parts of the site. The site will be primarily vulnerable to direct encroachment or nearby development affecting site hydrology or use (visitor pressure).
Borrowdale Woodland Complex SAC	**Annex I habitats that are a primary reason for selection of this site:** • Old sessile oak woods with Ilex and Blechnum in the British Isles **Annex I habitats present as a qualifying feature:** • Siliceous rocky slopes with chasmophytic vegetation • Bog woodland	In recent decades, there has been very little natural regeneration of native woodland tree species to ensure the long-term survival of the woodlands, due to grazing pressures from domestic livestock. However, very low levels of grazing are important to maintain the rich and diverse bryophyte flora. This issue should be addressed through the Environmentally Sensitive Area, Woodland Grant Scheme and agreement of Site Management Statements. The cSAC is also part of the UK Restoration of Atlantic Oakwoods LIFE project, under which further positive management is being carried out.

Site	Interest Features	Summary of Site Sensitivities/vulnerabilities
Clints Quarry SAC	**Annex II species that are a primary reason for selection of this site:** • Great crested newt Triturus cristatus	The great crested newt population at Clints Quarry has developed since quarrying ceased in the 1980s. The site has been relatively undisturbed since. Water levels in the ponds are largely dependent on rainfall which has been low in recent years.
Cumbrian Marsh Fritillary Site SAC	**Annex II species that are a primary reason for selection of this site:** • Marsh fritillary butterfly Euphydryas (Eurodryas, Hypodryas) aurinia	The grassland habitat of marsh fritillary requires appropriate grazing to maintain its suitability, and the presence of its food plant Succisa pratensis. The habitat within the site is in need of management and this is being addressed by pursuing management agreements with the landowners. The butterfly has suffered at this site in recent years from bad weather during its flight period. The site will be primarily vulnerable to direct encroachment, although damage to nearby habitats supporting the food plant could also have a negative effect.
Esthwaite Water Ramsar	**Qualifies under Ramsar Criteria 1 and 2** • Criterion 1 - Esthwaite Water is a particularly good example of a mesotrophic lake, with a well-developed hydrosere at the northern end • Criterion 2 - The lake supports a rich assemblage of pondweed species and is the only known locality in England and Wales for slender naiad Najas flexilis. The diverse aquatic invertebrate fauna includes a number of species with restricted distributions in Britain	Eutrophication - This site condition is unfavourable because of eutrophication, occurring as a result of pollution from aquaculture and domestic sewage. Recent surveys have shown significant deterioration of the aquatic macrophyte flora as well as adverse changes in the water chemistry. The single most important source of nutrients to the lake is the fish farm. The issue is complicated by the shallowness of the lake and presence of P-rich surface sediments, a consequence of the long history of P inputs. The adverse impacts of increasing P concentrations are exacerbated by a heavily-stocked rainbow trout Salmo gairdneri population.
Helbeck and Swindale Woods SAC	Annex I habitats that are a primary reason for selection of this site: Tilio-Acerion forests of slopes, screes and ravines*	These two woodlands are in an area important for upland sheep grazing. In part of one wood, natural regeneration and the development of the ground flora is being inhibited by sheep grazing where the woodland is unenclosed from the adjacent pastures. This issue has been addressed in other parts of the site through agri-environment schemes and management agreements, and similar agreements will be sought for this area. The site will be primarily vulnerable to direct encroachment or impacts on management.

Site	Interest Features	Summary of site sensitivities/vulnerabilities
Lake District High Fells SAC	**Annex I habitats that are a primary reason for selection of this site:** • Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea • Northern Atlantic wet heaths with Erica tetralix • European dry heaths • Alpine and Boreal heaths • Juniperus communis formations on heaths or calcareous grasslands • Siliceous alpine and boreal grasslands • Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels • Blanket bogs* • Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) • Siliceous rocky slopes with chasmophytic vegetation • Old sessile oak woods with Ilex and Blechnum in the British Isles **Annex I habitats present as a qualifying feature:** • Species-rich Nardus grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe) (Priority feature) • Alkaline fens • Calcareous rocky slopes with chasmophytic vegetation **Annex II species present as a qualifying feature:** • Slender green feather-moss Drepanocladus (Hamatocaulis) vernicosus	The European habitats on this site, other than acidic scree, are threatened by grazing and more locally grazing combined with visitor pressure. A very high proportion of the site occurs on unfenced common land where control of grazing is difficult to achieve and pressure of sheep threatens to destroy or prevent favourable condition from being achieved. These pressures have been significantly reduced over much of the site by entry into the Lake District ESA scheme, but this largely only slows or possibly arrests decline. Siliceous scree is possibly the least-threatened habitat and is widespread, albeit in a modified state. The site will be primarily vulnerable to direct encroachment or changes in management.

Site	Interest Features	Summary of site sensitivities/vulnerabilities
Moor House - Upper Teesdale SAC	**Annex I habitats that are a primary reason for selection of this site:** • Juniperus communis formations on heaths or calcareous grasslands • Siliceous rocky slopes with chasmophytic vegetation • Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) • Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia) • Blanket bogs* • Alpine and Boreal heaths • Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) • Calaminarian grasslands of the Violetalia calaminariae • Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels • Alpine pioneer formations of the Caricion bicoloris-atrofuscae* • Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. • Siliceous alpine and boreal grasslands • Mountain hay meadows • Calcareous rocky slopes with chasmophytic vegetation • Petrifying springs with tufa formation (Cratoneurion)* • Alkaline fens • Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii) **Annex I habitats present as a qualifying feature:** • European dry heaths • Limestone pavements* **Annex II species that are a primary reason for selection of this site:** • Round-mouthed whorl snail Vertigo genesii • Marsh saxifrage Saxifraga hirculus	Ecologically unsustainable grazing, driven by agricultural support mechanisms, has had a deleterious effect on virtually all the Annex I habitats listed, to the extent that for some habitats it is difficult to make the necessary assessments of conservation structure and function required here. This serious problem has so far been very difficult to solve, requiring fundamental policy change as well as targeted local action. Some successes have been achieved however through Wildlife Enhancement Schemes geared at moorland and pasture, and through the ESA and Countryside Stewardship schemes, while issues impacting on meadows have been largely addressed through meadow schemes. Refining scheme prescriptions in the light of monitoring feedback is an important part of delivering favourable condition. Inappropriate burning and drainage of bogs also need tackling; much progress has been made on the latter through partnerships. Acid deposition and the microclimatic shifts stemming from reservoir construction may also have implications for the vegetation, as may increase access.

Site	Interest Features	Summary of site sensitivities/vulnerabilities
Morecambe Bay Pavements SAC	**Annex I habitats that are a primary reason for selection of this site:** • Limestone pavements* • Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. • Taxus baccata woods of the British Isles* • Juniperus communis formations on heaths or calcareous grasslands • Tilio-Acerion forests of slopes, screes and ravines* • Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia) **Annex I habitats present as a qualifying feature:** • Calcareous fens with Cladium mariscus and species of the Caricion davallianae* • Old sessile oak woods with Ilex and Blechnum in the British Isles • European dry heaths **Annex II species that are a primary reason for selection of this site:** • Narrow-mouthed whorl snail Vertigo angustior	The SAC is subject to a number of problems related to the decline of traditional management practices. The under-grazing of grasslands and decline of traditional cattle grazing is leading to the loss of sward diversity and scrub encroachment problems. Localised overgrazing (sheep-dominated) has impoverished the pavement flora on one of the component sites. A decline of traditional coppice management has reduced the interest of some of the woodland sites. The planting of non-native conifer crops on some of the sites has led to localised declines in condition. However, large parts of the site are nature reserves and are sensitively managed. A major restoration project funded by LIFE Nature is in progress to remove non-native conifer plantations and further other aspects of site restoration. The problems are being addressed primarily through a series of management agreements. These include Natural England Wildlife Enhancement Schemes, Environmentally Sensitive Area Agreements, and Woodlands Grant Schemes.
Naddle Forest SAC	**Annex I habitats that are a primary reason for selection of this site:** • Old sessile oak woods with Ilex and Blechnum in the British Isles **Annex I habitats present as a qualifying feature:** • European dry heaths • Northern Atlantic wet heaths with Erica tetralix	The European habitats on the site have been threatened by grazing, by both sheep and deer. Much of the woodland area has been fenced to reduce sheep and deer grazing and allow regeneration to occur, although deer still range through parts of the site. Sheep grazing pressures have been reduced on the heath areas through entry into the ESA scheme, and further reductions are planned through this mechanism.

Site	Interest Features	Summary of site sensitivities/vulnerabilities
North Pennine Dales Meadows SAC	**Annex I habitats that are a primary reason for selection of this site:** • Mountain hay meadows **Annex I habitats present as a qualifying feature:** • Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	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.
North Pennine Moors SAC	**Annex I habitats that are a primary reason for selection of this site:** • European dry heaths • Old sessile oak woods with Ilex and Blechnum in the British Isles • Siliceous rocky slopes with chasmophytic vegetation • Blanket bogs* • Juniperus communis formations on heaths or calcareous grasslands • Petrifying springs with tufa formation (Cratoneurion)* **Annex I habitats present as a qualifying feature:** • Calaminarian grasslands of the Violetalia calaminariae • Siliceous alpine and boreal grasslands • Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) • Calcareous rocky slopes with chasmophytic vegetation • Alkaline fens • Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia) • Northern Atlantic wet heaths with Erica tetralix • Annex II species present as a qualifying feature: • Marsh saxifrage Saxifraga hirculus	All interest features have been affected by excessive livestock grazing levels across parts of the site. These have been, and are still, encouraged by headage payments, but agreements with graziers and moorland owners, including those in Wildlife Enhancement and Countryside Stewardship schemes, are starting to overcome the problems of overgrazing. In places, the difficulty of reaching agreements on commons, which cover much of the site, means that successes are limited at present, and continues to prevent restoration. Drainage of wet areas can also be a problem; drains have been cut across many areas of blanket bog, disrupting the hydrology and causing erosion, but in most parts these are being blocked and the habitat restored under agreements. Burning is a traditional management tool on these moorlands, which contributes to maintaining high populations of SPA breeding birds. However, over-intensive and inappropriate burning is damaging to heath and blanket bog and further agreements are needed with the landowners to achieve sympathetic burning regimes. Restoration, to some degree, of a mosaic of more natural habitats across parts of the site is desirable. Acid and nitrogen deposition continue to have damaging effects on the site.

Site	Interest Features	Summary of site sensitivities/vulnerabilities
North Pennine Moors SPA	• Curlew Numenius arquata (breeding) • Dunlin (ssp. schinzii) Calidris alpina schinzii (breeding) • Golden plover Pluvialis apricaria (breeding) • Hen harrier Circus cyaneus (breeding) • Merlin Falco columbarius (breeding) • Peregrine falcon Falco peregrinus (breeding)	The North Pennine Moors covers nearly 150,000 hectares and is largely heather moorland, either as blanket bog or drier heathland, with smaller associated areas of wetland, grassland, bracken, scrub, woodland and cliff. The habitats and qualifying breeding bird populations are mostly dependent upon stock grazing and burning at sympathetic levels. The continuation of these practices relies on their profitability, including any subsidy or incentive payments. Over-grazing, over-burning and other forms of intensive agricultural or sporting management (eg 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.
River Derwent and Bassenthwaite Lake SAC	**Annex I habitats that are a primary reason for selection of this site:** • Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea **Annex I habitats present as a qualifying feature:** • Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation **Annex II species that are a primary reason for selection of this site:** • River Lamprey Lampetra fluviatilis • Brook lamprey Lampetra planeri • Sea lamprey Petromyzon marinus • Atlantic salmon Salmo salar • Marsh fritillary butterfly Euphydryas (Eurodryas, Hypodryas) aurinia • Floating water-plantain Luronium natans • Otter Lutra lutra	Water levels and flooding are an issue with the River Derwent. Concern has been expressed about both the level of flooding of adjacent agricultural land and also recent flooding of urban areas. This has resulted in public pressure both for new flood defences and different water-level control regimes. Issues relating to water control levels are being addressed through a collaborative project between Natural England, Environment Agency and the water company, Yorkshire Water. Natural England is also fully consulted over any new proposals relating to new or improved flood defences. Water quality is also a potential issue on the river.

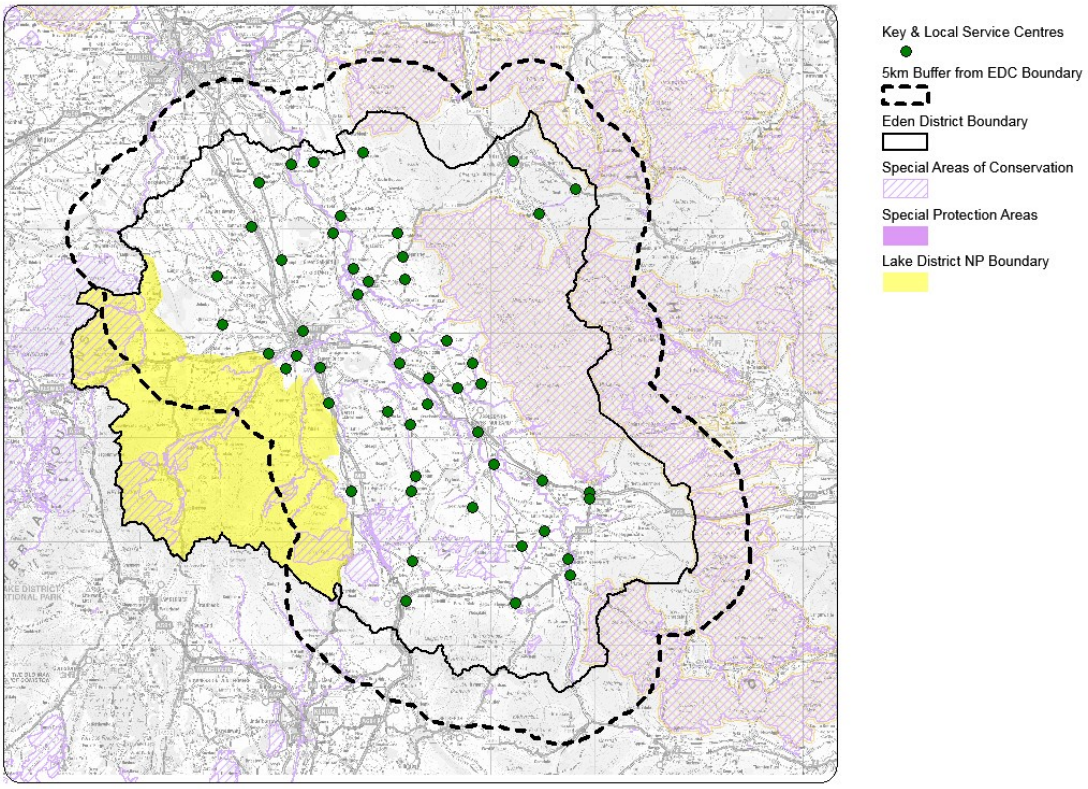
Site	Interest Features	Summary of site sensitivities/vulnerabilities
River Eden SAC	**Annex I habitats that are a primary reason for selection of this site:** • Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea • Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation • Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* • White-clawed (or Atlantic stream) crayfish Austropotamobius pallipes • Sea lamprey Petromyzon marinus • Brook lamprey Lampetra planeri • River lamprey Lampetra fluviatilis • Atlantic salmon Salmo salar • Bullhead Cottus gobio • Otter Lutra lutra	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.
River Kent SAC	**Annex I habitats present as a qualifying feature:** • Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation **Annex II species that are a primary reason for selection of this site:** • White-clawed crayfish Austropotamobius pallipes **Annex II species present as a qualifying feature:** • Freshwater pearl mussel Margaritifera margaritifera • Bullhead Cottus gobio	The maintenance of breeding and nursery areas for the species on this site depends on the habitat quality of streams and their margins. Some areas of the site suffer from poor habitat quality. The intention is to address this through implementation of habitat improvement schemes. The impact of point-discharges on water quality will be reviewed and action proposed where necessary. A particular problem on this site and affecting white-clawed crayfish is incidents of pyrethroid sheep-dip pollution of watercourses. These are currently under investigation. The dwindling population of freshwater pearl mussels needs to be investigated in relation to the factors affecting its recruitment and structure. A management plan will be developed for the part of the catchment supporting this species.

Site	Interest Features	Summary of site sensitivities/vulnerabilities
Solway Firth SAC	**Annex I habitats that are a primary reason for selection of this site:** • Salicornia and other annuals colonising mud and sand • Estuaries • Sandbanks which are slightly covered by sea water all the time • Mudflats and sandflats not covered by seawater at low tide • Atlantic salt meadows (Glauco-Puccinellietalia maritimae) **Annex I habitats present as a qualifying feature:** • Reefs • Fixed dunes with herbaceous vegetation ("grey dunes")* • Perennial vegetation of stony banks **Annex II species that are a primary reason for selection of this site:** • Sea lamprey Petromyzon marinus • River lamprey Lampetra fluviatilis	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), saltmarsh/ merse grazing, oil and gas exploration (outwith the site), and industrial development. A management strategy to consider and co-ordinate these activities is being produced by the Solway Firth Partnership. This will set out the means by which it is proposed to secure the sustainable use of the estuary.
Tarn Moss SAC	**Annex I habitats that are a primary reason for selection of this site:** • Transition mires and quaking bogs	Water quantity and quality is subject to influence by activities in the catchment. There is a conifer plantation to the south of the site. Felling of the trees could potentially change the quantity and quality of the water inputs. It is expected that Natural England would be consulted in advance of felling. To the north of the site is an area of siltation and slight enrichment. The source of this water is not known and will be the subject of further investigations.

Site	Interest Features	Summary of site sensitivities/vulnerabilities
Tyne and Nent SAC	**Annex I habitats that are a primary reason for selection of this site:** • Calaminarian grasslands of the Violetalia calaminariae	These grasslands occur in two distinct heavy metal-rich habitats: spoil heaps associated with past lead-mining, and river gravels that have been partially derived from the erosion of metal-rich spoil heaps upstream. They are dependent on the maintenance of a high metal content in the substrate. Loss of metallophytes through successional processes is beginning to occur on one site, and management to address this will be promoted through agreements. Motorcycle scrambling on part of another site could also represent a threat to the adjacent calaminarian grassland. This will be monitored and appropriate action taken if necessary. On river gravel sites concerns exist that depletion of the upstream supply of metal-rich waste following the decline of mining will result in a loss of metallophytes. Although this has not been shown to be a problem on these sites at present, research will be carried out to investigate and where necessary address this issue.
Tyne and Allen River Gravels SAC	**Annex I habitats that are a primary reason for selection of this site:** • Calaminarian grasslands of the Violetalia calaminariae	These special habitats have been created by deposition of minerals out of the rivers Tyne and Allen onto gravel banks. Mining activities upstream have virtually stopped, thus reducing the amount of metals carried by the rivers. In places the rivers have changed course, isolating the shingle banks. Succession to grassland and scrub is taking place on some of the component SSSIs. It is not currently known whether interventionist management would restore the interest in areas where succession has taken place, as there may no longer be sufficient available metals even if the bare shingle is re-exposed.

Site	Interest Features	Summary of site sensitivities/vulnerabilities
Ullswater Oakwoods SAC	**Annex I habitats that are a primary reason for selection of this site:** Old sessile oak woods with Ilex and Blechnum in the British Isles	In recent decades, there has been little natural regeneration of native woodland species to ensure the long-term survival of the woodlands. This is due to grazing pressures from domestic livestock and more recently, red deer in Low Wood. However, low levels of grazing are important to maintain the bryophyte flora. This issue should be addressed through WES and SMSs.
Upper Solway Flats and Marshes Ramsar	**Criterion 2** - Supports over 10% of the British population of natterjack toad Bufo calamita (Habitats Directive Annex IV species (S1202)) **Criterion 5** - 35720 waterfowl (5 year peak mean 1998/99-2002/2003) **Criterion 6** - Lesser black-backed gull Larus fuscus, Herring gull Larus argentatus, Barnacle goose Branta leucopsis, Bar-tailed godwit Limosa lapponica, Curlew Numenius arquata, Dunlin (ssp. alpina) Calidris alpina alpina, Knot Calidris canutus, Oystercatcher Haematopus ostralegus, Pink-footed goose Anser brachyrhynchus, Pintail Anas acuta, Redshank Tringa tetanus, Ringed plover Charadrius hiaticula, Scaup Aythya marila, Whooper swan Cygnus cygnus	As for Upper Solway Flats and Marshes SPA, except for natterjack toad which will be primarily vulnerable to direct damage / disturbance of habitats.
Upper Solway Flats and Marshes SPA	**Barnacle goose** Branta leucopsis (Wintering; added in SPA review); **Bar-tailed godwit** Limosa lapponica (Wintering); Curlew Numenius arquata (Wintering); **Dunlin** (ssp. alpina) Calidris alpina alpina (Wintering); **Golden plover** Pluvialis apricaria (Wintering); **Goldeneye** Bucephala clangula (Wintering; removed in SPA review); **Grey plover** Pluvialis squatarola (Wintering; removed in SPA review); **Knot** Calidris canutus (Wintering); **Oystercatcher** Haematopus ostralegus (Wintering); **Pink-footed goose** Anser	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 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

Site	Interest Features	Summary of site sensitivities/vulnerabilities
	brachyrhynchus (Wintering); Pintail Anas acuta (Wintering); Redshank Tringa totanus (Wintering); Ringed plover Charadrius hiaticula (Passage; added in SPA review); Sanderling Calidris alba (Wintering; removed in SPA review); Scaup Aythya marila (Wintering; removed in SPA review); Shelduck Tadorna tadorna (Wintering; removed in SPA review); Shoveler Anas clypeata (Wintering; removed in SPA review); Teal Anas crecca (Wintering; removed in SPA review); Turnstone Arenaria interpres (Wintering; removed in SPA review); Whooper swan Cygnus cygnus (Wintering); Waterfowl assemblage (Wintering)	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 and the management strategy addresses the planning of recreational and development activities to avoid disturbance to roosts and feeding areas.


Key & Local Service Centres
5km Buffer from EDC Boundary
Eden District Boundary
Special Areas of Conservation
Special Protection Areas
Lake District NP Boundary

4. Assessment

4.1 Assessment of Draft Policies

4.1.1 The following provides the assessment of the Policies proposed within the Eden Local Plan Preferred Options. A number of policies were screened out at the start for the following reasons:

- They have no influence over the quantum or location of development, but over aspects such as design standards or requirements for the provision of, for example affordable housing, which is a requirement of development but has no part in governing distribution or location; or
- The policy has built in wording which will ensure that Natura 2000 sites have protection from development which may come forward; or
- The policy is related to the protection of or providing mitigation for Natura 2000 sites.

4.1.2 Policies which are considered to have no influence over the quantum or location of development and are therefore screened out are:

Table 3 - Policies Screened Out

Policy Number	Screened out - no influence over quantum or location of development
PEN1	The Town Plan for Penrith
PEN2	Penrith Masterplans
AL1	A Town Plan for Alston
AP2	A Town Plan for Appleby
KS1	A Town Plan for Kirkby Stephen
DEV4	Infrastructure and Implementation
HS1	Affordable Housing
HS4	Housing Mix and Type
EC5	Advertising/Signposting
EC7	Town Centres
ENV3	The North Pennines Area of Outstanding Natural Beauty
ENV4	Green Infrastructure Networks and Recreational Land
ENV5	Sustainable Buildings
ENV9	The Built (Historic) Environment
COM1	Principles for Services, Facilities, Sport and Informal Recreation
COM2	Sustaining Village Services and Facilities
COM3	Open Space and Recreational Land

4.1.3 Policies which are considered to have adequate safeguards in place and are therefore screened out are:

Table 3.1 - Policies Screened Out

Policy Number	Screened out - adequate safeguards
AL2	Renovation in Alston Moor Provides - 'There is no adverse impact on landscape, nature conservation or archaeological interests' (Point 5)
RUR4	Employment Development and Farm Diversification in Rural Areas Provides - '…..not cause harm to the natural environment' (Point 6)
DEV5	Design of new Development Provides - 'protects and where possible enhances the District's distinctive rural landscape, natural environment and biodiversity' (Point 2)
HS3	Essential Dwellings for Workers in the Countryside Provides - '…will not have any significant impacts on local [ ] conservation interests' (Point 6)
HS7	Gypsy and Traveller Provision - the development would not materially harm the natural or historic environmental assets of the District' Point 5)
EC3	Employment Development at Existing Settlements Provides - 'Development would not give rise to any unacceptable impacts in relation to local amenity, landscape, ecology or other environmental and cultural heritage considerations' (Point 3)
EC6	Telecommunications Infrastructure Provides - '…should not have an unacceptable effect on sensitive areas, including areas of ecological interest' (Point 2)
ENV6	Low Carbon Energy Generation Provides - '…should not have an unacceptable effect on sensitive areas, including areas of ecological interest (Point 2)
ENV7	Wind Energy Development Provides - 'Development will usually be resisted where a proposal potentially leads to impacts on international sites, such as SACs and SPAs'

4.1.4 Policies which are considered to provide additional environmental protection measures and are therefore screened out are:

Table 3.3 - Policies Screened Out

Policy Number	Screened out - additional protection
ENV1	Protection and Enhancement of the Natural Environment
ENV2	Protection and Enhancement of Landscapes and Trees
DEV2	Water Management and Flood Risk
ENV8	Pollution

4.1.5 Consequently, the following policies could not be screened out at an early date either because they promote development within Eden District or govern its distribution or do not contain adequate safeguards within the text:

Table 4 - Policies Considered Further

Policy Number	Screened in	Potential Impact Identified
LS1	Locational Strategy	Increased population - potential to increase vehicle emissions, surface water run-off and increase predation from domestic animals also potentially give rise to additional recreational pressure
PEN3	Newton Rigg	Potential to increase vehicle emissions and surface water run off
RUR1	Rural Settlements and the Rural Areas	Increased population and employment land within the rural area with the potential to increase vehicle emissions, surface water run-off and potentially causing additional recreational pressure
DEV1	General Approach to New Development	Presumption in favour of sustainable development - potential for housing and employment to increase vehicle emissions, surface water run-off and increase predation from domestic animals also potentially give rise to additional recreational pressure
DEV3	Transport, Accessibility and Rights of Way	Potential to result in additional surface water run off
HS2	Housing to Meet Local Needs	Increased population - potential to increase vehicle emissions, surface water run-off and increase predation from domestic animals also potentially give rise to additional recreational pressure

Policy Number	Screened in	Potential Impact Identified
HS5	Housing for Older People and Those in Need of Support	Increased population - potential to increase vehicle emissions, surface water run-off and increase predation from domestic animals also potentially give rise to additional recreational pressure
HS6	Community Land Trusts	Increased population - potential to increase vehicle emissions, surface water run-off and increase predation from domestic animals also potentially give rise to additional recreational pressure
EC1	Employment Land Provision	Potential to increase vehicle emissions and surface water run off
EC2	Protection of Employment Sites	Potential to allow other uses which may have an impact in terms of surface water run-off, increased recreational pressure and increased predation from domestic animals
EC4	Tourism Accommodation	Locations may increase recreational pressure

4.1.6 However, these policies are to be read in conjunction with other policies within the proposed Local Plan when decisions are taken. Therefore it is considered that policies can be screened out due to the combined effects of other policies which provide safeguards:

4.2 Assessment of Proposed Sites

4.2.1 The Local Plan proposes a number of sites for allocation for both housing and employment. This assessment aims to identify any sites which are unsuitable from an HRA perspective or which would need to include specific measures to ensure that specific effects are avoided or mitigated appropriately. The assessment was desk based, using OS mapping data and information on the following:

- the proximity of the potential allocation site to any European site;
- the presences of direct linkages or impact pathways to a European site (eg connecting watercourse);
- any known indirect linkages or pathways (eg roosting areas);
- the type of development proposed;
- the size of the proposed allocation site.

The results of the assessment are summarised in Table 5, the assessment criteria and colour coding are summarised in Box 2. Table 6 summarises the ‘screening’ assessment of the allocations - it is not possible to exclude a site without understanding both the likely effects of the allocations and the vulnerabilities of the European site interest feature.

Box 2 - Summary of Assessment Criteria for Allocations and Colour Codes
The allocation or policy will not, as far as can be reasonable determined, have any significant effects on any European site due to: • the European site or interest not being sensitive to the likely outcomes of the proposal; • the site or interest features not being exposed to the likely outcomes of the proposal due to the absence of reasonable impact pathways of the likely scale/location of the development. This will include allocations where there is no reason to assume that works could not be accommodated without significant effects assuming that standard construction best practice or mitigation that is common and established and known to be successful in similar situations, is applied.
The allocation may require some additional investigation to determine the likelihood of significant effects and there may be a risk that the effects cannot be quantified sufficiently to show no LSE. Adverse effects are not necessarily likely but generic mitigation measures may not be sufficient to ensure no LSE.
Significant effects are very likely or certain due to the scale/nature/location of the proposals or the vulnerability and distribution of the interest features within/near the European site.

Table 5 - Summary of Potential Effects of Proposed Preferred Allocations on European Site Due to Scale and Location - Employment

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
2A - Gilwilly Industrial Estate Extension, Penrith	B1(a), B2 and B8 Purpose built industrial estate partly developed with site infrastructure works in place to allow future development to come forward	The closest European Site is the River Eden SAC, approximately 2.6km away to the east of Penrith. It is assumed that surface water drainage systems are already designed and in place to ensure that site run off is appropriately controlled to prevent any adverse effects on the SAC. Future phases are unlikely to result in significant effects on European sites. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
MPC - Masterplan Option C, Skirsgill - Land Adjacent Skirsgill Depot, Penrith	B1(a), B2 and B8 Adjacent to existing depot area	The closest European Site is the River Eden SAC immediately adjacent to the south of the site. Due to the close relationship of the site to the SAC and the potential types of development, it is considered that further investigation is necessary to ensure that appropriate mitigation measures are outlined and feasible. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
24 - Skelgillside Workshops, Alston	B1(a) and B2	This is a modest site to the east of Alston, adjacent to an existing site. The closest European site is the Tyne and Nent Gravels SAC of which the closest area is approximately 1.5km upstream. The interest feature of the site is Calaminarian grasslands which are unlikely to be affected by the proposed site. Moor House, Upper Teesdale SPA and North Pennines Moors SPA are approximately 3km from the site. There are no direct impact pathways to the site and it is not considered likely that the allocation would affect the interest features. All other European sites are further than 5km away and not connected by any direct pathways.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
29 - Land Adjacent to Bonds Factory, Potters Lane, Alston	B2	This is a modest site within Alston, adjacent to an existing site. The closest European site is the Tyne and Nent Gravels SAC of which the closest area is approximately 1.5km upstream. The interest feature of the site is Calaminarian grasslands which are unlikely to be affected by the proposed site. Moor House, Upper Teesdale SPA and North Pennines Moors SPA are approximately 3km from the site. There are no direct impact pathways to the site and it is not considered likely that the allocation would affect the interest features. All other European sites are further than 5km away and not connected by any direct pathways.
26 - High Mill, Front Street, Alston	B1, may be part C3 as mixed development	This is a small brownfield site within Alston. The closest European site is the Tyne and Nent Gravels SAC of which the closest area is approximately 1.5km upstream. The interest feature of the site is Calaminarian grasslands which are unlikely to be affected by the proposed site. Moor House, Upper Teesdale SPA and North Pennines Moors SPA are approximately 3km from the site. There are no direct impact pathways to the site and it is not considered likely that the allocation would affect the interest features. All other European sites are further than 5km away and not connected by any direct pathways.
19 - Cross Croft Industrial Estate, Appleby	B1(a), B1(b) and B8	The River Eden SAC is the closest European site, some 700m away. Direct effects are unlikely and appropriately designed surface water drainage systems would ensure surface water run-off was successfully controlled to prevent any impact on the SAC. Moor House, Upper Teasdale SPA and North Pennine Moors SPA within 4km of the allocation site although the interest features are unlikely to be affected by the proposed development use. All other European sites are at least 5km away and not connect by a direct impact pathway.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
21 - The Old Creamery, Appleby	C3, B1(a), and B1(b) Brownfield site	The River Eden SAC is the closest European site, some 500m away. Direct effects are unlikely and appropriately designed surface water drainage systems would ensure surface water run-off was successfully controlled to prevent any impact on the SAC. Moor House, Upper Teasdale SPA and North Pennine Moors SPA within 4km of the allocation site although the interest features are unlikely to be affected by the proposed development use. All other European sites are at least 5km away and not connected by a direct impact pathway.
23 - Shire Hall, The Sands, Appleby	B1(a) Brownfield site, partially vacant historic building	The site is within Appleby town centre and 100m from the River Eden SAC, but given it represents a conversion, it is considered unlikely to have any potential significant effects on the SAC or any other European site.
33 - Land Adjacent Kirkby Stephen Business Park, St Luke's Road, Kirkby Stephen	B2, B8 Extension to existing business park	The closest European site is the River Eden which is 360m away to the south of Kirkby Stephen. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC. The next nearest site is the North Pennines Moors SPA, approximately 4km from the site. It is unlikely that the development would have any adverse impact on the interest features of this site. All other European sites are at least 5km away and not connected by a direct impact pathway.
38(b) Tebay Old Railway Sidings, Tebay	B2 Brownfield Site	The nearest European sites are the North Pennines Dales Meadows SAC approximately 2.5km away, the Lake District High fells SAC approximately 2.8km away and Asby Complex SAC. These are all upstream of the allocation and therefore there is unlikely to be an effect on any hydrological linkage to the European sites. All other European sites are at least 5km away and not connected by a direct impact pathway.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
40 Grand Prix Club and Trading Estate/Land Adjacent Trading Estate, Brough	B2 Brownfield partly developed site.	The closest European sites to this allocation are the North Pennines Dales Meadows SAC (2.5km), the Lake District High Fells (2.8km) and the Asby Complex (2.5km). These are upstream of the allocation and therefore are unlikely to be hierologically affected by development of the site. The interest features are unlikely to be exposed to of effects of the sites use. All other European Sites are at least 5km away and not connected by a direct impact pathway.

Table 5.1 - Summary of Potential Effects of Proposed Preferred Allocations on European Site Due to Scale and Location - Housing

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
Penrith		
E1, Carleton, Penrith	Housing, Greenfield extension (potential 554 dwellings)	The closest European Site is the River Eden SAC approximately 994m to the south of the site. Whilst appropriate mitigation measures are likely to be possible it is considered that, due to the potential combined effects with E2, 3 and 4,further investigation is necessary to ensure that appropriate mitigation measures are outlined and feasible. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
E2, Carleton, Penrith	Housing, Greenfield extension (potential 44 dwellings)	The closest European Site is the River Eden SAC approximately 637m to the south of the site. Whilst appropriate mitigation measures are likely to be possible it is considered that, due to the potential combined effects with E1, 3 and 4,further investigation is necessary to ensure that appropriate mitigation measures are outlined and feasible. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
E3, Carleton, Penrith	Housing, Greenfield extension (potential 300 dwellings)	The closest European Site is the River Eden SAC approximately 237m to the south of the site. Due to the close relationship of the site to the SAC, (and the potential combined effects with E1, 2 and 4) it is considered that further investigation is necessary to ensure that appropriate mitigation measures are outlined and feasible. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
E4, Carleton, Penrith	Housing, Greenfield extension (potential 108 dwellings)	The closest European Site is the River Eden SAC approximately 84m to the south of the site. Due to the close relationship of the site to the SAC, (and the potential combined effects with E1, 2 and 3) it is considered that further investigation is necessary to ensure that appropriate mitigation measures are outlined and feasible. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
N1, Salkeld Road, Penrith	Housing, Greenfield extension (potential 159 dwellings)	The closest European Site is the River Eden SAC approximately 2.6km to the south-east of the site. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
N1a, Salkeld Road extension, Penrith	Housing, Greenfield extension (potential 241 dwellings)	The closest European Site is the River Eden SAC approximately 3.7km to the south-east of the site. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
N3, Raiselands, Penrith	Housing Greenfield extension (potential 150 dwellings)	The closest European Site is the River Eden SAC approximately 2.8km to the south of the site. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
TC1, Old London Road, Penrith	Housing/mixed use Brownfield site (potential 25 dwellings)	The closest European Site is the River Eden SAC approximately 1.4km to the south of the site. The re-use of this town centre brownfield site, with the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, is unlikely to have any adverse impacts on the SAC. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
P2, Gilwilly Road, Penrith	Housing Brownfield site (potential 17 dwellings)	The closest European Site is the River Eden SAC approximately 2 km to the south of the site. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development of this modest brownfield site would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
P8, Myers Lane, Norfolk Road, Penrith	Housing Brownfield site (potential 32 dwellings)	The closest European Site is the River Eden SAC approximately 1.4 to the south of the site. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development of this modest brownfield site would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
P61, Garage at Roper Street, Penrith	Housing Brownfield site (potential 19 dwellings)	The closest European Site is the River Eden SAC approximately 1.3km to the south of the site. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
		impacts, it is considered that the development of this modest brownfield site would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
P71, Brent Road Garages, Penrith	Housing Brownfield site (potential 32 dwellings)	The closest European Site is the River Eden SAC approximately 1.4km to the south of the site. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development of this modest brownfield site would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
P86, Garages at Dodding House, Penrith	Housing Brownfield site (potential 4 dwellings)	The closest European Site is the River Eden SAC approximately 1.8km to the south of the site. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development of this modest brownfield site would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
P93, Barn and Yard, Brunswick Road, Penrith	Housing Brownfield site (potential 5 dwellings)	The closest European Site is the River Eden SAC approximately 1.9km to the south of the site. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development of this modest brownfield site would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
P94, QEGS Annex, Ullswater Road, Penrith	Housing Brownfield site (potential 29 dwellings)	The closest European Site is the River Eden SAC approximately 1.3km to the south of the site. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development of this modest brownfield site would not be likely to have any adverse impacts on the SAC.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
		All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
P101, Land at Pategill, Penrith	Housing Greenfield site (potential 6 dwellings)	The closest European Site is the River Eden SAC approximately 512m to the south of the site. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
GT1, Land at Maidenhill, Penrith	Gypsy and Traveller site (potential 14 pitches)	The closest European Site is the River Eden SAC approximately 3.6km to the east of the site. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away from the allocation site and are not connected by direct impact pathways.
Alston		
AL4, Bruntley Meadows, Alston	Housing Greenfield site (potential 22 dwellings)	This is a modest site to the south of Alston, adjacent to an existing housing estate. The closest European site is the Tyne and Nent Gravels SAC of which the closest area is approximately 1.5km upstream. The interest feature of the site is Calaminarian grasslands which are unlikely to be affected by the proposed site. Moor House, Upper Teesdale SPA and North Pennines Moors SPA are approximately 3km from the site. There are no direct impact pathways to the site and it is not considered likely that the allocation would affect the interest features. All other European sites are further than 5km away and not connected by any direct pathways.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
AL8, Tyne Café and garage buildings, Alston	Housing Brownfield site (potential 18 dwellings)	This is a modest brownfield site to the west of Alston, within the boundaries of the town. The closest European site is the Tyne and Nent Gravels SAC of which the closest area is approximately 1.5km upstream. The interest feature of the site is Calaminarian grasslands which are unlikely to be affected by the proposed site. Moor House, Upper Teesdale SPA and North Pennines Moors SPA are approximately 3km from the site. There are no direct impact pathways to the site and it is not considered likely that the allocation would affect the interest features. All other European sites are further than 5km away and not connected by any direct pathways.
AL10, Station Road Garage, Alston	Housing Brownfield site (potential 16 dwellings)	This is a modest brownfield site to the north of Alston. The closest European site is the Tyne and Nent Gravels SAC of which the closest area is approximately 1.5km upstream. The interest feature of the site is Calaminarian grasslands which are unlikely to be affected by the proposed site. Moor House, Upper Teesdale SPA and North Pennines Moors SPA are approximately 3km from the site. There are no direct impact pathways to the site and it is not considered likely that the allocation would affect the interest features. All other European sites are further than 5km away and not connected by any direct pathways.
AL11, Land South of Primary School, Alston	Housing Greenfield site (potential 20 dwellings)	This is a modest greenfield site to the south of Alston, adjacent to an existing site. The closest European site is the Tyne and Nent Gravels SAC of which the closest area is approximately 1.5km upstream. The interest feature of the site is Calaminarian grasslands which are unlikely to be affected by the proposed site. Moor House, Upper Teesdale SPA and North Pennines Moors SPA are approximately 3km from the site. There are no direct impact pathways to the site and it is not considered likely that the allocation would affect the interest features.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
		All other European sites are further than 5km away and not connected by any direct pathways.
AL12, High Mill, Alston	Housing Brownfield site (potential 6 dwellings)	This is a modest brownfield site within the centre of Alston. The closest European site is the Tyne and Nent Gravels SAC of which the closest area is approximately 1.5km upstream. The interest feature of the site is Calaminarian grasslands which are unlikely to be affected by the proposed site. Moor House, Upper Teesdale SPA and North Pennines Moors SPA are approximately 3km from the site. There are no direct impact pathways to the site and it is not considered likely that the allocation would affect the interest features. All other European sites are further than 5km away and not connected by any direct pathways.
AL15, St Paul's Mission, Alston	Housing Brownfield site (potential 5 dwellings)	This is a modest site within Alston. The closest European site is the Tyne and Nent Gravels SAC of which the closest area is approximately 1.5km upstream. The interest feature of the site is Calaminarian grasslands which are unlikely to be affected by the proposed site. Moor House, Upper Teesdale SPA and North Pennines Moors SPA are approximately 3km from the site. There are no direct impact pathways to the site and it is not considered likely that the allocation would affect the interest features. All other European sites are further than 5km away and not connected by any direct pathways.
Appleby		
AP10, Fields adj. Scrap Yard, Appleby	Housing Greenfield site (potential 65 dwellings)	The River Eden SAC is the closest European site, approximately 510m away. Direct effects are unlikely and appropriately designed surface water drainage systems would ensure surface water run-off was successfully controlled to prevent any impact on the SAC. Moor House, Upper Teasdale SPA and North Pennine Moors SPA within 4km of the allocation site although the interest features are unlikely to be affected by the proposed development use.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
		All other European sites are at least 5km away and not connected by a direct impact pathway.
AP11, Fields at the Coal Yard, Appleby	Housing Greenfield site (potential 90 dwellings)	The River Eden SAC is the closest European site, approximately 502m away. Direct effects are unlikely and appropriately designed surface water drainage systems would ensure surface water run-off was successfully controlled to prevent any impact on the SAC. Moor House, Upper Teasdale SPA and North Pennine Moors SPA within 4km of the allocation site although the interest features are unlikely to be affected by the proposed development use. All other European sites are at least 5km away and not connected by a direct impact pathway.
Kirkby Stephen		
KS3, South Road/Whitehouse Farm, Kirby Stephen	Housing Greenfield site (potential 10 dwellings)	The closest European site is the River Eden which is 370m away to the east of Kirkby Stephen. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development of this limited site would not be likely to have any adverse impacts on the SAC. The next nearest site is the North Pennines Moors SPA, approximately 4km from the site. It is unlikely that the development would have any adverse impact on the interest features of this site. All other European sites are at least 5km away and not connected by a direct impact pathway.
KS4, Croglam lane, Kirkby Stephen	Housing Greenfield site (potential 4 dwellings)	The closest European site is the River Eden which is 495m away to the east of Kirkby Stephen. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development of this small site would not be likely to have any adverse impacts on the SAC. The next nearest site is the North Pennines Moors SPA, approximately 4km from the site. It is unlikely that the development would have any adverse impact on the interest features of this site.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
		All other European sites are at least 5km away and not connected by a direct impact pathway.
KS7, Mark Johns Motors, Kirkby Stephen	Housing Brownfield site (potential 5 dwellings)	The closest European site is the River Eden which is immediately to the east of the site. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the redevelopment of this commercial garage would not be likely to have any adverse impacts on the SAC and may provide benefits. The next nearest site is the North Pennines Moors SPA, approximately 4km from the site. It is unlikely that the development would have any adverse impact on the interest features of this site. All other European sites are at least 5km away and not connected by a direct impact pathway.
KS13, Land to the west of Faraday Road, Kirkby Stephen	Housing Greenfield site (potential 70 dwellings)	The closest European site is the River Eden which is 450m away to the east of Kirkby Stephen. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC. The next nearest site is the North Pennines Moors SPA, approximately 4km from the site. It is unlikely that the development would have any adverse impact on the interest features of this site. All other European sites are at least 5km away and not connected by a direct impact pathway.
KS15, Land adjacent Croglam Lane, Kirkby Stephen	Housing Greenfield site (potential 75 dwellings)	The closest European site is the River Eden which is 520m away to the east of Kirkby Stephen. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
		The next nearest site is the North Pennines Moors SPA, approximately 4km from the site. It is unlikely that the development would have any adverse impact on the interest features of this site. All other European sites are at least 5km away and not connected by a direct impact pathway.
KS17, Land behind Park Terrace, Kirkby Stephen	Housing Greenfield site (potential 23 dwellings)	The closest European site is the River Eden which is approximately 320m away to the east of Kirkby Stephen. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC. The next nearest site is the North Pennines Moors SPA, approximately 4km from the site. It is unlikely that the development would have any adverse impact on the interest features of this site. All other European sites are at least 5km away and not connected by a direct impact pathway.
Rural Areas		
LBR1, Rowan House Brough	Housing Greenfield site (potential 12 dwellings)	The closest European sites to this allocation are: Helbeck Woods SAC (1.1km); the North Pennines Dales Meadows SAC (2.5km); the Lake District High Fells (2.8km); and the Asby Complex (2.5km). These are upstream of the allocation and therefore are unlikely to be hierologically affected by development of the site. The interest features are unlikely to be exposed to of effects of the sites use. All other European Sites are at least 5km away and not connected by a direct impact pathway.
LBR2, Castle View, Brough	Housing Greenfield site (potential 6 dwellings)	The closest European sites to this allocation are: Helbeck Woods SAC (1.1km); the North Pennines Dales Meadows SAC (2.5km); the Lake District High Fells (2.8km); and the Asby Complex (2.5km). These are upstream of the allocation and therefore are unlikely to be hierologically affected by development of the site. The interest features are unlikely to be exposed to of effects of the sites use.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
		All other European Sites are at least 5km away and not connected by a direct impact pathway.
LBR3, Land behind Croft Close, Brough	Housing Greenfield site (potential 25 dwellings)	The closest European sites to this allocation are: Helbeck Woods SAC (1.1km); the North Pennines Dales Meadows SAC (2.5km); the Lake District High Fells (2.8km); and the Asby Complex (2.5km). These are upstream of the allocation and therefore are unlikely to be hierologically affected by development of the site. The interest features are unlikely to be exposed to of effects of the sites use. All other European Sites are at least 5km away and not connected by a direct impact pathway.
LGR3, Greystoke	Housing Greenfield site (potential 30 dwellings)	All European Sites are at least 5km away and not connected by a direct impact pathway.
LHA1, Pattinson Close, Hackthorpe	Housing Greenfield site (potential 5 dwellings)	The closest European site is the River Eden which is approximately 1.6km away to the west of Hackthorpe. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away and not connected by a direct impact pathway.
LHA3, Land opposite Stevannketh, Hackthorpe	Housing Greenfield site (potential 8 dwellings)	The closest European site is the River Eden which is approximately 1.6km away to the west of Hackthorpe. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away and not connected by a direct impact pathway.
LKT1, Land beside Primary School, Kirkby Thore	Housing Greenfield site (potential 22 dwellings)	The closest European site is the River Eden which is approximately 680m away to the south of Kirkby Thore. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
		any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away and not connected by a direct impact pathway.
LKT2, Ashton Lea, Kirkby Thore	Housing Greenfield site (potential 24 dwellings)	The closest European site is the River Eden which is approximately 270m away to the south of Kirkby Thore. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away and not connected by a direct impact pathway.
LLG1, Meadow Court, Langwathby	Housing Brownfield site (potential 4 dwellings)	The closest European site is the River Eden which is approximately 570m away to the east of Langwathby. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that this limited development would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away and not connected by a direct impact pathway.
LLG2, Townhead, Langwathby	Housing Greenfield site (potential 13 dwellings)	The closest European site is the River Eden which is approximately 180m away to the east of Langwathby. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development of this modest site would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away and not connected by a direct impact pathway.
LLG5, Tynedale Farm, Langwathby	Housing Greenfield site (potential 25 dwellings)	The closest European site is the River Eden which is approximately 300m away to the east of Langwathby. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
		All other European sites are at least 5km away and not connected by a direct impact pathway.
LLG7, Adj. Eden View, Langwathby	Housing Greenfield site (potential 25 dwellings)	The closest European site is the River Eden which is approximately 370m away to the east of Langwathby. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away and not connected by a direct impact pathway
LNE1, Moredun Garage, Nenthead	Housing Brownfield site (potential 6 dwellings)	This is a modest brownfield site within Nenthead. The closest European site is the North Pennines Moor SPA (850m) then theTyne and Nent Gravels SAC (930m). The sites are unlikely to be affected by the development of 6 additional properties. Moorhouse, and Upper Teesdale SPA are approximately 3km from the site. There are no direct impact pathways to the site and it is not considered likely that the allocation would affect the interest features. All other European sites are further than 5km away and not connected by any direct pathways.
LOR7, To Rear of The Mires and West End Cottage, Orton	Housing Greenfield site (potential 10 dwellings)	The nearest European sites are the North Pennines Dales Meadows SAC approximately 4.9km away, the Lake District High Fells SAC approximately 4km away and Asby Complex SAC, approximately 2.2km. These are all unlikely to be effected by the addition of 10 properties to the area. All other European sites are at least 5km away and not connected by a direct impact pathway.
LPL2, Adj. Byrnes Close, Plumpton	Housing Greenfield site (potential 14 dwellings)	All European Sites are at least 5km away and not connected by a direct impact pathway.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
LRA3 Adj. 2 Little Close, Ravenstondale	Housing Greenfield site (potential 4 dwellings)	The nearest European sites are the River Eden SAC approximately 330m away, the North Pennines Dales Meadows SAC approximately 470m away, and Asby Complex SAC, approximately 3.5km. There are unlikely to be significant effects caused by the addition of 4 properties to the area. All other European sites are at least 5km away and not connected by a direct impact pathway.
LSH1, West Lane, Shap	Housing Greenfield site (potential 8 dwellings)	The nearest European sites are the River Eden SAC approximately 1.2km away, and Asby Complex SAC, approximately 3.3km away. The site is considered unlikely to have any significant effects on the designated sites. All other European sites are at least 5km away and not connected by a direct impact pathway.
LSH5, To Rear of Woodville Terrace, Shap	Housing Greenfield site (potential 18 dwellings)	The nearest European sites are the River Eden SAC approximately 1.2km away, and Asby Complex SAC, approximately 2.4km away. The site is considered unlikely to have any significant effects on the designated sites. All other European sites are at least 5km away and not connected by a direct impact pathway.
LSH7, Green Farm, Shap	Housing Greenfield site (potential 13 dwellings)	The nearest European sites are the River Eden SAC approximately 1km away, and Asby Complex SAC, approximately 2.4km away. The site is considered unlikely to have any significant effects on the designated sites. All other European sites are at least 5km away and not connected by a direct impact pathway.
LSH11, Church Street, Shap	Housing Greenfield site (potential 8 dwellings)	The nearest European sites are the River Eden SAC approximately 1.4km away, and Asby Complex SAC, approximately 3.2km away. The site is considered unlikely to have any significant effects on the designated sites. All other European sites are at least 5km away and not connected by a direct impact pathway.
LSH12, Nook Farm, Shap	Housing Greenfield site (potential 33 dwellings)	The nearest European sites are the River Eden SAC approximately 1.3km away, and Asby Complex SAC, approximately 3.5km away. The site is considered unlikely to have any significant effects on the designated sites.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
		All other European sites are at least 5km away and not connected by a direct impact pathway.
LTE1, Highfield, Tebay	Housing, Part brownfield (potential 9 dwellings)	The nearest European sites are the North Pennines Dales Meadows SAC approximately 2.5km away, the Lake District High Fells SAC approximately 2.8km away and Asby Complex SAC, likewise 2.8km away approximately. These are all upstream of the allocation and therefore there is unlikely to be an effect on any hydrological linkage to the European sites. All other European sites are at least 5km away and not connected by a direct impact pathway.
LTE2, Woodend, Tebay	Housing Greenfield site (potential 23 dwellings)	The nearest European sites are the North Pennines Dales Meadows SAC approximately 2.5km away, the Lake District High Fells SAC approximately 2.8km away and Asby Complex SAC, likewise 2.8km away approximately. These are all upstream of the allocation and therefore there is unlikely to be an effect on any hydrological linkage to the European sites. All other European sites are at least 5km away and not connected by a direct impact pathway.
LTE6, Adj. Church Rise, Tebay	Housing Greenfield site (potential 19 dwellings)	The nearest European sites are the North Pennines Dales Meadows SAC approximately 2.5km away, the Lake District High Fells SAC approximately 2.8km away and Asby Complex SAC, likewise 2.8km away approximately. These are all upstream of the allocation and therefore there is unlikely to be an effect on any hydrological linkage to the European sites. All other European sites are at least 5km away and not connected by a direct impact pathway.
LTE7, Former Railway Cutting, Tebay	Housing Brownfield site (potential 16 dwellings)	The nearest European sites are the North Pennines Dales Meadows SAC approximately 2.5km away, the Lake District High Fells SAC approximately 2.8km away and Asby Complex SAC, likewise 2.8km away approximately. These are all upstream of the allocation and therefore there is unlikely to be an effect on any hydrological linkage to the European sites.

Site Reference	Possible use and Site Character	Summary of Potential Effects on European sites Due to Location
		All other European sites are at least 5km away and not connected by a direct impact pathway.
LTS4, Chapel Street, Temple Sowerby	Housing Greenfield site (potential 6 dwellings)	The nearest European site is the River Eden SAC approximately 820m away. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away and not connected by a direct impact pathway.
LTS6, Adj. Eden House, Temple Sowerby	Housing Greenfield site (potential 5 dwellings)	The nearest European site is the River Eden SAC approximately 820m away. With the inclusion of appropriate surface water drainage systems to ensure controls are in place to prevent any adverse impacts, it is considered that the development would not be likely to have any adverse impacts on the SAC. All other European sites are at least 5km away and not connected by a direct impact pathway.
LWA1, Martindale View, Warcop	Housing Greenfield site (potential 5 dwellings)	The nearest European sites are the River Eden SAC approximately 350m away, North Pennines Moors SPA approximately 3.2km away, the Moorhouse and Upper Teasdale SAC and Heelbeck and Swindale Woods SAC approximately 3.8km away. It is not considered that the limited development would have an impact on these sites. All other European sites are at least 5km away and not connected by a direct impact pathway.
LWA6 Adj. Warcop CofE school, Warcop	Housing Greenfield site (potential 10 dwellings)	The nearest European sites are the River Eden SAC approximately 490m away, North Pennines Moors SPA approximately 3.2km away, the Moorhouse and Upper Teasdale SAC and Helbeck and Swindale Woods SAC approximately 3.8km away. It is not considered that the limited development would have an impact on these sites. All other European sites are at least 5km away and not connected by a direct impact pathway.

Table 6: Summary of likely effects on European Sites

International Site	Nature of Impact	Likely Significant Effects?	Impact on Conservation Objective	Mitigation Needed?
Asby Complex SAC	Recreational Disturbance	No	Potential recreational pressures could including off road sports, can damage woodland ground flora and disturb breeding birds	No
	Human Impacts	No	Possibility that local limestone clints will be removed by individuals for garden rockery stone (now illegal)	No
Borrowdale Woodland Complex SAC	Recreational Disturbance	No	There may be some additional recreational pressure but this is not considered to be significant	No
	Human Impacts	No		
Clints Quarry SAC	Recreational Disturbance	No	Water levels are largely dependent on rainfall and unaffected by human intervention	No
	Water Resource Availability	No		No
Cumbrian Marsh Fritillary SAC	Recreational Disturbance	No	Objectives for conservation relate to monitoring natural processes of the site to ensure correct balance is maintained to support to the marsh fritillary butterfly. Impacts negligible	No
	Water Quality Impacts	No		
	Water Resource Availability	No		
	Disturbed Flight Lines/Ecological Activity	No		
	Pollution (Chemical, light, noise, air and dust)	No		
Esthwaite Water Ramsar	Increased recreational impact	No	There is a fish farm on the lake which is causing issues of aquaculture pollution	No
	Water quality impact	No	Increased sewage could cause further issues for the lake. This is unlikely to be the case for the developments proposed within the Plan	No

International Site	Nature of Impact	Likely Significant Effects?	Impact on Conservation Objective	Mitigation Needed?
Helbeck & Swindale Wood SAC	Human Impacts	No	There may be some additional recreational pressure but this is not considered to be significant	No
	Water Quality Impacts	No	Unlikely	No
	Pollution (Chemical, light, noise, air and dust)	No	Possible impacts associated with recreational use could include trampling, (air, noise, light, fly-tipping)	No
Lake District High Fells SAC	Recreational Disturbance	No	Blanket bog on Shap Fells is sensitive to degradation from recreational pressures	No
	Water Quality Impacts	No	Bog quality linked to the availability and quality of water sources. Unlikely to be affected by development	No
	Water Resource Availability	No		No
	Human Impact	No	Natural grassland site, which requires maintenance or grazing. Impacts of plan unlikely	No
	Pollution (Chemical, light, noise, air and dust)	No	In levels of pollution is likely to be minimal	No
	Human Impacts	No	The introduction of non-native species in the area may be detrimental to breeding birds	No
	Disturbed Flight Lines/Ecological Activity	No	Impacts upon known sites are unlikely	No
	Pollution (Chemical, light, noise, air and dust)	No	Effects unlikely	No
	Water Quality Impacts	No	Conservation of interest features is reliant upon the maintenance of current conditions. Impact of recreational use, pollutants and water resources are low	No
	Water Resource Availability			
	Disturbed Flight Lines/ Ecological Activity			

International Site	Nature of Impact	Likely Significant Effects?	Impact on Conservation Objective	Mitigation Needed?
	Pollution (Chemical, light, noise, air and dust)			
Moor House - Upper Teesdale SAC	Hydrological changes	No	Limited to management of land. Unlikely in-combination effects	No
	Hydrological changes	No		
	Water pollution	No		
	Recreational disturbances	No	There may be slight increases in recreational use of the site, though impacts are likely to be low	No
Morecambe Bay Pavements SAC	Human Impacts	No	Limited to management of land which is unaffected by the proposals in the Plan	No
Naddle Forest	Recreational Disturbance	No	Impacts unlikely	No
	Hydrological changes	No	Impacts unlikely	No
North Pennine Dales Meadows	Hydrological changes	No	Conservation objectives linked to agricultural management, to ensure that levels of pollution are controlled	No
North Pennine Moors SAC	Hydrological changes	No	The condition of the peat based soils in this SAC is linked to agricultural management. The plan will not lead to significant issues	No
	Recreational Disturbance	No	Dog walking is the main concern from development, and the effects on breeding bird populations. Given the locational strategy, impacts are unlikely to be significant	No
North Pennine Moors SPA	Hydrological changes	No	The condition of the peat based soils in this SAC is linked to agricultural management. The plan will not lead to significant issues	No
	Recreational Disturbance	No	Dog walking is the main concern from development, and the effects on breeding bird	No

International Site	Nature of Impact	Likely Significant Effects?	Impact on Conservation Objective	Mitigation Needed?
			populations. Given the locational strategy, impacts are unlikely to be significant	
River Derwent and Bassenthwaite Lake SAC	Recreational Disturbance	No	Impacts unlikely	No
	Water Quality Impacts	No	Conservation of river species dependent on maintenance of river quality. Impacts unlikely	No
	Water Resource Availability	No	Impacts unlikely	No
	Pollution (Chemical, light, noise, air and dust)	No	Development is unlikely to lead to any significant impacts	No
River Eden SAC	Recreational Disturbance	Yes	There may be an impact as a direct result of development adjacent to the river, but increased recreational use of river banks may be detrimental to Otter habitats. This is potentially compounded through the redevelopment of Stamphill gypsum site in Long Marton, which is likely to include	Yes
	Water Quality Impacts	Yes	Run off from both construction and end housing use is likely to lead to detrimental impacts on water quality in the river	Yes
	Water Resource Availability	Uncertain	Construction and residential consumption is likely to be taken from natural boreholes, though high levels are needed for the construction of expected units	?
	Pollution (Chemical, light, noise, air and dust)	Yes	In addition to surface water run-off, additional pollutants as a result of development may lead to algae enrichment and eutrophication	Yes

International Site	Nature of Impact	Likely Significant Effects?	Impact on Conservation Objective	Mitigation Needed?
River Kent SAC	Recreational Disturbance	No	There may be cumulative impacts with neighbouring plans, though significant impacts unlikely	No
	Water Quality Impacts	No	Effects unlikely	No
	Pollution (Chemical, light, noise, air and dust)	No	No development within close proximity to SAC	No
Solway Firth SAC	Recreational Disturbance	No	There may be cumulative impacts with neighbouring plans, though significant impacts not predicted	No
Tarn Moss SAC	Recreational Disturbance	No	The site falls within an NNR and as such may be subject to increased recreation pressures	No
	Water Quality Impacts	No	The interest features of this site are transition mires and quaking bogs, reliant upon nutrient poor ground water to feed the soils. Changes to	No
	Pollution (Chemical, light, noise, air and dust)	No	The interest features of this site are transition mires and quaking bogs, reliant upon nutrient poor ground water to feed the soils	No
Tyne & Allen River Gravels SAC	Recreational Disturbance	No	The principal feature of this site is the metal rich calaminarian grasslands. Effects of development are unlikely to have significant impacts on this site	No
	Water Quality Impacts	No		No
	Water Resource Availability	No		No
	Pollution (Chemical, light, noise, air and dust)	No		No
Tyne and Nent SAC	Recreational Disturbance	No	The principal feature of this site is the metal rich calaminarian grasslands. Though part of this SAC lies directly adjacent to Nenthead, the impacts of the plan in isolation or	No
	Water Quality Impacts	No		No
	Water Resource Availability	No		No

International Site	Nature of Impact	Likely Significant Effects?	Impact on Conservation Objective	Mitigation Needed?
	Pollution (Chemical, light, noise, air and dust)	No	along with other plans are likely to be low.	No
Upper Oakwoods	Recreational Disturbance	No	The issue of land management is greatest here. It is not considered that the Plan would have any significant impacts either in isolation or in combination with other plans	No
Upper Solway Flats and Marshes Ramsar	Recreational Disturbance	No	The Management of the area in regards to fishing, breeding birds and natterjack toads is unaffected. It is not considered that the Plan would give rise to any significant impacts either in isolation or in combination with other plans	No
	Water Quality Impacts	No		No
Upper Solway Flats and Marshes SPA	Recreational Disturbance	No	As above, the management of the area in regards to fishing, breeding birds (with the exception of the natterjack toads) is unaffected. It is not considered that the Plan would give rise to any significant impacts either in isolation or in combination with other plans	No
	Water Quality Impacts	No		No

4.3 Allocations with Potential for Significant Effects

4.3.1 The majority of sites are several kilometres from European sites and of the scale that potential impacts are unlikely to result in significant effects. Assuming all best-practice design and implementation is employed, there is nothing associated with the scale or location of development or the type of development proposed which would suggest that the development of the proposed allocated sites for housing or employment cannot be accommodated without significant effects.

4.3.2 The exception to this is some of the Penrith sites specifically:

In relation to housing:

- E1: Carleton, Penrith
- E2: Carleton, Penrith
- E3: Carleton, Penrith
- E4: Carleton, Penrith

These sites have been identified due to their potential in combination effect. The sites will realise approximately 1000 new dwellings and associated infrastructure. At the nearest point, the combined site is 84m from the River Eden SAC. It is considered that whilst it is likely that sufficient controls can be built into the drainage systems to protect the Eden, this should be further investigated to ensure the allocation is sound.

In relation to employment:

- MPC: Skirsgill, Penrith

These sites have been identified due to the potential uses which could lead to a significant impact on water quality in the River Eden SAC if not properly managed. There is potential for the Solway Firth SAC to be affected by this due to its hydrological relationship but it is considered unlikely due to the distance between the sites and the likelihood of an impact on the Estuary is unlikely.

4.3.3 The River Eden SAC has the following interest features:

- Oligotrophic to mesotrophic standing waters with vegetation of the Littorelleta uniflorae and/or the Isoeto-Nanojuncetea
- Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation
- Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Sallicion albae)
- White- clawed (or Atlantic stream) crayfish Austropotamobius pallipes
- Sea lamprey Petromyzon marinus
- Brook lamprey Lampetra planeri
- River lamprey Lampetra fluviatilis
- Atlantic salmon Salmo salvar
- Bullhead Cottus gobio
- Otter Lutra lutra

With the exception of the Oligotrophic to mesotrophic standing waters (associated with Ullswater and unlikely to be affected by the proposals) the features are likely to be present in the waters in and near to the sites identified above.

4.3.4 Development at the sites identified could result in significant effects on these interest features both during construction and operation. Effects could occur in the following ways:

- Increased sedimentation, particularly through the potential for construction or operational run-off;
- Point source pollution events use as fuel spillage;
- Increases in site run off increasing diffuse pollution;
- Changes in hydrology affecting local river flows;
- Spread of non-native invasive species; and
- Displacement of mobile species for example due to noise and general disturbance.

4.3.5 It is considered that the potential effects summarised in Table 6 could be avoided with suitable mitigation (ie appropriately designed SUDS, suitable buffer zones from river margins, good general design). However, it may be necessary to specify this in the text relating to the development of these sites. Additional protective policies are embedded in the plan in relation to protecting the natural environment and it is important that these are appropriately employed at the decision making process.

4.4 In-Combination Effects

4.4.1 It is not considered that there will be any further in-combination effects than those already identified. Adjoining planning authorities have also got Plans at various stages which are themselves subject to HRA consideration both as stand-alone documents and in combination with the proposals for Eden District. No in-combination effects have been identified within these Plans or by this HRA.

4.4.2 The Draft Cumbria Minerals and Waste Plan has identified two possible sites within Eden District:

- Flusco;
- Long Marton gypsum mine.

Both sites have been subject to an HRA, it was concluded that neither site would have an impact on a European site. There are not considered to be any in combination effects with the Preferred Options Local Plan.

5. Summary

5.1 The policies and sites within the Preferred Options have been reviewed and their potential impacts on European Sites in the area assessed. It is considered that policies are consistent with the protection and proper consideration of European sites and that no further adjustments or assessments are required. However, in regards to the sites, there are some exceptions particularly in regards to their in-combination effects these are:

- E1: Carleton, Penrith for housing
- E2: Carleton, Penrith for housing
- E3: Carleton, Penrith for housing;
- E4: Carleton, Penrith for housing;
- MPC: Skirsgill, Penrith for employment.

These sites are all near to the River Eden SAC, which may be impacted by their development either during construction or through the post-construction phase for instance in relation to changes to run-off, discharge of surface water and effects on river corridors.

5.2 Existing riverside sites within Penrith have been developed with the inclusion of appropriate measures for example buffer zones and SUDS. It is considered that the sites identified have nothing fundamental which would result in their not being able to be development appropriately. However, it is recommended that an Assessment of Likely Significant Effects (ALSE) is carried out in respect of these sites in order to further assess this.

5.3 With regards to in-combination effects with other plans and strategies, it is considered that the only plan with which they may be an issue is the Draft Cumbria Minerals and Waste Local Plan 2013-28. In combination effects have not be identified as both sites are considered to have neither in combination effects with proposed sites or policies nor stand-alone effects through the HRA process they have been through separately.

5.4 The Plan is at a Preferred Option stage and an HRA is not required although best practice. Likewise, the ALSE is not required at this stage but forms good practice and will ensure that the Local Plan is well grounded in evidence. The HRA and, if required, the ALSE will be updated as the Plan progresses.

6. Consultation

6.1 The Habitats Regulations require that the appropriate nature conservation body is consulted (Natural England). The HRA is also made available for wider public consultation at the same time as the Preferred Option paper. Any responses made in regards to the HRA will be considered by the Council and will inform future iterations of the HRA both at the publication and submission stages. Details of any responses made will be made available in the next draft of the HRA.

Appendix 1

List of other Plans/Policies which may have an ‘in combination’ effect

Regional

Cumbria County Council (2011) 3rd Cumbria Local Transport Plan (2011-2026)
Cumbria County Council (2006) Cumbria Sustainability Strategy
Cumbria County Council (2011) Landscape Character Guidance and Toolkit
Cumbria County Council (2013) Draft Cumbria Minerals and Waste Local Plan 2013
Cumbria Biodiversity Action Plan
Cumbria Local Enterprise Partnership Draft Strategic Economic Plan

Local

Alston Moor Partnership
Allerdale Local Plan (Part 1) 2013
Carlisle Local Plan (Preferred Options) 2015-30
County Durham Plan, Preferred Options
Cumbria Wind Energy SPD
Eden and Esk Catchment Abstraction Management Strategy (2006)
Eden Area Plan
Eden Catchment Flood Management Plan (Summary Report) (2009)
Eden Cultural Strategy
Eden District Retail Study
Eden Economic Plan
Eden Open Space and Recreation
Eden Sustainable Community Strategy
Lake District Local Plan (Part 1, Core Strategy and Part 2, Allocations of Land)
Lake District National Park Management Plan
Northumberland Local Development Plan (Core Strategy) Preferred Options
North Pennines AONB Management Plan (2004)
North Pennines AONB Planning and Design Guide (2011)
Penrith Landscape and Visual Impact Assessment (LVIA)
Penrith Strategic Master Plan
South Lakeland District Council Local Plan (Core Strategy and Land Allocations)
Strategic Flood Risk Assessment (SFRA)
The Cumbria Biodiversity Evidence Base for Cumbria's Planning Authorities
Upper Eden Neighbourhood Plan
Tyne Abstraction Strategy.