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Habitats Regulations Assessment of the South Lakeland Development Management Policies Development Plan Document – Publication Stage

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Footprint Contract Reference: 403

Date: 19th September 2017

Version: Final at Publication stage

Recommended Citation: Hoskin, R. & Liley, D. (2017) Habitats Regulations Assessment of the South Lakeland Development Management Policies Document. Unpublished report for South Lakeland District Council.

Summary

This report is the Habitats Regulations Assessment (HRA) of the South Lakeland Development Management Policies Development Plan Document (DPD) at Publication stage. This stage follows on from the Preferred Options stage, and takes in to account changes proposed to the DPD since that stage. HRA is the step by step process of ensuring that a plan or project being undertaken by, or permitted by a public body, will not adversely affect the ecological integrity of a European wildlife site.

To date, HRA has been an integral part of the development of all documents that form the South Lakeland Local Plan, and measures to protect European sites are relevant to the implementation of the plan as a whole, and their progress is therefore checked as part of this HRA report. The ongoing mitigation measures of relevance to the Development Management Policies DPD primarily relate to preventing or minimising impact pathways for recreation disturbance and water quality. General urban effects and air quality are also considered.

A screening for likely significant effects has been undertaken on the whole DPD each time that the DPD has been updated. The HRA process is iterative as a plan is developed, and will make recommendations that are then checked the next time the DPD is updated. At the Publication stage, the DPD has been screened again, with final policy and supporting text changes recommended, as outlined in Section 6. This HRA concludes that the DPD can now be screened out from likely significant effects with the recommendations for policy wording having now been incorporated within the final Publication version of the DPD, which is now ready for Examination by the Planning Inspectorate. The adopted Development Management Policies DPD will need to be compliant with the Habitats Regulations in its final form, and further HRA work may therefore be required in light of modifications arising from Examination.

The Core Strategy and Land Allocations HRA mitigation measures should continue to be progressed as part of the Local Plan implementation as a whole. Recommendations are made within this HRA for continued progression, and the Council should ensure consistency from the HRAs undertaken at the plan level through to project level HRAs for the determination of planning applications. Liaison with Natural England and United Utilities for this HRA report has provided an update on mitigation progression in relation to recreation and water quality. The Council already has an established relationship with both Natural England and United Utilities. Regular liaison meetings take place with United Utilities in order to manage risk and ensure that the sewage and water treatment network meets demand. Further liaison with Natural England would enable progression from high level commitments to a planning input to specific projects, maximising opportunities for European site protection and enhancement as part of the planning and development management process, particularly around Morecambe Bay.

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Acknowledgements

We are grateful for the continued assistance and support provided by Lorayne Woodend and Damian Law, South Lakeland District Council, during the preparation of this report. Discussions with Andrew Leysens at United Utilities, and with Maggie Robinson, Pin Dhillon-Downey and Elizabeth Knowles at Natural England provided helpful updates on the progression of mitigation measures.

1. Introduction

Context

- 1.1 This report is the Habitats Regulations Assessment (HRA) of the South Lakeland Development Management Policies Development Plan Document (DPD) at Publication stage. This stage follows on from the Preferred Options stage, and takes in to account changes proposed to the DPD since that stage. This assessment has been made on a draft version of the plan at Publication stage.
- 1.2 The DPD has been subject to public consultation at key stages throughout the process of preparation to enable the public, stakeholders and statutory consultees to provide comments on the policy proposals and updates. The DPD is being progressed by South Lakeland Council as part of their Local Plan. This HRA updates the draft HRA report at Preferred Options stage, making the necessary assessment of the new and updated policy options.
- 1.3 A HRA considers the implications of a plan or project for European wildlife sites, in terms of any possible harm to the habitats and species that form an interest feature of the European sites in close proximity to the proposed plan or project, which could occur as a result of the plan or project being put in place. An explanation of the HRA assessment process is summarised below and also described in greater detail in [Appendix 1](#).
- 1.4 Spatial planning and development management in South Lakeland is to be informed by four key documents that make up the Local Plan. These are an adopted Core Strategy (October 2010), an adopted Land Allocations document (December 2013), the Development Management Policies DPD, which is the subject of this assessment and to be adopted in 2018, and an Arnside and Silverdale Area of Outstanding Natural Beauty (AONB) DPD, also to be adopted in 2018. Additionally, a neighbourhood plan, and supplementary planning documents such as development briefs, add to the Local Plan portfolio.
- 1.5 At the current time, in the absence of a finalised Development Management Policies document, a number of policies remain 'saved' from the previous South Lakeland Local Plan. This plan includes policies that were originally prepared as far back as 1997, and it is therefore necessary for South Lakeland District Council to consider new policy requirements in light of current evidence and national planning legislation, policy and practice guidance.
- 1.6 It is Government policy that local planning documents are continually reviewed in order to remain up to date and informed by current evidence on local economic, social and environmental needs, as well as national legislation and

planning policy. In light of this, and recognising the need to revisit key policy topics, the Development Management Policies DPD is in timely preparation, following on from the Core Strategy and Land Allocations documents. The DPD was the subject of public consultation at Preferred Options stage in the winter of 2016/2017, and following on from that consultation, South Lakeland District Council recognised the need for a number of changes to the proposed policies, in terms of new policy additions as well as amendments to some of the previously proposed policies.

- 1.7 This HRA updates the previous HRA report at Preferred Options Stage, to assess the various changes made since that stage. At Preferred Directions stage, and through various further drafts as the DPD progressed to its Publication version, Footprint Ecology has liaised with South Lakeland District Council and made a number of recommendations as part of the HRA, which have subsequently been taken on board by the Council. The Development Management Policies DPD has now been finalised for Publication, and will be submitted to the Planning Inspectorate for Examination. This HRA report will also be submitted for consideration at Examination alongside the DPD. Any post Examination modifications will also need to be checked before the HRA is complete and the DPD is adopted as part of the South Lakeland Local Plan.
- 1.8 Previous HRA work informed the preparation and adoption of the Core Strategy and Land Allocations document. When embarking on new HRA work, it is important to take stock and consider how well the measures put in place to protect European site interest have worked, and what evidence there is available to support the continuation of such measures, or to indicate that they may need modification. That review of previous assessment has been undertaken and documented as part of this report. In addition to assessing the Development Management Policies DPS, this HRA report checks progress on all HRA related measures for the South Lakeland Local Plan.

Habitats Regulations Assessment process

- 1.9 A 'Habitats Regulations Assessment,' normally abbreviated to HRA, is the step by step process of ensuring that a plan or project being undertaken by, or permitted by a public body, will not adversely affect the ecological integrity of a European wildlife site. Where it is deemed that adverse effects cannot be ruled out, a plan or project must not proceed, unless exception tests are met. This is because European legislation, which is transposed into domestic legislation and policy, affords European sites the highest levels of protection in the hierarchy of sites designated to protect important features of the natural environment.

- 1.10 The relevant European legislation is the Habitats Directive 1992¹ and the Wild Birds Directive 2009², which are transposed into domestic legislation through the Conservation of Habitats and Species Regulations 2010, as amended. These Regulations are normally referred to as the ‘Habitats Regulations.’ Legislation sets out a clear step by step approach for decision makers considering any plan or project. In England, those duties are also supplemented by national planning policy through the National Planning Policy Framework (NPPF). This national planning policy also refers to Ramsar sites, which are listed in accordance with the international Ramsar Convention. The NPPF requires decision makers to apply the same protection and process to Ramsar sites as that set out in legislation for European sites. Formally proposed site, i.e. sites proposed for European designation and going through the designation process, and those providing formal compensation for losses to European sites, are also given the same protection. This report refers to all the above sites as ‘European sites’ for assessment purposes, as the legislation is applied to all such sites, either directly or as a result of policy.
- 1.11 It should be noted that the European Directives operate on the basis that sites are in place to serve as an ecologically functioning network, and ultimately it is the preservation of that network as a whole that is the overall aim of the European Directives. The network is often referred to as the Natura 2000 Network or ‘N2K.’
- 1.12 The duties set out within the Habitats Regulations apply to any public body or individual holding public office with a statutory remit and function, referred to as ‘competent authorities.’ The requirements are applicable in situations where the competent authority is undertaking or implementing a plan or project, or authorising others to do so. A more detailed guide to the step by step process of HRA is provided in this report at [Appendix 1](#).
- 1.13 In assessing the implications of any plan or project, in this case a local plan, for European sites in close proximity, it is essential to fully understand the sites in question, their interest features, current condition, sensitivities and any other on-going matters that are influencing each of the sites. Every European site has a set of ‘interest features,’ which are the ecological features for which the site is designated or classified, and the features for which Member States should ensure the site is maintained or, where necessary restored. Each European site has a set of ‘conservation objectives’ that set out the objectives for the site

¹ Council Directive 92/43/EEC

² Council Directive 2009/147/EC

interest, i.e. what the site should be achieving in terms of restoring or maintaining the special ecological interest of European importance.

- 1.14 The site conservation objectives are relevant to any HRA, because they identify what should be achieved for the site, and a HRA may therefore consider whether any plan or project may compromise the achievement of those objectives. Further information on European site conservation objectives can be found at [Appendix 2](#) of this report.

Approach to assessing the DPD during its preparation

- 1.15 To date, HRA has been an integral part of the development of all documents that form the South Lakeland Local Plan, and this HRA report provides a record of assessment during the preparation of the Development Management Policies DPD. HRA identifies potential risks to European sites posed by an emerging policy approach, and by being undertaken from an early stage in plan making, it seeks to find solutions that enable sustainable development to meet the needs of an area whilst protecting European sites. The HRA process should be mindful of the objectives of an emerging plan, and the previous iterations of this HRA report for the Development Management Policies DPD recommended measures that allowed objectives to be met whilst avoiding or minimising risk to European sites. In considering the HRA requirements, a competent authority must adequately apply the protective legislation for European sites, and where solutions are not available or evidence to support a solution is not robust, it may then necessary to consider a different policy approach. In this assessment of the South Lakeland Development Management Policies DPD, it has been possible to strengthen policies and supporting text to adequately protect European sites without needing to consider a different policy approach.
- 1.16 As described in [Appendix 2](#), the step by step process of HRA of an emerging plan allows for continual refinement of the plan to ensure its compliance with the Habitats Regulations. The assessment therefore remains in draft and is updated as the plan is refined and re-assessed. As both the plan maker and the competent authority responsible for assessing the plan, South Lakeland District Council have continued to have regard for the assessment findings at each update, and have embedded the necessary recommendations for European sites as an integral part of continued policy formulation and refinement before finalising the Publication version of the DPD for Examination. This iterative process enables a robust plan to be adopted, with adequate protection for European sites alongside workable solutions for delivering sustainable growth and meeting the needs of local communities.

- 1.17 When the Council is acting as competent authority for development projects, there is far less flexibility because the project proposer (in the case of planning applications this is the planning applicant) is presenting a project for consideration in its final form. Such proposals should be informed by the documents that make up the Local Plan, and the Local Plan should therefore seek to provide relevant and helpful guidance for the submission of projects that adequately protect European sites as part of the proposal.
- 1.18 At plan level HRA, a screening for likely significant effects in the preparation of a plan may therefore be run a number of times as the plan develops, to continually recheck conformity with the Habitats Regulations requirements and the incorporation of recommendations made at earlier HRA iterations. The HRA should use the screening stage of assessment to identify where further detailed assessment and additional evidence gathering is required, and in such circumstances the plan may proceed to the appropriate assessment stage.
- 1.19 The South Lakeland Development Management Policies DPD sets out proposed policies to inform the determination of planning applications, to ensure that the right type of new growth and regeneration and enhancement of existing assets is provided in accordance with the overall objectives of the local plan as a whole. Liaison between Footprint Ecology and South Lakeland District Council during the preparation of this HRA alongside the development of the DPD has enabled appropriate protective measures to be incorporated within the DPD to give confidence that the plan will not result in likely significant effects. This position will be reviewed before the DPD is adopted, checking any matters arising from Examination.

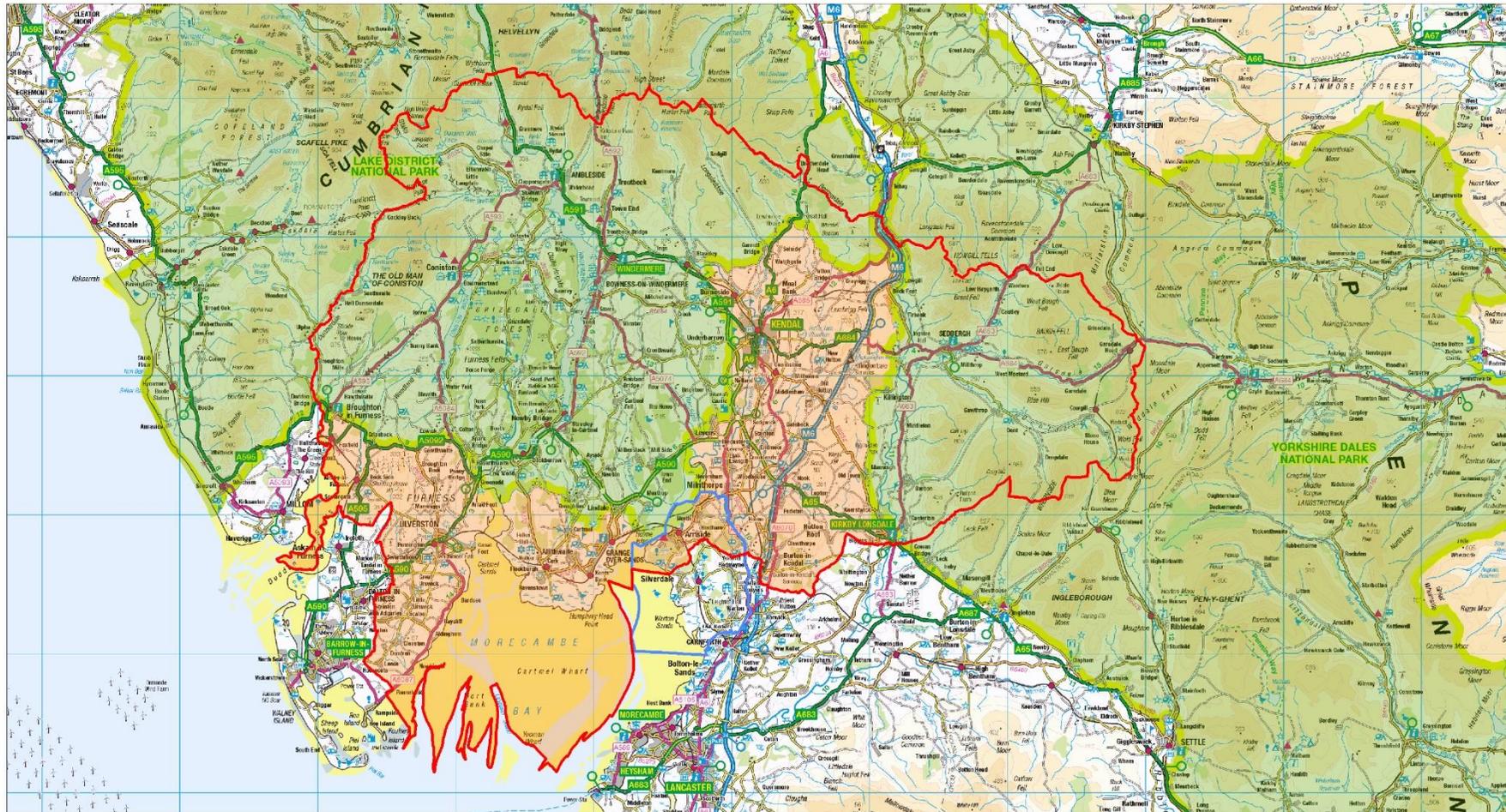
The South Lakeland District

- 1.20 The South Lakeland District includes parts of the Lake District National Park and the Yorkshire Dales National Park; recent extensions to these National Parks took effect on 1st August 2016. South Lakeland District Council has planning authority responsibility over areas of the South Lakeland District that lie outside the national parks. In addition to the presence of the two national parks, spatial planning for South Lakeland is also undertaken in the context of an Area of Outstanding Natural Beauty, three planning areas that are physically divided, major transport routes running north south through the District and an area that is one of the most important for wildlife and nature conservation in the UK, including Morecambe Bay.
- 1.21 The Core Strategy and Land Allocations document provide for 8,800 houses over the plan period, and direct over half of the new housing development to the main 'principal service centres' of Kendal and Ulverston. Housing allocations

are also in place for Grange-over Sands, Milnthorpe and Kirkby Lonsdale, and 17 Local Service Centres. Kendal is set to deliver 3,080 houses and Ulverston 1,760 houses over the plan period.

- 1.22 Kendal is the main urban centre within the District, and is a popular town for visitors to the national parks, amplifying a need to carefully manage traffic through the town. The District has a large proportion of residents that are older than working age, and it is anticipated that the proportion of the population in this age group will continue to grow over the Local Plan period. The District and its surrounding areas are of considerable biodiversity and landscape value, making it a popular destination for tourists. The Local Plan must therefore seek to strike the most appropriate direction for sustainable development, in the context of a wide-ranging set of complex issues.
- 1.23 The South Lakeland Local Plan already includes the adopted Core Strategy and Land Allocations, providing an overview of key objectives and drivers for sustainable growth, and the main sites for growth delivery. The Development Management Policies within the emerging DPD will provide a set of policies that inform the determination of planning applications, to ensure that the right type of new growth and regeneration and enhancement of existing assets is provided in accordance with the overall objectives of the local plan as a whole, being implemented alongside the Core Strategy and in accordance with the NPPF. Whilst the preparation of the Development Plan Policies DPD does not itself require any review of the Core Strategy, the adoption of the Development Plan Policies DPD will ensure up to date development management policies are in place as the Council then embarks on a new Local Plan in the near future.
- 1.24 The adopted Core Strategy provides policies that protect the natural environment, and these policies must be implemented alongside the Development Management Policies DPD, once also adopted. Whilst the Development Management Policies DPD must be compliant with the Habitats Regulations, this assessment has regard for the fact that both national policy and Core Strategy Policy CS8.4 is in place and applicable to development proposals coming forward, which should be compliant with all current planning policy documents. Core Strategy Policy CS8.4 provides protection for designated sites and wider biodiversity and ecological networks, and encourages biodiversity enhancement. This policy refers to national, regional, local and non-protected sites of biodiversity importance, therefore covering SSSIs that normally underpin European site designations, but without a specific reference to European sites.
- 1.25 The South Lakeland Development Management Policies DPD area is illustrated on Map 1 below.

Map 1: South Lakeland and areas within the National Parks



- South Lakeland boundary
- Arnside & Silverdale AONB
- National Park
- Area covered by the DM DPD (i.e. outside National Parks)

European sites

- 1.26 In undertaking a HRA it is necessary to gather information on the European sites that could be potentially affected by the plan or project. This section and the accompanying detailed site information within [Appendix 3](#), identifies those sites that could potentially be affected by the policies and proposals within the Development Management Policies DPD. [Appendix 3](#) sets out the site interest features, sensitivities and any current conservation issues, drawing on available information and the expertise and local knowledge of the assessment team preparing this report.
- 1.27 In assessing the implications of any plan or project for European sites, it is essential to fully understand the ecology and sensitivity of the sites, in order to identify how they may be affected. Central to HRA is the consideration of how a plan or project may affect the achievement of conservation objectives. This section of the report and [Appendix 2](#) together provides the necessary information that informs the assessment of Development Management Policies DPD.
- 1.28 Every European site has a set of 'interest features' which are the ecological features for which the site is designated or classified, and the features for which Member States should ensure the site is maintained or, where necessary restored. Each European site also has a set of 'conservation objectives' for the site interest, i.e. what the site should be achieving in terms of restoring or maintaining the special ecological interest of European importance.
- 1.29 The site conservation objectives are relevant to any HRA, because they identify what should be achieved for the site, and a HRA may therefore consider whether any plan or project may compromise the achievement of those objectives. In addition to conservation objectives, Natural England produces Site Improvement Plans (SIPS) for each European site in England as part of a wider programme of work under the 'Improvement Programme for England's Natura 2000 sites.' Each plan includes a set of actions for alleviating issues that are impeding the delivery of conservation objectives, with lead delivery bodies identified and indicative timescales. The SIPs can provide an additional useful reference for HRA work, identifying where there are site sensitivities.
- 1.30 The Development Management Policies DPD area and nearby European sites are shown in Map 2 and Map 3 (the latter showing land allocations, set out in the Land Allocations document as part of the South Lakeland Local Plan). As there are a considerable number of European sites, these are not labelled individually on the Maps, rather the maps show the extent of designations, and then the sites are listed in Table 1. This table lists all sites where at least part of the site is

within 10km of the plan area. The choice of 10km is a pragmatic one. The Development Management Policies DPD contains no quantum of development and the policies will simply guide future development in terms of style, types of development etc. As such it is unlikely that European sites that are over 10km from the plan area and have no physical link (such as a hydrological connection to the plan area) will be relevant to the assessment.

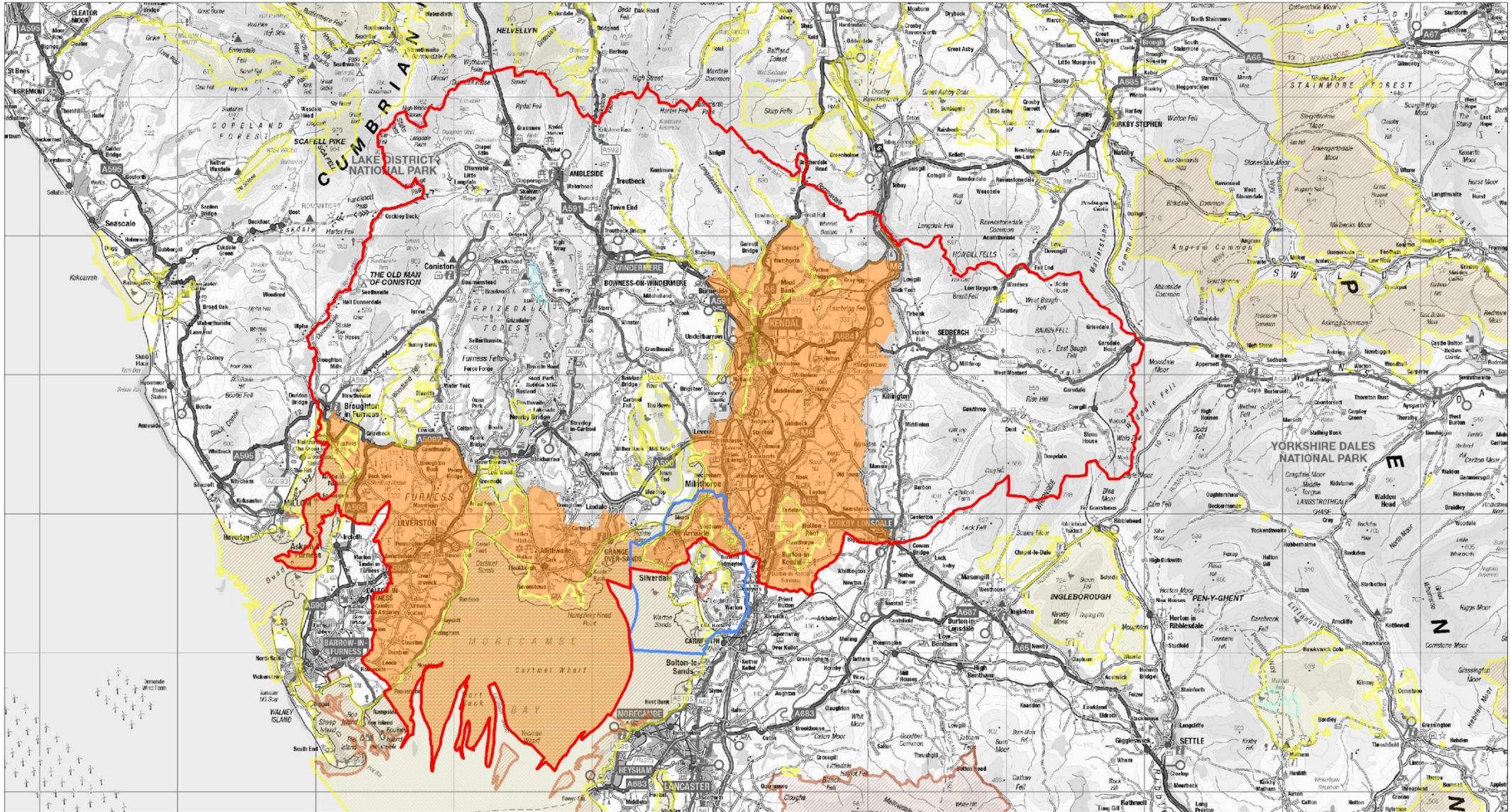
- 1.31 It should be noted that on the 7th February 2017, the previously separate Morecambe Bay SPA and Duddon Estuary SPA were combined to form a new SPA, Morecambe Bay and Duddon Estuary SPA. The new SPA also includes extended areas to incorporate part of the West Cumbria coast and the Ravenglass Estuary, which support colonies of internationally important tern populations³. Throughout this HRA, the proposals to combine and extend the sites were known and formed part of a public consultation. The extensions out to sea relate to tern foraging habitat, which is not specifically affected by the policies relating to Development Management, other than the need to have regard for the new site boundary within project level HRAs. South Lakeland District Council have confirmed that they have been provided with the new site information.
- 1.32 European sites function within a wider network of biodiversity assets, some of which are designated sites, and some of which is part of the wider undesignated network of green and blue infrastructure. European site protection and long-term resilience needs to be supported by that wider network and the underlying supporting process that it provides, such as genetic dispersal, habitat that provides additional functions such as feeding habitat, or hydrological connections. At Publication stage, the Development Management Policies DPD now includes a strong policy and supporting text on the protection and expansion of blue and green infrastructure through development, which adds to the site focussed measures now embedded within the DPD.
- 1.33 European site protection is also closely linked to the protection and management of the Arnside to Silverside AONB, which is a landscape designation that recognises the natural beauty and cultural history that has shaped the landscape. Maintaining close links between spatial planning, protecting biodiversity and achieving AONB objectives is therefore important. The production of the Arnside and Silverdale AONB DPD will hopefully make these links, and its HRA should further build on the HRA work to date.

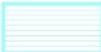
³ See <https://www.gov.uk/government/consultations/morecambe-bay-and-duddon-estuary-special-protection-area-changes-comment-on-proposals>

Table 1: European sites where at least part of the site boundary falls within a 10km radius of the plan area. Sites listed in italics are those that are within 10km but are outside the plan area.

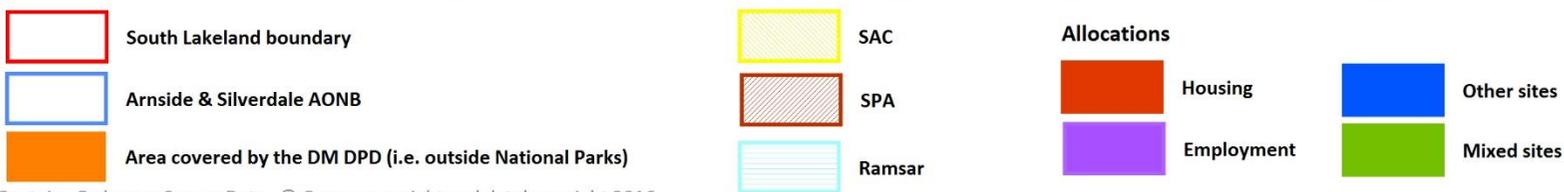
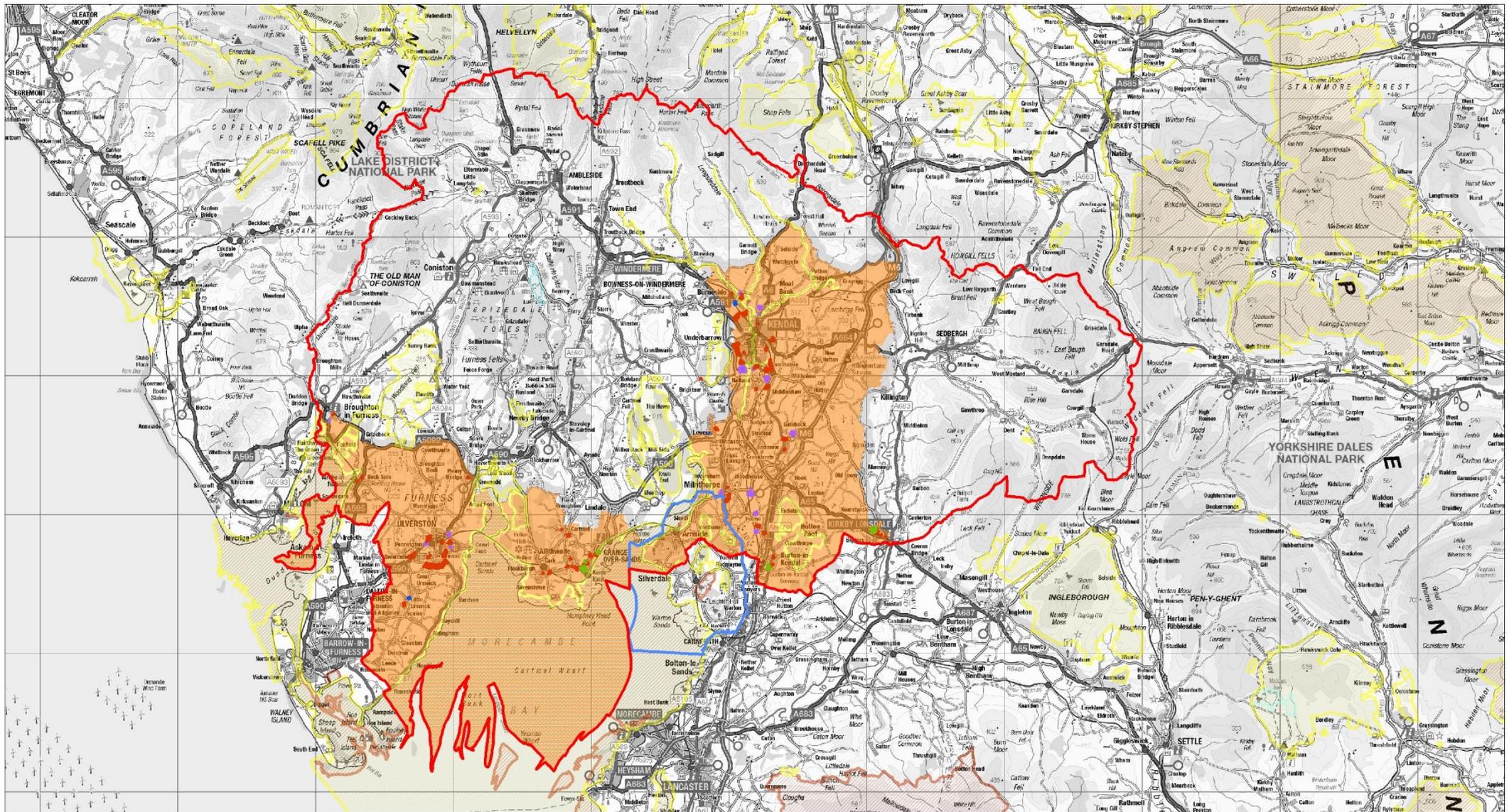
SPA	SAC	Ramsar
<i>Leighton Moss</i>	<i>Asby Complex</i>	Duddon Estuary
Morecambe Bay & Duddon Estuary (SPA)	Duddon Mosses	<i>Leighton Moss</i>
<i>North Pennine Moors</i>	<i>Ingleborough Complex</i>	Morecambe Bay
	<i>Lake District High Fells</i>	
	Morecambe Bay	
	Morecambe Bay Pavements	
	<i>Naddle Forest</i>	
	<i>North Pennine Dales Meadows</i>	
	<i>North Pennine Moors</i>	
	<i>River Eden</i>	
	River Kent	
	Roudsea Wood & Mosses	
	<i>Shell Flat and Lune Deep</i>	
	<i>Subberthwaite, Blawith & Torver Low Commons</i>	
	<i>Witherslack Mosses</i>	
	<i>Yewbarrow Woods</i>	

Map 2: European Sites in and around the plan area



-  South Lakeland boundary
-  Arnsdale & Silverdale AONB
-  Area covered by the DM DPD (i.e. outside National Parks)
-  SAC
-  SPA
-  Ramsar

Map 3: European Sites and allocated sites



Contains Ordnance Survey Data. © Crown copyright and database right 2016.
 Designated sites boundaries downloaded from Natural England website. © Natural England.

2. Previous Habitats Regulations Assessment Work

- 2.1 This section of the report sets out the progression of HRA work for the South Lakeland Local Plan, including HRA work for other documents that form part of the Local Plan, as well as the progression of HRA work for the Development Management Policies DPD.
- 2.2 HRA reports were prepared for the Core Strategy and Land Allocations documents. The assessments made, findings and recommendations, and the measures put in place to protect European sites as a result of those assessments are considered here. It is necessary to understand the historical HRA work in order to check the progression of mitigation through the development of the Local Plan to the current DPD being assessed.

Core Strategy Habitats Regulations Assessment

- 2.3 HRA work for the Core Strategy (Treweek Environmental Consultants Ltd. 2009) identified the delivery of the Core Strategy posed a potential risk to Morecambe Bay SAC/SPA/Ramsar, Morecambe Bay Pavements SAC and River Kent SAC. The Assessment identified a number of issues for which adverse effects on European sites could not be ruled out. The assessment recommended the addition of a number of measures to the plan in order to have confidence those adverse effects could be ruled out, as summarised below in Table 2. Notably the HRA also included a recommendation that “efforts are made to monitor the plan effects and collect further information to better inform future revisions of the Core Strategy.”

Table 2: Summary of potential impacts identified in the Core Strategy HRA

Potential risks	Measures added to the plan
Increased use of Morecambe Bay by residents and visitors leading to SAC habitat damage	References in the plan to the Morecambe Bay Strategy, working in partnership with Natural England. Use of zoning and bylaws is specifically referred to (CS8.5)
Renewable energy infrastructure development in Morecambe Bay leading to	Additional text added at CS7.7 to secure N2K protection

Potential risks	Measures added to the plan
habitat deterioration for Morecambe Bay SAC/SPA/Ramsar	
Residents and visitors to Morecambe Bay Pavements, and increased dog fouling could lead to habitat changes for SAC interest	Text relating to the need to secure adequate open space and improve existing open space
Abstraction from the River Kent SAC affecting riverine interest features and movement of crayfish plague from the Lancaster Canal to the Kent from works to the canal	Text advising that canal restoration is not a project supported by the Local Plan (CS2)
Reduction in water quality arising from sewer network being over capacity with more homes in Kendal and Burnside.	Text added to require WWTW and sewage infrastructure to have adequate capacity before further development is accommodated.
Increased disturbance to bird interest features at Morecambe Bay SPA and Ramsar from additional tourists and residents	Reference to the Morecambe Bay Strategy added and stricter bylaws and zoning (CS8.5)

Land Allocations Habitats Regulations Assessment

- 2.4 The HRA work for the Land Allocations document, (Trewick Environmental Consultants 2012), assessed the full set of land allocations being proposed (including an additional list of proposed allocations brought forward after the main list). The assessment proceeded to appropriate assessment, having identified a number of risks to European sites, with the main issues relating to impacts on water quality for both Morecambe Bay SAC/SPA/Ramsar and the River Kent SAC.
- 2.5 The Land Allocations HRA highlights that the River Kent is in unfavourable condition because of a number of issues that are either directly or indirectly related to past development, including channel modification and degradation of the riparian zone, which can lead to bankside erosion and loss of marginal vegetation.

- 2.6 Additionally, as also identified in the Land Allocations document HRA, the tributaries of the Natland Beck, support good populations of White-clawed crayfish and development across or near the Natland Beck and its tributaries therefore poses risks to the River Kent SAC. Natland Beck is within the SAC but a number of tributaries are outside.
- 2.7 The assessment advised that a buffer zone against the SAC and the Natland Beck tributaries should be left undeveloped and managed appropriately.
- 2.8 Natural England advised South Lakeland District Council that a permanent fence to create a 10m wide no-working buffer zone adjacent to the SAC (with appropriate landscaping), and any development should be located at least 15m from it. Natural England has also highlighted the need for a number of specific river restoration projects to restore some sections of the SAC, which should be taken forward in partnership with relevant stakeholders.
- 2.9 Water quality issues relating to Morecambe Bay SAC/SPA/Ramsar more generally focussed on water management within new development in close proximity to the Bay.
- 2.10 The assessment recommended the addition of a number of measures and restrictions to the Land allocations document in order to have confidence those adverse effects could be ruled out, as summarised below in Table 3.

Table 3: Summary of potential impacts identified in the Land Allocations HRA

Potential risks	Measures added to the plan
Risk of water quality deterioration in the River Kent SAC	<p>The plan required caveats for no further development at sites in Burneside, Steeles Row, and Kentrigg until sewage network improvements are in place. However, the plan allows for case specific consideration of proposals, depending on site specific design solutions, which may be developed in conjunction with United Utilities.</p> <p>Development in Kendal is currently capped at 2000 properties unless a more stringent phosphorus effluent standard can be achieved (United Utilities now advise that this work is now currently underway.</p> <p>The development of 2000 properties at Kendal is dependent upon specific conditions adhered to:</p>

Potential risks	Measures added to the plan
	Development phasing, foul flows only into the sewer network, separate systems of drainage for effluent and surface water, surface Water Management plans and sustainable drainage systems for development and buffer zones adjacent to the River Kent.
Water quality deterioration issues in relation to development affecting Morecambe Bay SAC/SPA/Ramsar	Development sites around Morecambe Bay SAC/SPA/Ramsar to include a requirement for SUDS, as advised in the Core Strategy.
Additional allocation specific issues for a number of allocations	Allocations were either removed or allocation specific requirements were stipulated within the HRA to protect European sites

2.11 The progress made with these mitigation measures is discussed in relation to assessing potential impacts in Section 3 and progress with mitigation measures to date in Section 4.

3. Establishing Potential Impacts

Overview

- 3.1 At the screening stage of HRA for a plan, there is the opportunity to identify changes to the plan that could be made to avoid risks to European sites. The screening for likely significant effects is an initial check to identify risks and recommend any obvious changes that can avoid those risks.
- 3.2 All aspects of the emerging plan that influence sustainable development for the District are checked for risks to European sites. Risks need to be identified in order to inform the screening for likely significant effects. This section therefore considers the potential risks arising from the plan, with each summarised in Table 4 and then considered in turn under thematic headings following on from the table.
- 3.3 The impact pathways were established early in the HRA process for the Development Management Policies DPD. This information was then used to inform a policy by policy check to screen each policy against the potential impact pathways, at each new iteration of the DPD.

Impact pathways

- 3.4 European sites are at risk if there are possible means by which any aspect of a plan can, when being taken forward for implementation, pose a potential threat to the wildlife interest of the sites. This is often referred to as the 'impact pathway' as it is an identifiable means by which the plan or project could potentially affect the European site. Possible impact pathways for sites (within our 10km radius) in relation to potential impacts arising from implementation of the local plan are set out in Table 4.
- 3.5 The table identifies which sites are relevant for the screening and which risks need to be considered. Impacts from recreation relate to disturbance, trampling, increased fire risk and enrichment such as through dog fouling. These impacts are reviewed and summarised in a range of sources (e.g. Saunders *et al.* 2000; Lowen *et al.* 2008; Liley *et al.* 2010). Sites that will be vulnerable are those with public access; those likely to draw recreation users and are in relatively close proximity to new development. Some interest features (such as wintering waterfowl and ground-nesting birds) are particularly vulnerable.
- 3.6 Water issues relate to water quality and water quantity (i.e. water availability). Run-off, outflow from sewage treatments and overflow from septic tanks can

result in increased nutrient loads and contamination of water courses. Abstraction and land management can influence water flow and quantity, resulting in reduced water availability at certain periods or changes in the flow. Such impacts particularly relate to aquatic and wetland habitats.

- 3.7 Emissions from agriculture and industry can lead to impacts on air quality. Traffic increases and changes in road use that increase congestion can also lead to air quality deterioration that can affect sensitive interest features within European sites. Sites that are vulnerable are those that are close to, or directly downwind of the source and contain vegetation communities associated with low nutrient levels. Research has shown that effects on heathland vegetation from local traffic can extend up to 200m from the road edge (Angold 1997).
- 3.8 Finally, there are 'general urban effects' which are set out in Table 4 to encompass a range of effects relating to development in proximity to designated sites, such as fragmentation/isolation, loss of supporting habitat and increased fire risk.

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Table 4: Potential impact pathways – i.e. potential mechanisms where by the different European sites could be impacted. This table was initially developed at an early stage in the HRA to provide an overview of the sites and possible issues, enabling some sites to be excluded from further consideration within the report. Information are drawn primarily from the relevant site improvement plans.

	Recreation	Water Quality	Water Quantity	Air Quality	General urban effects	Notes
SPA						
<i>Leighton Moss</i>	✓	✓	✓			
Morecambe Bay & Duddon Estuary SPA	✓	✓	✓		✓	
<i>North Pennine Moors</i>	?					<i>Distant from the plan area and unlikely to draw many residents/tourists from S. Lakeland</i>
SAC						
<i>Asby Complex</i>		✓	✓			
Duddon Mosses		✓	✓			
<i>Ingleborough Complex</i>						<i>Distant from the plan area and unlikely to draw many residents/tourists from S. Lakeland</i>
<i>Lake District High Fells</i>						<i>Tourism within the National Park will be for National Park plans to consider. No hydrological links.</i>
Morecambe Bay	✓	✓				
Morecambe Bay Pavements	✓	✓		✓		
<i>Naddle Forest</i>						<i>To north of plan area, near Haweswater. Not likely to draw recreation.</i>
<i>North Pennine Dales Meadows</i>						<i>Well outside plan area and not likely to draw recreation; limited access</i>

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	Recreation	Water Quality	Water Quantity	Air Quality	General urban effects	Notes
North Pennine Moors						<i>Distant from the plan area and unlikely to draw many residents/tourists from S. Lakeland</i>
River Eden						<i>Catchment outside plan area – drains northwards</i>
River Kent		✓	✓		✓	
Roudsea Wood & Mosses		✓	✓	✓		
Shell Flat and Lune Deep						<i>Designated for sandbanks covered by seawater and reefs. Well offshore.</i>
Subberthwaite, Blawith & Torver Low Commons	✓			✓		
Witherslack Mosses		✓	✓			
Yewbarrow Woods						<i>Well outside plan area and unlikely to have a draw in terms of recreation. No hydrological links.</i>
Ramsar						
Duddon Estuary	✓	✓	✓			
Leighton Moss	✓	✓	✓			
Morecambe Bay	✓	✓	✓			

Increased Recreation Pressure

Housing development

- 3.9 Pressure on sites from recreation linked to nearby development is of relevance to Morecambe Bay SAC/SPA/Ramsar and Morecambe Bay Pavements SAC. Recreational pressure arising from new housing needs to be factored in to the policy development under the housing topic. Whilst the policies within the Development Management Policies DPD do not directly promote a quantum of growth, there are particular measures committed to within the Core Strategy in relation to growth that link to the Development Management Policies, which will be in place to steer the delivery of that growth through qualitative requirements. The Core Strategy provides protection for the natural environment with policy CS8.4, and the Development Management Policies need to contribute to securing any relevant mitigation measures in setting qualitative policy. For example, the policy wording should give specific direction in relation to greenspace provision and access management, and in order to do this it is advised that the overarching commitments in the Core Strategy now need further thought in terms of how greenspace provision and access management can be achieved. The Core Strategy HRA referred to working with Natural England to progress protection of European sites. Natural England will continue to provide consultation comments on the Development Management Policies DPD, and it would be beneficial to liaise with Natural England to check their expectations in relation to the progression of mitigation measures for housing growth.
- 3.10 Morecambe Bay SAC/SPA/Ramsar is vulnerable to recreational pressure, both from residents and tourists. Natural England's Site Improvement Plan⁴ for Morecambe Bay reflects this vulnerability, highlighting recreational pressure as an issue for the site. Coastal sites have a particular draw for recreation. With growing housing and local populations, gradual increases in recreation levels can result in issues such as disturbance to birds, trampling of dune and saltmarsh habitats and nutrient enrichment through dog fouling. Detailed work in Morecambe Bay (Liley *et al.* 2015), focussed on bird disturbance, involved fieldwork and visitor interviews. The study highlighted a range of complex issues. A wide range of types of access were identified; dog walking being a particular issue but other access included walking, wildlife watching, canoeing, water sports (jet skis, kitesurfing, windsurfing etc.), horse riding, fishing,

⁴ See <http://publications.naturalengland.org.uk/publication/6708495835463680>

wildfowling and air-borne activities. All these types of activities have the potential to cause disturbance to breeding birds and wintering waterfowl.

- 3.11 Breeding birds and high tide roosts occur in the same areas where access is focussed – the narrow strip where land and tide meet are key areas for wildlife and also tend to be the areas people want to visit. Whilst isolated, single disturbance events are unlikely to be a major problem; chronic disturbance will lead to impacts. Many of the shoreline areas at Morecambe Bay are not existing nature reserves and the bird disturbance work identified that it is not clear to visitors that these are important sites for nature conservation. In general, there is a lack of information for visitors, relatively little engagement and very little access infrastructure (such as marked paths, formalised parking, gates, interpretation etc.). Access is therefore difficult to control or manage, and options to influence how people behave are limited. Given the range and scale of the issues there is a need for coordination across sites and initiatives at a Bay-wide scale.
- 3.12 Following on from this work, the Morecambe Bay Partnership, with a range of partners and stakeholders, has been looking at ways to establish such an approach. A number of initiatives for improving interpretation are being progressed through a Waders and Wildfowl Implementation Plan⁵ that has recently been finalised at the beginning of 2017 and sets out measures under a number of themes to take forward ambitious changes to the quality and availability of interpretation around Morecambe Bay. The projects primarily focus on making the birds of Morecambe Bay the central focus, with activities that educate and encourage residents and tourists to contribute to their protection. Future development will need to have regard for this strategy and ensure that it is in conformity with its objectives.
- 3.13 The study by Liley et al included visitor interviews and collected data on home postcodes. These showed that local residents, travelling from home for a short visit, typically came from within 4km of the access point (median distance between home postcode and interview location was 3.45km).
- 3.14 Development at Ulverston in particular will be in close proximity to Morecambe Bay and as such is likely to have implications in terms of increased recreation. While the Development Management DPD sets no quantum of growth and does not identify named sites for development, general policies relating to green

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<file:///C:/Users/rachel/AppData/Local/Microsoft/Windows/INetCache/IE/HB0TTLGJ/Waders%20and%20Wildfowl%20Interpretation%20Plan%202017.pdf>

infrastructure and improved management of recreation on the coast will be important to ensuring impacts to Morecambe Bay are recognised and resolved.

- 3.15 The issue of recreational pressure on Morecambe Bay Pavements SAC was highlighted in the Land Allocations document HRA. Access to the site is possible close to Kendal and as such the site can be used for daily recreational needs that should ideally be served by adequate greenspace provision in the District. It continues to be recognised that Morecambe Bay Pavements SAC is sensitive to trampling and dog fouling, arising from its recreational use by both residents and tourists – for example the site improvement plan⁶ for the site highlights dog fouling and South Lakeland Council is included in the plan as a delivery partner. It is important to ensure that measures to rectify recreation issues within the Core Strategy and Land Allocations document are being put in place and are adequate, and the Development Management Policies DPD needs to provide consistent policy wording to enable this to be delivered.
- 3.16 The alignment of the England Coast Path National Trail from Allonby to Whitehaven has been agreed by the Secretary of State and progress is now being made on the second stretch from Whitehaven to Silecroft. Any further development of mitigation for new housing needs to be designed with regard for the measures in place or being developed for the England Coast Path stretches.
- 3.17 For the Lake District High Fells SAC possible impacts relate to vegetation wear, trampling and habitat wear from increased footfall. Residents in the local area may be keen walkers and perhaps choose areas away from the main tourist areas. The site improvement plan⁷ identifies public access as an issue for the site and as an action sets out the need to map areas where trampling damage is an issue and resolve issues through the ‘Fix the Fells’ initiative. The National Trust are identified as the lead partners with the National Park Authority as a delivery partner. It may well be that such an approach resolves any issues and it is not clear what level of impact local residents in South Lakeland may have in comparison to residents from other areas and tourists. As such South Lakeland Council are advised to liaise with neighbouring authorities and Natural England regarding the scale of the issue and the need for mitigation.

Tourism

- 3.18 Whilst the development of policy in relation to retail and town centre use is predominantly not going to bring risks to European sites, the consideration of

⁶ <http://publications.naturalengland.org.uk/publication/6401957140889600>

⁷ <http://publications.naturalengland.org.uk/publication/6534434434056192>

tourism is of relevance. The latest available Local Plan Annual Monitoring Report (2014-2015) advises that *"it remains difficult to assess trends in tourism in the Local Plan area as data is not available for the areas outside the National Parks alone. Making the most of the benefits tourism has for the local economy whilst ensuring that the impact of tourism on the environment is minimised is a key challenge for the Local Plan."*

- 3.19 Tourism brings additional recreational pressure, and adds to air quality issues with additional traffic emissions. Tourists will include day visitors from the wider area such as Greater Manchester, and will include those who own holiday homes and static caravan who will come to the district on a regular basis to make the most of their holiday accommodation, often for regular weekend retreats. These tourists will become familiar with the area over time and may make regular use of particular locations for walking and dog walking.
- 3.20 Cumbria Country Council works in partnership with the two National Park Authorities to implement a Cumbria wide Access Strategy, with the current strategy in place to cover the period 2014 to 2019. One of the four strategic aims of this strategy is to *"ensure access and recreation contributes to a thriving economy whilst protecting and, where possible enhancing, the sustainability of the County's natural and cultural resources."*
- 3.21 South Lakeland District Council should continue to work closely with Natural England, the County Council and national park authorities to ensure that protection of European sites remains part of access management. The collection of data is critical to future plan and strategy making, and noting that the visitor survey work last undertaken related to 2001, the Council should seek to ensure that there is continued provision for both visitor surveys and ecological condition assessments, in partnership with the authorities and Natural England. The Access Strategy refers to a Strategic Action Plan for access management, and this plan should include specific actions to gather monitoring data.
- 3.22 Some limited data on tourist use of Morecambe Bay was collected through the visitor interviews in Liley *et al.* (2015). Surveys were undertaken at 5 locations and during the winter months. Tourists accounted for 9% of interviewees, highlighting that sites like Morecambe Bay do have a tourist draw during the winter. Particular issues at Morecambe Bay with tourism relate to caravan and mobile home sites and occupancy during the winter. There is a need for better understanding of how such sites are used, visitor behaviour and implications for nearby European sites.
- 3.23 The Waders and Wildfowl Implementation Plan being implemented by the Morecambe Bay Partnership referred to above has a number of measures

particularly focused on tourism, including information packs for families using caravan sites. As with housing development, any tourism development proposals will need to demonstrate join up with this Implementation Plan.

Water issues

Water quality

- 3.24 It is recognised in previous HRAs for the Core Strategy and Land Allocations, and also within previous assessment of the emerging Development Management Policies document, that there are important issues to resolve in relation to water quality; for both Morecambe Bay SAC/SPA/Ramsar and for the River Kent SAC. Policy areas being proposed within the DPD include key mitigation measures being taken forward (e.g. Sustainable Drainage Systems), and following on from earlier HRA recommendations for the DPD, there is now specific wording relating to the European sites within the supporting text for this policy.
- 3.25 Water quality issues are particularly pertinent for Kendal WWTW and associated infrastructure at Steele Row, Burneside and Kentrigg Walk, North Kendal. Currently the Core Strategy places a limit of 2000 houses within the plan period for Kendal, and makes clear that development at Burneside and North Kendal (reference to allocated sites at West of High Sparrowmire, North of Laurel Gardens and North of High Sparrowmire) cannot proceed in the absence of upgrades or demonstration of an application specific design solution. The Council has regular contact with United Utilities to understand the current progression of upgrade possibilities for the network, and is closely monitoring any planning proposals in these locations until matters are resolved.
- 3.26 Where new growth poses potential risks to European sites in the absence of certainty that the development will not contribute to or exacerbate pollution risk, the Council is not able to promote such development sites within planning documents without clear wording that requires prior to completion of works before sites can come forward for planning permission. The Council cannot give planning permission unless the necessary infrastructure is in place, or an application specific solution is able to demonstrate that the drainage requirements are such that they do not pose additional risk. Having regard for the fact that utility companies are legally bound to provide water supply and waste water disposal for any development with planning permission, the Council cannot promote allocations with pollution risk in their planning documents, or give planning permission. Further information on the current situation and network upgrades is provided in Section 4 in relation to a discussion on the current progression of mitigation.

Flood Risk

- 3.27 Cumbria County Council has produced a Local Flood Risk Management Strategy, in accordance with their duties under the Flood and Water Management Act 2010, defining the County Council as a 'Lead Local Flood Authority.' Whilst the HRA was not able to assess implications for flood risk management in detail due to the strategic nature of the strategy, it gives a clear steer to flood risk management projects coming forward that they must be the subject of HRA and that early project design and options for locations must have regard for potential impacts on European sites and the range of mitigation measures available to protect them. It may therefore be relevant to give further weight to this within the Development Management Policies document under this topic heading.
- 3.28 Cumbria County Council is preparing a design guide specifying the early considerations for drainage in development design. It will be important for this to be disseminated to planning officers with reference to its relevance for Morecambe Bay and River Kent European sites.

Water supply

- 3.29 Water availability concerns relate to over-abstraction and impacts of reduced flows. Checks at the Core Strategy ensured capacity and headroom for the level of development and locations proposed and, recent discussions between South Lakeland District Council and United Utilities confirms that the conclusions in the United Utilities 2014 Water Resources Management Plan are still applicable, with sufficient capacity to serve new development for the next 15 years.

Air quality

- 3.30 The Council is responsible for meeting the requirements of national legislation and policy in relation to air quality, and this includes establishing air quality management areas (AQMA) where air quality fails to meet national objectives and action therefore needs to be committed to and undertaken. The South Lakeland District has one AQMA at Kendal, established in 2001 in response to levels of NO₂ on Lowther Street being above Government targets. The AQMA was expanded in 2010 to cover other roads in the town centre, and it captures the main traffic routes through the town, with an action plan in place to reduce air pollution through measures primarily focusing on reducing traffic congestion within the defined zone. They include actions to encourage behavioural change, improved signage, reduced bus emissions and reduced parking prices for cleaner vehicles. Annual progress reports are sent to Defra, and the most recent Annual Status Report 2017 states that NO₂ levels are showing a downward

trend, but that although levels have fallen on Lowther Street, it is yet to meet target levels. A further list of measures to be implemented in 2017 is provided within the report, including installation of a green wall at Kendal Road station, reductions in HGVs entering the AQMA and the installation of a cycle hub at Westmorland Shopping Centre. It is anticipated that the NO₂ target will be achieved by the next report in 2018.

- 3.31 Some parts of the Morecambe Bay Pavements SAC are in close proximity to Kendal, and other parts are close to the motorway. Natural England's SIP for the site⁸ highlights the SAC's sensitivity to air quality and need for reduction in emissions in close proximity. A specific action relates to the preparation of a Site Nitrogen Action Plan for Morecambe Bay Pavements SAC before 2020. Whilst Natural England have not provided any specific advice relating to the Morecambe Bay Pavements and air quality issues⁹, the Council will need to ensure further deterioration is avoided and air quality monitoring data and monitoring of traffic flows will be important in providing early warning of deterioration. It is recommended that the council liaise with Natural England over the timetable and content for the Action Plan, to determine its scope and what opportunities there may be for spatial planning and development management to contribute. When the Site Nitrogen Action Plan is available for the site (see Natural England 2015 for details) this should provide guidance on headroom for future development and any necessary mitigation. It is therefore important for the Council to begin early discussions with Natural England to inform the development of the plan and maximise Local Plan led opportunities.

General urban effects

- 3.32 General urban effects relate to the impacts of development in close proximity to European sites. Reviews (Underhill-Day 2005; Corney *et al.* 2008; McKinney 2008; McDonald *et al.* 2009) highlight a range of ways development can have impacts, including from increased cat predation, increased fire risk, contamination etc.
- 3.33 These issues are relevant to Morecambe Bay SPA/SAC/Ramsar, the Morecambe Bay Pavements SAC and the River Kent SAC. In general risks are probably very low, due to proximity, and the nature and size of the site. For Morecambe Bay SPA cat predation may be relevant but most roost sites and feeding areas have waterbodies/creeks etc that are likely to provide protection. Similarly, at both the Morecambe Bay SPA/SAC/Ramsar and Morecambe Bay Pavements SAC fire

⁸ See <http://publications.naturalengland.org.uk/publication/6401957140889600>

⁹ Email correspondence in June and July 2016

risk is unlikely to be a major concern as fires are unlikely to spread due to the habitats present.

- 3.34 There are also particular issues with respect to introduced plant species, which fall under this general heading. Species such as Himalayan balsam *Impatiens glandulifera* and Japanese Knotweed *Fallopia japonica* are an issue for some sites, such as the River Kent (See the site's IPENS report¹⁰). Invasive species are also a concern for some parts of the Morecambe Bay SPA/SAC/Ramsar¹¹. Landscaping and earth movement can create bare ground conditions and spread root stock allowing such species to colonise and spread and particular care should be taken with such works within the River Kent catchment or other European sites. This is a project level HRA consideration, but one which planning officers will need to be aware of in order to request the necessary information from applicants.
- 3.35 Progression from the Core Strategy and Land Allocations documents to the Development Management DPD has taken place over a number of years and the HRA work has progressed alongside the development of these documents that form part of the South Lakeland Local Plan. Current progress in relation to mitigation measures should be checked with each new document to maintain an overview of the appropriateness and effectiveness of plan level measures to protect European sites over the lifetime of the Local Plan as a whole. This is discussed in the following section.

¹⁰ <http://publications.naturalengland.org.uk/publication/6050544158244864>

¹¹ <http://publications.naturalengland.org.uk/publication/6708495835463680>

4. Current Status of Mitigation Measures and Recommendations for Progression

- 4.1 The mitigation measures for the Core Strategy and Land Allocations documents provide the necessary measures to enable development to proceed within South Lakeland in accordance with the adopted Local Plan. The Development Management Policies DPD adds to the Local Plan by setting out the detailed policies that inform the determination of planning applications, following from overarching strategic policies and land allocations for development. The current status and progression in implementation of the measures is therefore relevant to the HRA for the Development Management Policies DPD.
- 4.2 The Core Strategy HRA relied heavily on protective text to secure European site protection, and it is recommended that this should now be built upon with evidence to demonstrate that the protective measures are being successfully translated into appropriate action. For the Land Allocations Document, the HRA made very clear recommendations for specific measures and restrictions to be in place, and those recommendations complimented and gave more detail to the caveats in place within the Core Strategy.
- 4.3 The Development Management Policies DPD is predominantly qualitative in terms of policy, as it ensures sustainable and high-quality development comes forward in line with the quantities and locations previously outlined in the Core Strategy and Land Allocations document. However, as each HRA is undertaken for each part of the Local Plan, there should be a continual overview of mitigation measures and how the plan, as a whole, is working to adequately protect European sites. The implementation of the more qualitative Development Management policies should be in the context of strong European site protection in place for the strategic policies and the quantities of and locations for sustainable development.
- 4.4 The ongoing mitigation measures of relevance to the Development Management Policies DPD primarily relate to preventing or minimising impact pathways for recreation disturbance and water quality. In order to provide an update within this HRA, and assist the Council with recommendations for practical implementation of the high level protective policy wording in the Core Strategy, discussions have taken place through Footprint Ecology and the Council liaising with both Unites Utilities and Natural England. These discussions have provided information on the current status of these measures, recognising that they require continual progression and review in order to adequately fulfil their purpose of preventing adverse effects throughout the lifetime of the South Lakeland Local Plan. The ongoing water and recreation matters are discussed

here, recognising the positive ongoing work being undertaken and also including opportunities for further practical implementation.

Progression of water quality measures

4.5 Water issues are highlighted in paragraph 3.29 of the Core Strategy where:

“Increases in housing and employment land will put pressure on the existing sewage network and wastewater treatment works in Kendal. The Environment Agency has highlighted two areas where there are sewer capacity issues: Kentrigg Walk and Steeles Row, Burneside. In addition, it has concerns about the capacity of the Waste Water Treatment Works, located to the south of Kendal. A lack of sewage capacity at these locations may increase the incidence of sewage discharge to the River Kent and have an adverse affect on the species for which the river is designated a SAC. Measures are needed to avoid/mitigate these adverse effects and protect the health and wellbeing of local people.”*

* note in the actual Core Strategy text there is a typing error here

4.6 In considering the allocation of new development sites, South Lakeland District Council had regard to the availability of wastewater infrastructure and how the impact of development can be most appropriately managed to avoid adverse effects on European sites. The HRA work for the Core Strategy and Land Allocations therefore triggered measures put in place within the adopted plans for a small number of locations to cap, phase or only allow growth after upgrades.

4.7 Where there are risks posed to European wildlife sites, in terms of the potential for deteriorating water quality from discharges as a result of network capacity, it is appropriate for the Council to work alongside the wastewater company, which is United Utilities, to ensure mitigating measures through the planning process.

4.8 South Lakeland District Council cannot plan for growth in the absence of certainty that the impact of new development can be appropriately managed to prevent adverse effects on European sites. In preparing this HRA report for the Development Management Policies DPD, Footprint Ecology has liaised with United Utilities, to inform an update on water issues relevant to European sites.

4.9 The potential constraints on wastewater infrastructure are known by United Utilities, and have been conveyed to the South Lakeland planning officers through the regular meetings held between United Utilities and South Lakeland District Council. United Utilities and the Local Planning Authority have engaged in early and meaningful dialogue to understand any concerns. Regular liaison meetings are held so that United Utilities has an up to date picture of

development coming forward and therefore understands future demands on infrastructure. United Utilities also proactively engages in the development management process to recommend planning conditions and collect data so that it is able to most appropriately manage the impact on its infrastructure.

- 4.10 There are numerous factors that influence the impact of development on wastewater infrastructure. These include local population changes, economic circumstances influencing house building rates, changes to existing built development such as the redevelopment of a brownfield site and the point of connection and rate of discharge to the public sewer. It is particularly important to have regard to whether a development will connect foul and surface water or only foul water. This is important because surface water flows can be many times greater than foul water flows and therefore have the potential to have a greater impact on the capacity of wastewater infrastructure.
- 4.11 It is only once the detail of a development project is known that it is possible to fully understand the impact on wastewater infrastructure. This information can then be fed into potential investment responses. In order to comply with the requirements of the Habitats Regulations, the Council needs to have certainty in the delivery of growth promoted within a Local Plan without posing risks to European sites.
- 4.12 It is worth noting that a local plan is typically planning for 15 years of development. In contrast, United Utilities will plan for investment on five-yearly cycles known as 'Asset Management Plans' (AMP). The current investment period is AMP6 which covers the period 2015-2020). In considering their five year cycles for investment, United Utilities assesses investment needs in a resource efficient and appropriately prioritised manner, i.e., investment is made in response to known development need and risks should be managed in accordance with the timescales for new development. A site allocation does not give United Utilities certainty of delivery of a development. Therefore, in the interests of prioritising spend, United Utilities ensure investment is focussed in response to development where there is increased certainty of delivery through tracking the development lifecycle.
- 4.13 A wastewater company is legally bound to respond to the development needs placed on its infrastructure as a result of new development proposals coming forward. In the context of the Habitats Regulations, there needs to be certainty that the impacts of new development can be managed without posing a risk to European sites before a development can be approved.
- 4.14 Ongoing engagement in the planning process both through the development management process and via proactive responses to planning applications, enables United Utilities to understand and mitigate the impact of growth. United

Utilities regularly meets with South Lakeland District Council, to discuss the current situation and future progression of growth. United Utilities continues to emphasise the importance of foul only connections and has explained that subject to the detail of any development proposal, it may be necessary to recommend specific mitigating measures in the drainage proposal for a new development scheme or to co-ordinate development with the delivery of infrastructure improvements.

- 4.15 In recognising the potential capacity constraints, and also driven by the need to comply with environmental improvements such as those set out in the Water Framework Directive, United Utilities has been progressing with the assessment, development and implementation of solutions as detailed below.

Burneside

- 4.16 United Utilities are now not proposing to start any site works until 2018 to allow an assessment of the impact of removing infiltration from Carlingdale Pumping Station. This additional time allows for a more robust hydraulic model with the potential to reduce the storage volume currently identified, therefore reducing the impact on customers.
- 4.17 Whilst the Council has phased development allocations accordingly in the Local Plan, there are aspirations from the community for more housing in Burneside, who would like additional housing to be included in the emerging Neighbourhood Plan. United Utilities is aware of possible additional development proposals coming forward in Burneside and emphasises the importance of foul only flows from any development proposals. United Utilities is keen to continue dialogue to understand the impact of any additional development proposals beyond those identified in the adopted local plan so that these can be fully considered in the design of a solution for Steeles Row.
- 4.18 A HRA will need to be produced to support the production of the Neighbourhood Plan. The HRA will need to be informed by the current progression of upgrades at Steele Row at the time of preparation of the Neighbourhood Plan, prior to any Examination.

Kentrigg Walk

- 4.19 United Utilities is aware of the three site allocations at West of High Sparrowmire, North of Laurel Gardens and North of High Sparrowmire. United Utilities has considered the current situation for the infrastructure at Kentrigg Walk and has advised that no solution is being progressed in respect of Kentrigg Walk in AMP6 (which runs up to 2020). United Utilities has emphasised the need for detailed drainage design for development at these sites in order to

potentially seek a solution that appropriately manages waste water. Such a solution should only connect foul flows and should demonstrate there isn't an impact on the public sewer. Early liaison with United Utilities is necessary in order to consider options, determine whether a planning proposal could be progressed and to enable South Lakeland District Council to gather the necessary evidence to undertake project level HRA to assess risks to European sites.

Kendal town

- 4.20 South Lakeland District Council has planned for allocations at Kendal equating to 1300 houses, Canal Head 200 houses, a potential for windfall of 200 houses, plus 'broad allocations' equating up to 600 houses. South Lakeland District Council have confidence in retaining permissions within the 2000 dwellings identified in the Core Strategy for Kendal.
- 4.21 United Utilities have advised that upgrading works are currently on site at Kendal Wastewater Treatment Works to maintain water quality in the River Kent in response to Water Framework Directive quality drivers for AMP6. United Utilities have advised that this work has a design horizon of 2036, and account has been taken of the proposed growth within the plan.
- 4.22 The Council can therefore have confidence that the current allocations for Kendal can proceed within the plan period. Development at Kendal will need to consider the other mitigation measures for the River Kent, such as the buffer zones and surface water management, which should be checked within project level HRAs.

Progression of recreation and disturbance measures

- 4.23 As noted relation to Core Strategy and Land Allocations HRA work in Section 2 and impact pathways in Section 3 of this report, recreation pressure, arising from both residents and tourists, is an impact requiring ongoing measures to ensure that increased pressure on sensitive habitats and disturbance to internationally important bird populations is appropriately managed. Access management and minimising bird disturbance is necessary to prevent further declines, and should also be used to take opportunities to improve European site resilience into the long term.
- 4.24 The Core Strategy includes policy wording in CS8.4 (Biodiversity and Geodiversity) to protect sites and the supporting text highlights that development proposals should be accompanied by sufficient information to assess the effects of development on protected sites, species, biodiversity or geology, this should also take into consideration the indirect effects such as an

increase in visitors may have, together with any proposed prevention, mitigation or compensation measures. It should be noted that CS8.4 does not directly refer to European sites, but does refer to national, regional and local sites, with most European sites having an underpinning national SSSI designation.

- 4.25 The protective wording put in place within the Core Strategy was generic in nature, and this therefore requires some additional consideration about how protecting European sites can be put into practice, over and above project by project consideration each time a development proposal is submitted. A piecemeal approach can risk multiple small-scale developments being progressed without an understanding of their cumulative impact.
- 4.26 In Core Strategy Policy CS8.5 (The Coast), the policy wording identifies the need to conserve and enhance biodiversity and protect wildlife habitats. The wording states that access to the beach and foreshore of Morecambe Bay needs to be controlled to prevent damage to habitats and disturbance, through measures such as restrictions on parking and vehicle access in sensitive areas, and there is also a requirement to provide information to encourage responsible recreation use and help visitors to understand the special features of the protected sites of Morecambe Bay.
- 4.27 As noted in Section 3 in relation to impact pathways, many of the shoreline areas at Morecambe Bay are not existing nature reserves and the bird disturbance work identified that it is not clear to visitors that these are important sites for nature conservation. In preparing this HRA report, discussions with Natural England have highlighted that high tide roosting, often located on supporting habitat outside the European site boundary, and low tide feeding (notably wintertime use of mudflats for feeding) are particularly sensitive locations for bird disturbance.
- 4.28 As discussed in earlier sections of this report, the Morecambe Bay Partnership is working on a number of evidence gathering, access management and interpretation projects, which includes a recent high tide roost survey, for example. The Morecambe Bay Partnership is a charitable organisation, delivering projects relating to the local community, and protecting and promoting the historic and natural heritage of the Bay. Natural England works closely with the Partnership, both directly and also as part of the wider Morecambe Bay Local Nature Partnership, a nature focussed partnership of organisations within which the nature focussed aspects of the Morecambe Bay Partnership dovetails.
- 4.29 It would now be timely for South Lakeland District Council to become more active in the work being undertaken, to link spatial planning opportunities with the aspirations of the Morecambe Bay Partnership and Natural England. In

doing so, South Lakeland can take forward the high-level commitments of the Core Strategy into action on the ground, and continue to fulfil their role as competent authority under the Habitats Regulations as an integral part of the planning function of the Council.

- 4.30 An obvious example raised by Natural England would be for South Lakeland and neighbouring local planning authorities around Morecambe Bay to look at how land being brought forward for development relates to high tide roosting areas, and how such development might be able to contribute to measures to reduce disturbance and even bring forward new roost sites where possible. Natural England advise that high tide roosts have declined over time. By working more closely with Natural England and the Morecambe Bay Partnership when bringing forward existing allocations for development, this will then enable a more informed approach to Local Plan review and potential new allocations in the near future. Essentially, this ensures that HRA related work is ongoing from plan to plan.
- 4.31 Natural England has also advised that the England Coast Path work being undertaken by them is starting to look at areas of recreation sensitivity and where there may need to be restrictions or zoning of access, or where access should not cause additional disturbance, all of which is also relevant to delivering sustainable growth in the Morecambe Bay area. Zoning and bylaws within the Bay itself are in place for boating and water sport use, but would benefit from co-operation between local planning authorities to check that this is adequately protecting sensitive European site receptors.
- 4.32 It is therefore recommended that South Lakeland District Council liaise with Natural England and the Morecambe Bay Partnership to realise the opportunities presented by linkages between spatial planning and the work of the Partnership, which will in turn provide options for implementing the high-level commitments made in Core Strategy policy.

Summary of mitigation progress to date

- 4.33 Table 5 below provides an update on the current status of the relevant mitigation measures developed for the Core Strategy and Land Allocations documents, upon which implementation of the Development Management Policies also rely. There are other measures from these previous HRAs to be progressed, but those in Table 5 are most pertinent to the Development Management Policies DPD.

Table 5: Summary of progression to date on key mitigation measures

Potential risks	Progress to date
<p>Increased use of Morecambe Bay by residents and visitors leading to both SAC habitat damage and increased disturbance to SPA/Ramsar bird interest – Core Strategy highlighted the need to work in partnership with Natural England. Use of zoning and bylaws is specifically referred to (CS8.5).</p>	<p>The SIP from Morecambe Bay SPA/SAC and Duddon Estuary SPA recognises public access and disturbance as an issue requiring action, and lists a number of measures for site improvement, including detailed studies in conjunction with the Morecambe Bay Partnership.</p> <p>Natural England and the Morecambe Bay Partnership are leading on this work, but it is important for SLDC to engage and ensure join up with the planning process, particularly in relation to restrictions or mitigation needs that should be considered at a project level HRA, but also to look for opportunities to protect European site features in a more strategic and forward thinking way, such as high tide roost protection and enhancement as part of bringing forward land allocations in the vicinity of the Bay.</p> <p>Progression of zones of sensitivity (for both habitat and bird protection) is currently being looked at as part of the England Coast Path. Bylaws and zones exist within the Bay itself, but require better co-ordination between LPAs.</p> <p>Action - SLDC should liaise with Natural England to better understand implications and how SLDC planning process can positively contribute.</p>
<p>Residents and visitors to Morecambe Bay pavements, and increased dog fouling could lead to habitat changes for SAC interest – policy wording in relation to open space provision</p>	<p>The Core Strategy HRA requires adequate greenspace provision but risks are not such that there is a requirement for a strategic approach. It is however necessary to give consistent consideration to potential risks to Morecambe Bay Pavements as a result of increased recreation. Project level HRAs should therefore take into account the location and number of houses for new residential development, and gather evidence on current greenspace provision and development needs. In order to have confidence that this is being undertaken, it would be beneficial for SLDC</p>

Potential risks	Progress to date
	<p>to monitor and keep an audit of project level HRA and the outcomes in relation to greenspace considerations.</p> <p>Action: Project level HRA monitoring</p> <p>It is anticipated that in implementing the new DM4 policy, there will be a data base and mapping resource to record the blue and green infrastructure enhancements and expansion across the District as a result of this policy, and in order to inform plan monitoring. SLDC could then use this resource to highlight opportunities and priorities for biodiversity net gain, with supporting European sites through mitigation projects, ecological network connectivity and supporting processes, informing those priorities. Natural England is looking at biodiversity opportunity mapping and there could be join up here.</p> <p>Recommendation: Blue/greenspace database and mapping to be discussed with Natural England and designed to identify and maximise biodiversity benefits</p> <p>The new proposed amendments to Policy DM4: Green and Blue infrastructure, Open Space, Trees and Landscaping are positive, and provide for the progression of specific greenspace needs as part of European site mitigation.</p>
<p>Water quality deterioration issues in relation to development affecting Morecambe Bay SAC/SPA/Ramsar - Development sites around Morecambe Bay SAC/SPA/Ramsar to include a requirement for SUDS</p>	<p>The new amendments to Policy DM6: Flood Risk Management and Sustainable Drainage Systems now adequately cover this, for both Morecambe Bay and the River Kent, but it will be important for SLDC to keep abreast of emerging new water quality data, and work being progressed by Natural England for both sites.</p> <p>Recommendation: continued liaison with Natural England and keep abreast of current situation and data.</p>

Potential risks	Progress to date
<p>Reduction in water quality arising from sewer network being over capacity with more homes in Burneside - WWTW and sewage infrastructure to have adequate capacity before further development is accommodated.</p> <p>No further development at sites in Burneside, Steeles Row, and Kentrigg until sewage network improvements are in place.</p>	<p>Current lack of capacity of infrastructure at Steeles Row potentially prevents further development coming forward at Burneside. This is being investigated by United Utilities and improvements are likely to take place next year.</p> <p>Recommendation: Continue close liaison and positive working with United Utilities, seeking clarity and updates on network improvements and timescales.</p>
<p>Reduction in water quality arising from sewer network being over capacity with more homes in Kendal - WWTW and sewage infrastructure to have adequate capacity before further development permitted.</p> <p>Development in the Kendal to be capped at 2000 properties unless a more stringent phosphorus effluent standard can be achieved. Development of 2000 houses dependent upon:</p> <p>Development phasing, foul flows only into the sewer network, separate systems of drainage for effluent and surface water, surface Water Management plans and sustainable drainage systems for development and buffer zones adjacent to the River Kent.</p>	<p>United Utilities have advised that upgrading work is taking place at Kendal WWTW, and has taken account of proposed growth at Kendal and the need to maintain water quality for the River Kent.</p> <p>Recommendation: Continue close liaison and positive working with United Utilities, seeking clarity and updates on network improvements and timescales.</p> <p>SLDC have confirmed that the 2000 house cap is being closely adhered to and monitored, and that allocations/windfall allow this to be met.</p>

5. Screening for Likely Significant Effects

- 5.1 Once relevant background information and potential impact pathways are understood, and relevant HRA and mitigation progress has been considered, the HRA process can progress to the screening for likely significant effects stage, fully informed by the background research undertaken. Table below records the conclusions drawn and recommendations made on a policy by policy check. The screening also included a check for implications of loss of the old policies from the previous local plan that have not been progressed beyond Issues and Options and also saved local plan policies that are proposed for replacement by the DPD.
- 5.2 During the screening stage of HRA, text changes are recommended in the screening table where there is a clear opportunity to avoid impacts on European sites through policy strengthening. For a number of policies, the screening initially identified a potential for Likely Significant Effects ('LSE'). As the policies set no quantum of development or specific locations the potential for Likely Significant Effects relates to the possibility of development coming forward in a particular location or with particular characteristics. In such instances, the risk is not such that further assessment of impacts is required, but rather that the impacts can be simply avoided with straightforward additions to the plan which remove any uncertainty.
- 5.3 The screening table below (Table 6) has been updated at various points during the preparation of this HRA report alongside the preparation of the Development Management Policies DPD. The table records screening of the Preferred Options, which included an initial screening and then a check after liaison between Footprint Ecology and South Lakeland District Council and consideration of an updated version of the Preferred Options in October 2016. The table has now been updated again during July and August 2017 to include the additional policy changes that have been made in order to prepare the Publication version of the DPD. The screening for each version of the plan has been undertaken in light of the identified impact pathways discussed earlier in this HRA report.
- 5.4 For the screening of the Publication version of the plan this HRA report has had regard for a number of changes to policy wording a further two new policies that have been added. Additionally, a number of minor text have been made throughout the plan to prepare the Publication version, most of which are not of any consequence for the HRA and the screening for likely significant effects. This HRA is therefore considered complete for submission alongside the DPD for Examination. However, the screening stage may be revisited again if there are further modifications as a result of Examination before the DPD is adopted.

- 5.5 As noted earlier in this report and within Appendix 1 in relation to HRA process, where risks to European sites are identified but further scrutiny of information, further evidence gathering or assessment of the nature and extent of impacts is required, a HRA screening table will record a recommendation that those aspects of the plan should be taken to the next stage of HRA, which is the more detailed 'appropriate assessment' stage.
- 5.6 The previous screening of the Development Management Policies DPD at Preferred Options, and the re-checking at Publication stage in light of additional policy changes, has enabled a conclusion that the DPD can be screened as having no likely significant effects, as a result of the incorporation of recommendations made throughout the screening process. An appropriate assessment is therefore not considered necessary for this HRA of the south Lakeland Development Management Policies DPD. Further modifications to the DPD prior to adoption should be re-screened, and it is therefore possible that modifications could still trigger the need for more detailed appropriate assessment.

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Table 6: South Lakeland Development Management Policies document - LSE screening

Screening initially undertaken on the Draft 'Preferred Options' in September 2016, followed by a check made of an updated version of the Draft DPD 'Preferred Options' in early October 2016. *Green text indicates checks made on the October 2016 version. An additional final column has now been added to the table, recording the re-screening of the Publication version of the plan in July/August 2017.

Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
Introduction						
Introductory text	To set context for the Development Management Policies DPD – background and process to date, and fit with other planning documents	No LSE	n/a	Relevance of HRA needs to be identified	1.6 – Add in text relating to the role of HRA to sit alongside the text relating to SA *Recommended text now added, no further action.	No substantial changes
Sustainable Development						
DM1 General requirements for all development	Sets out the general requirements for all development proposals to meet, in accordance with the core principles of the NPPF	No LSE Includes references to biodiversity protection and enhancement, GI and ecological networks	All	None	n/a *Discussion between SLDC and Footprint Ecology concluded that additional protective text in this policy would negate the need for text changes in housing policies below. Reference now in part 7 of the General Requirements Policy to biodiversity protection and enhancement,	Updated policy and text includes reference to biodiversity assets and the mitigation hierarchy. * The wording should clarify biodiversity harm is only allowed as a last resort outside designated sites, and compensation

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
					international sites, project level HRA and mitigation.	can only proceed in exceptional circumstances for designated sites.
DM2 Achieving Sustainable high-quality design	A qualitative policy to secure quality development	No LSE – not promoting particular quantum or location of development	n/a	None	n/a	No LSE - An environmentally positive policy. Now includes reference to habitat creation and urban greening (thus supporting wider ecological networks outside but beneficial for the functioning of designated sites).
DM3 Historic environment	A protective policy to secure historic asset protection	No LSE – not promoting particular quantum or location of development	n/a	None	n/a	No LSE – policy not relevant to European sites
DM4 Green and blue infrastructure, open space, trees and landscaping	Provision of open space, GI, trees and landscaping and the gains that development needs to present	Potential for LSE	Morecambe Bay and Duddon Estuary, Morecambe Bay Pavements	In light of potential mitigation needs for housing/tourism this policy needs to integrate	Incorporate specific wording in this policy to ensure that GI needs for N2K mitigation are provided over and above open space standards, i.e. where development may	An environmentally positive policy, now further strengthened within both policy and supporting text in relation to wider ecological

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
				mitigation requirements	<p>result in increased, regular recreational use of relevant sites, GI may be necessary as part of mitigation.</p> <p><u>*Recommendation not yet incorporated.</u></p> <p>Text after the policy paragraph relating to biodiversity enhancement should be added to highlight that additional or enhanced GI provision may be required where development poses a risk to designated sites in terms of recreation pressure. This links back to previous HRA recommendations for the Core Strategy. Discussion with SLDC has concluded that this will be considered at the next iteration of the plan.</p>	networks outside but beneficial for the functioning of designated sites.
DM5 Rights of way and other routes	Protection and enhancement of public rights of way, encouraging new access in new developments.	Potential for LSE	Morecambe Bay,	Increased recreational use of and	Supporting text needs to link in with measures to prevent	No substantial changes

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
providing pedestrian and cycle access			Morecambe Bay Pavements	increased access to N2K sites – new access may bring additional risks.	recreation impacts on N2K sites and refer to project level HRA for new access if links to relevant N2K sites. Check England Coast Path HRA work for co-ordinated approach *Addition of text as above in General Requirements Policy removed the need for specific reference in this policy. No further action required. England Coast Path in early stages of development for the relevant stretch of coast. Re-check at next plan/HRA iteration.	
DM6 Flood risk management and sustainable drainage systems	Sets requirements for flood risk management including foul and surface water disposal and sustainable drainage systems.	Potential for LSE – whilst not promoting development, this policy should link to water related mitigation measures	River Kent, Morecambe Bay and Duddon Estuary	Mitigation measures for water quality and resources need to be integrated so the requirements are clear	Risks relate to increased levels of pollution in Morecambe Bay and the River Kent. Policy/supporting text should ensure clear steer that surface water	No LSE – previous recommendations incorporated and policy and supporting text now further strengthened

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
					disposal and foul water disposal must have regard for relevant European sites and ensure no adverse effects on integrity. Flood defence works must be the subject of HRA and early project design/options for locations must have regard for potential impacts on European sites and the range of mitigation measures available. *Additional text now added to supporting text for this policy and amendments to the General Requirements policy cover project level HRA. No further action required.	
DM7 Addressing pollution and contamination impact, water quality	Policy to limit further contaminated land deterioration/pollution	Potential for LSE	Morecambe Bay and Duddon Estuary Pavements,	Sites are sensitive to air pollution and nitrogen emissions	Supporting text could refer to issues from traffic flows and need to consider traffic. Supporting	No substantial changes. Changes made to policy and supporting text

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
			possibly also Subberthwaite , Blawith and Torver Low Commons, Roudsea Wood and Mosses SAC, Duddon Mosses SAC	exceed site sensitive loads. The Pavements in particular are in close proximity to Kendal (and the motorway). While the policy states development must be air quality neutral, development in different locations will have varying impacts on traffic flows near relevant sites.	text could refer to Natural England’s work to develop Site Nitrogen Action Plans which will require partnership working and will set out approaches for reducing emissions. <i>*Additional text now added to supporting text for this policy in relation to mitigating for air quality effects, and amendments to the General Requirements policy cover project level HRA. No further action required.</i>	are of relevance to European sites and provide additional measures to avoid impacts as a result of water and air quality sensitivities of European sites. The most recent Kendal AQMA report for 2017 advises that NO2 targets for the AQMA are yet to be reached, but continuing progressive reductions indicate targets should be met by 2018. Whilst the policy brings in further protective measures, there may be opportunities for additional action as part of NE’s Nitrogen Action Plan for

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
						Morecambe Bay Pavements. No LSE but liaison with NE recommended re Action Plan scope and cross over with spatial planning.
DM8 High speed broadband for new developments	Relates to requirements for broadband connectivity in new residential and commercial developments	No LSE – not promoting particular quantum or location of development	n/a	None	n/a, but note that new masts would need project level HRA *Project level HRA now referred to in the General Requirements policy.	No LSE – project level HRA may be required (e.g. for fibre installation etc)
Sustainable travel and access						
DM9 Parking provision, new and loss of car parks	A qualitative policy to secure appropriate parking provision	No LSE – not promoting particular quantum or location of development	n/a	None	Note that new car parks outside urban locations will need project level HRA, as risks of promoting/increasing access to sites such as Morecambe Bay. *Project level HRA now referred to in the General Requirements policy.	No substantial changes
DM10 Safeguarding land for transport	Protecting the canal and disused railway line assets	No LSE – not promoting particular	n/a	None	n/a	No substantial changes

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
infrastructure improvements		quantum or location of development				
Housing						
Housing policies – general points	A set of policies to inform housing growth of differing types	Potential for LSE	All	All new housing could potentially pose risks to N2K sites. The housing policies cover different types of housing development.	In some instances, it is beneficial to add specific wording to a policy. For most housing policies, the nature and level of potential threat is the same, and supporting text as part of the housing chapter would be appropriate, rather than repeating wording for each policy *Addition of text as above in General Requirements Policy removed the need for specific reference in this policy. No further action required.	No substantial changes
DM11 Accessible and adaptable homes	Technical standards for all new housing, in accordance with Building Regulations and the government’s Housing Standards Review	No LSE - Environmentally positive, but not directly relevant to N2K sites	n/a	None	n/a	No LSE – policy not relevant to European sites

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
DM12 Self-build and custom build housing	Principles for accepting self-build and custom build housing, and general support for this type of sustainable development, including encouraging developers to offer self-build plots	Potential for LSE	All	Plots could be outside allocated development sites and in locations that pose risks to N2K sites. Protective policy wording should be added to this policy.	As a policy directed at small scale development that could occur anywhere, it is recommended that protective wording is included within this policy/supporting text. *Addition of text as above in General Requirements Policy removed the need for specific reference in this policy. No further action required.	No substantial changes
DM13 Housing development in small villages and hamlets	Circumstances in which development on the edge of villages and hamlets would be acceptable	Potential for LSE	All	Depending upon location, certain sites could pose risks to N2K sites.	Natural Environment policy wording needs to be included/linked in the housing chapter of the emerging DPD, and applicable to this policy. Supporting text could refer to the need to adhere to relevant environmental policy and cross reference to the HRA.	No substantial changes

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
					*Addition of text as above in General Requirements Policy removed the need for specific reference in this policy. No further action required.	
DM14 Rural exceptions sites	Rural exception sites to deliver 100% affordable housing in the rural area- a criteria based policy to allow exceptions.	Potential for LSE	All	Any proposed rural exception sites could pose risks to N2K sites and should therefore adhere to natural environment policy and project level HRA.	Natural Environment policy wording needs to be included/linked in the housing chapter of the emerging DPD, and applicable to this policy. Supporting text could refer to the need to adhere to relevant environmental policy and cross reference to the HRA. *Addition of text as above in General Requirements Policy removed the need for specific reference in this policy. No further action required.	No substantial changes
DM15 Essential dwellings for workers in the countryside	Requirement for essential dwellings for countryside/agricultural worker accommodation	Potential for LSE	All	Development could be outside	As a policy directed at small scale development that	No substantial changes

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
				allocated development sites and in locations that pose risks to N2K sites. Protective policy wording should be added to this policy.	could occur anywhere, it is recommended that protective wording is included within this policy/supporting text. *Addition of text as above in General Requirements Policy removed the need for specific reference in this policy. No further action required.	
Types of Development						
DM16 Conversion of Buildings in Rural Areas	Bringing empty buildings into residential/tourism/employment/community use	Potential for LSE	All	Conversion to a development type that could pose risks to N2K sites – recreation, water quality etc.	As a policy directed at small scale development that could occur anywhere, it is recommended that protective wording is included within this policy/supporting text. *Addition of text as above in General Requirements Policy removed the need for specific reference in this policy. No	No substantial changes

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
					further action required.	
DM17 Retention of community facilities	Likely to be a protective policy to safeguard community facilities	No LSE – not promoting particular quantum or location of development	n/a	None	n/a	No substantial changes
DM18 Tourist accommodation – caravans, chalets, log cabins, camping and new purpose built self-catering accommodation (outside the Arnside and Silverdale AONB)	Responding to the need for additional tourist accommodation	Potential for LSE	Morecambe Bay and Duddon Estuary in particular, potentially others	This is a criterion based policy – criterion 3 refers to biodiversity and should be expanded to cover protection of biodiversity as well as enhancement	Amend point 3 text to <i>...Proposals should protect biodiversity assets and seek to...</i> *Policy text amended, no further action required.	No LSE – amended wording still protecting biodiversity assets. Note the importance of linkages to the Morecambe Bay Partnership interpretation work.
DM19 Equestrian related development	A qualitative/restrictive policy to secure quality development in the right location	No LSE – not promoting particular quantum or location of development	n/a	None	Suggest policy text refers to biodiversity as well as landscape (last sentence of policy). *Policy text amended, no further action required.	No LSE – project level HRA may be required
DM20 Advertisement, signs and shop fronts	A qualitative policy to secure quality development	No LSE – not promoting particular quantum or	n/a	None	n/a	No substantial changes

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
		location of development				
DM21 Renewable and low carbon energy development	Consideration of renewable energy development	Potential for LSE – includes some generic protective wording but additional explanation required	Morecambe Bay and Duddon Estuary	Morecambe Bay of particular concern as highlighted by Core Strategy HRA.	Remove the word 'unacceptable' from 3 rd bullet of policy. The supporting text for this policy would benefit from an explanation of the potential risks to N2K sites, and the need for evidence to support proposals. *text at point 3 now amended. No further action required.	No substantial changes
DM22 Hot food takeaways	A qualitative policy to secure quality development	No LSE – not promoting particular quantum or location of development	n/a	None	n/a	No substantial changes
Economy, Town Centres and Tourism						
DM23 Retail uses outside town centres	To clarify policy for retail development outside towns, with thresholds for retail impact assessment	No LSE – The policy is for the requirements for retail impact thresholds only and does not promote development	n/a	None	n/a	No substantial changes

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
DM24 Kendal town centre and Kendal Canal Head area	Policy options for the main urban centre of the district	Potential for LSE	River Kent, Morecambe Bay Pavements	River Kent SAC – water quality issues Morecambe Bay Pavements – recreation issues (and potentially air quality)	Policy text should ensure that there are no adverse effects for the relevant European sites. *Addition of text as above in General Requirements Policy removed the need for specific reference in this policy. No further action required for the DPD, but note that issues highlighted in the Core Strategy and Land Allocations HRAs need to be progressed and the Kendal Masterplan should have regard for these.	No substantial changes. Development delivery is being closely monitored.
DM25 - Agricultural buildings	Ensuring demonstrable essential need in relation to the functional operations of an existing farm or agricultural business	No LSE – supporting text refers to conserving the natural environment.	All	Project level HRA may be required		No LSE – Project level HRA may be required.
DM26 - Gypsies, travellers and travelling show people	Criteria based policy for meeting the needs of gypsies, travellers and travelling show people	LSE – potential risk of water pollution from disposal of waste direct to	River Kent, Morecambe Bay and Duddon Estuary	Water sensitive sites affected downstream of water contamination		Policy wording now amended to make specific reference to the need for water

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
		watercourses and water bodies in the absence of facilities.		as a result of waste disposal direct to watercourses and water bodies.		disposal facilities as well as water supply. Previously only referred to sanitation, which was not explicit in relation to the risks.
Enforcement						
DM27 Enforcement	Council actions explained in relation to taking forward enforcement on planning matters	No LSE – not promoting particular quantum or location of development	n/a	None	n/a	No substantial changes
Monitoring and implementation						
Policy by policy list of monitoring requirements	Sets out implementation of monitoring, responsibility, potential indicators and targets where appropriate.	No LSE	n/a	None	Would be beneficial to refer to the need for HRA monitoring. In particular water quality and the River Kent. Such data are collected by EA and could be referenced under DM6. *Recommendation now incorporated at DM6 with reference to HRA monitoring of water quality and the River Kent. No further action required.	No substantial changes. For monitoring green and blue infrastructure gains and enhancements as part of DM4, it would be beneficial to determine monitoring criteria early on in order to maximise the future benefits and applications

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
						for such monitoring.
Appendix 1 Options Assessment						
1A Options Assessment Summary – For topic areas where new MD policies are proposed	Provides SA results and summaries of alternative options for all relevant policies	No LSE – no policy but rather summary of alternatives	n/a	None	n/a	No substantial changes
1B Options Assessment Summary – For topic areas where no new DM policies are proposed	Provides SA results and summaries of alternative options for all relevant policies	No LSE – no policy but rather summary of alternatives	n/a	None	n/a	No substantial changes
Appendix 2 – Saved Local Plan Policies Proposed for replacement by DPD						
Saved policies - considered no longer required	List of polices not likely to be taken forward	Potential for LSE– checked for implications of loss	n/a	Nature conservation matters not adequately clear and linked back to Core Strategy	Nature conservation is covered by the Core Strategy, but additional text for certain policies is recommended for the Development Management DPD to ensure linkages and clarity. Individual policies will need to be screened if they are added back into the plan. *Advice - no further action required.	No substantial changes

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
Glossary						
Glossary	Explanation of terms used in the plan	No LSE	n/a	None	n/a, although there may be a need to add terms as the HRA continues to progress *Advice - no further action required.	No substantial changes
Policy included at Issues and Options but not progressed						
Housing Technical Standards - water efficiency and space standards	Technical standards for housing development in relation to water efficiency and space.	No LSE – checked for implications of loss, and not relevant for N2K sites	n/a	None	n/a	n/a
Telecommunications equipment	Telecommunications (NB some elements taken forward through policy DM8)	No LSE – checked for implications of loss, and not relevant for N2K sites	n/a	None	n/a	n/a
Starter homes	Delivery of starter homes	No LSE – checked for implications of loss, and not relevant for N2K sites	n/a	None	n/a	n/a
Self-catering	Delivery of self-catering tourism development	No LSE – checked for implications of loss, and not	n/a	None	n/a	n/a

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Policy	Description	Initial LSE screening	Relevant European Sites	Potential risks	Recommendations (*incl check of final version Oct 2016)	Re-screen Publication version
		relevant for N2K sites				
Retail and other uses in town centres	Town centre growth encouraged, criteria set	No LSE – checked for implications of loss, and not relevant for N2K sites	n/a	None	n/a	n/a
Coasts and Watercourses	Protective policy	Potential for LSE – loss of this policy removes the opportunity to build in protective wording	River Kent, Morecambe Bay and Duddon Estuary	Policy protection reduced	Ensure remaining policies/supporting text has specific reference to vulnerability of coastal and watercourse N2K sites and need to protect them. *Addition of text as above in General Requirements Policy now covers this point. No further action required.	No substantial changes
Loss of Employment sites and premises	Protection of employment assets	No LSE – checked for implications of loss, and not relevant for N2K sites	n/a	None	n/a	n/a

*The mitigation hierarchy is the stepwise approach to protecting biodiversity. Harm should firstly be avoided. Any residual harm then minimised. Only residual harm after avoidance and mitigation should be compensated for, allowing the development project to proceed in circumstances specified by relevant legislation and planning policy, in accordance with the type of biodiversity asset affected. If the specified exceptions set out in legislation/policy are not met, the project should not proceed. At all steps in the mitigation hierarchy, the project should also seek gains for biodiversity, as integral to sustainable development.

6. Key Considerations and Recommendations

- 6.1 After establishing background evidence and relevant information, screening for likely significant effects was undertaken on an early version of the Draft DPD 'Preferred Options' document, and then again on a version ready for public consultation in October 2016. HRA recommendations were identified as having been incorporated. South Lakeland District Council has now prepared a Publication version of the Development Management Policies DPD, which has now also been the subject of screening for likely significant effects and an updated screening table completed.
- 6.2 Screening identifies potential for likely significant effects and Table 6 of this HRA of the Development Management Policies DPD records the recommendations made for wording amendments during the development of the DPD. With all recommendations incorporated, these measures will ensure impacts can be prevented as a result of the additions to the plan.

Recommendations for the Development Management Policies DPD

- 6.3 The most recent recommendations are set out in the final column of Table 6. South Lakeland District Council has progressed the necessary policy and supporting text wording changes, which are now within the Publication version of the Development Management Policies DPD.
- 6.4 **Policy DM1 – General Requirements for all Development** – Policy now amended to provide further clarification on where exceptional circumstances may enable biodiversity harm, for both designated and non-designated biodiversity assets.
- 6.5 The relevant legislation to refer to would include the Conservation of Habitats and Species Regulations 2010, as amended, and the Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000. The National Planning Policy Framework refers to the need to treat Ramsar sites as European sites, and the need for criteria based policies with distinctions made between the hierarchy of international, national and local designated sites.
- 6.6 **Policy DM4 –Green and Blue Infrastructure, Trees, Open Space and Landscaping** – This is a very positive policy for the natural environment, particularly with the inclusion of maintenance and management. Additional minor amendments have now been made, which strengthen the creation and enhancement of biodiversity assets outside designated sites, which provide

critical support for the designated site network. The need to connect green and blue infrastructure to enable wildlife dispersal is referred to, which is fundamental to sustaining biodiversity.

- 6.7 Specific reference to biodiversity mitigation as well as enhancement is made, and there is now very positive reference to net gains for the natural environment, making clear that the objective is to reverse declines and develop a more resilient and healthy natural environment.
- 6.8 **Policy DM 7 – Addressing pollution and contamination impact, water quality** – This policy provides strengthened protection for European sites with air and water quality sensitivities. The Kendal AQMA report for 2017 advises that NO₂ targets for the AQMA are yet to be reached, but continuing progressive reductions indicate targets should be met by 2018. The policy brings in further protective measures, and there may be opportunities for additional action as part of Natural England’s Nitrogen Action Plan for Morecambe Bay Pavements, and the Council should therefore liaise further with Natural England on this.
- 6.9 **Policy DM18 - Tourist Accommodation** – In implementing this policy, the Council should be aware of the importance of linkages to the Morecambe Bay Partnership interpretation work. Recommendations are made in Section 4 above in relation to progressing Core Strategy mitigation measures, and summarised below
- 6.10 **Policy DM26 – Gypsies, Travellers and Travelling Show-People** – A recommendation was made for giving clarity on waste water disposal, which has now been added to the policy. The policy previously referred to sanitation only, but it is now clear that the requirements relate to safe waste water disposal.

Progression of measures developed for the Core Strategy and Land Allocations

- 6.11 As noted throughout this HRA, the Local Plan as a whole informs development, and the other documents forming the Local Plan are applicable to this HRA. There are particular measures committed to within the Core Strategy that are relevant to the implementation of the Development Management Policies and South Lakeland District Council should ensure that measures continue to be progressed throughout the Local Plan. Of particular relevance are the Core Strategy policies and supporting text CS 8.4 and CS 8.5.
- 6.12 As part of the work undertaken to prepare this HRA of the Development Management Policies DPD, Natural England highlighted that they would expect the HRA to reflect South Lakeland Council’s involvement with aspects of the SIP

that are relevant to the Local Plan and planned growth. Liaison with Natural England has been undertaken to inform this HRA report, as detailed in Section 4, particularly focussing recreation and the work of the Morecambe Bay Partnership. There are a number of opportunities for the Council to make linkages from spatial planning across to the natural environment related work of the Partnership, with one notable example provided by Natural England of the potential for a more strategic approach to protecting and possibly expanding high tide roosting areas for Morecambe Bay waders. Such projects would take forward the high-level commitments in the Core Strategy into implementation on the ground in a more co-ordinated way.

- 6.13 Section 4 of this HRA report also provides an update on water issues and relevant mitigation measures. Discussions with United Utilities have been undertaken to inform this HRA report, as detailed in Section 4. Regular liaison with United Utilities is already established, and is key to continuing to protect European sites from pollution risks, and aligning growth with water network improvements.

7. Summary and Next Steps

- 7.1 This HRA concludes that the Development Management Policies DPD can be screened out from likely significant effects with the recommendations for policy wording made in the last column of Table 6. The recommendations have been made whilst considering a draft of the Publication version of the plan, and discussion with the Council has enabled those recommendations to be made for the final Publication version of the DPD. A check has been made of the final version to confirm that the recommended changes have been incorporated.
- 7.2 The adopted Development Management Policies DPD will need to be compliant with the Habitats Regulations in its final form, and further HRA work may therefore be required in light of modifications after Examination. The recommendations made in the screening assessment to date have allowed positive progression of protective measures within this DPD, now enabling a conclusion that the Publication version of the DPD is compliant with the requirement of the Habitats Regulations.
- 7.3 Importantly, in taking forward all documents within the Local Plan as a whole, the Core Strategy and Land Allocations HRA mitigation measures must continue to be progressed as part of the Local Plan implementation. Discussions with United Utilities and Natural England have enabled a picture of the current situation to be developed to inform this HRA, and Section 4 reflects those discussions, which provide an update on HRA mitigation as a whole for the South Lakeland Local Plan, and identify opportunities for further progression of the measures with these partners.
- 7.4 Additionally, it is advised that planning officers should be aware of mitigation requirements, in order to maintain consistency from the HRAs completed at the plan level through to project level HRAs undertaken for the determination of planning applications. Continued liaison with Natural England for progressing matters in relation to recreation, air quality and NO₂ impacts, and with United Utilities in relation to water quality should be an integral part of staff awareness raising and their work in delivering and monitoring the Local Plan.
- 7.5 It is recommended that it would be beneficial to determine monitoring criteria for biodiversity early in the implementation of the Development Management Policies DPD, in order to maximise the future benefits and applications for such monitoring.

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9. Appendix 1 - The Habitats Regulations Assessment Process

- 9.1 The designation, protection and restoration of European wildlife sites is embedded in the Conservation of Habitats and Species Regulations 2010, as amended, which are commonly referred to as the 'Habitats Regulations.' Recent amendments to the Habitats Regulations were made in 2012. The recent amendments do not substantially affect the principles of European site assessment as defined by the 2010 Regulations, and which forms the focus of this report.
- 9.2 The Habitats Regulations are in place to transpose European legislation set out within the Habitats Directive (Council Directive 92/43/EEC), which affords protection to plants, animals and habitats that are rare or vulnerable in a European context, and the Birds Directive (Council Directive 2009/147/EC), which originally came into force in 1979, and which protects rare and vulnerable birds and their habitats. These key pieces of European legislation seek to protect, conserve and restore habitats and species that are of utmost conservation importance and concern across Europe. Although the Habitats Regulations transpose the European legislation into domestic legislation, the European legislation still directly applies, and in some instances, it is better to look to the parent Directives to clarify particular duties and re-affirm the overarching purpose of the legislation.
- 9.3 European sites include Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) classified under the Birds Directive. The suite of European sites includes those in the marine environment as well as terrestrial, freshwater and coastal sites. European sites have the benefit of the highest level of legislative protection for biodiversity. Member states have specific duties in terms of avoiding deterioration of habitats and species for which sites are designated or classified, and stringent tests have to be met before plans and projects can be permitted, with a precautionary approach embedded in the legislation, i.e. it is necessary to demonstrate that impacts will not occur, rather than they will. The overarching objective is to maintain sites and their interest features in an ecologically robust and viable state, able to sustain and thrive into the long term, with adequate resilience against natural influences. Where sites are not achieving their potential, the focus should be on restoration.
- 9.4 The UK is also a contracting party to the Ramsar Convention, which is a global convention to protect wetlands of international importance, especially those wetlands utilised as waterfowl habitat. In order to ensure compliance with the

requirements of the Convention, the UK Government expects all competent authorities to treat listed Ramsar sites as if they are part of the suite of designated European sites, as a matter of government policy, as set out in Section 118 of the National Planning Policy Framework. Most Ramsar sites are also a SPA or SAC, but the Ramsar features and boundary lines may vary from those for which the site is designated as a SPA or SAC.

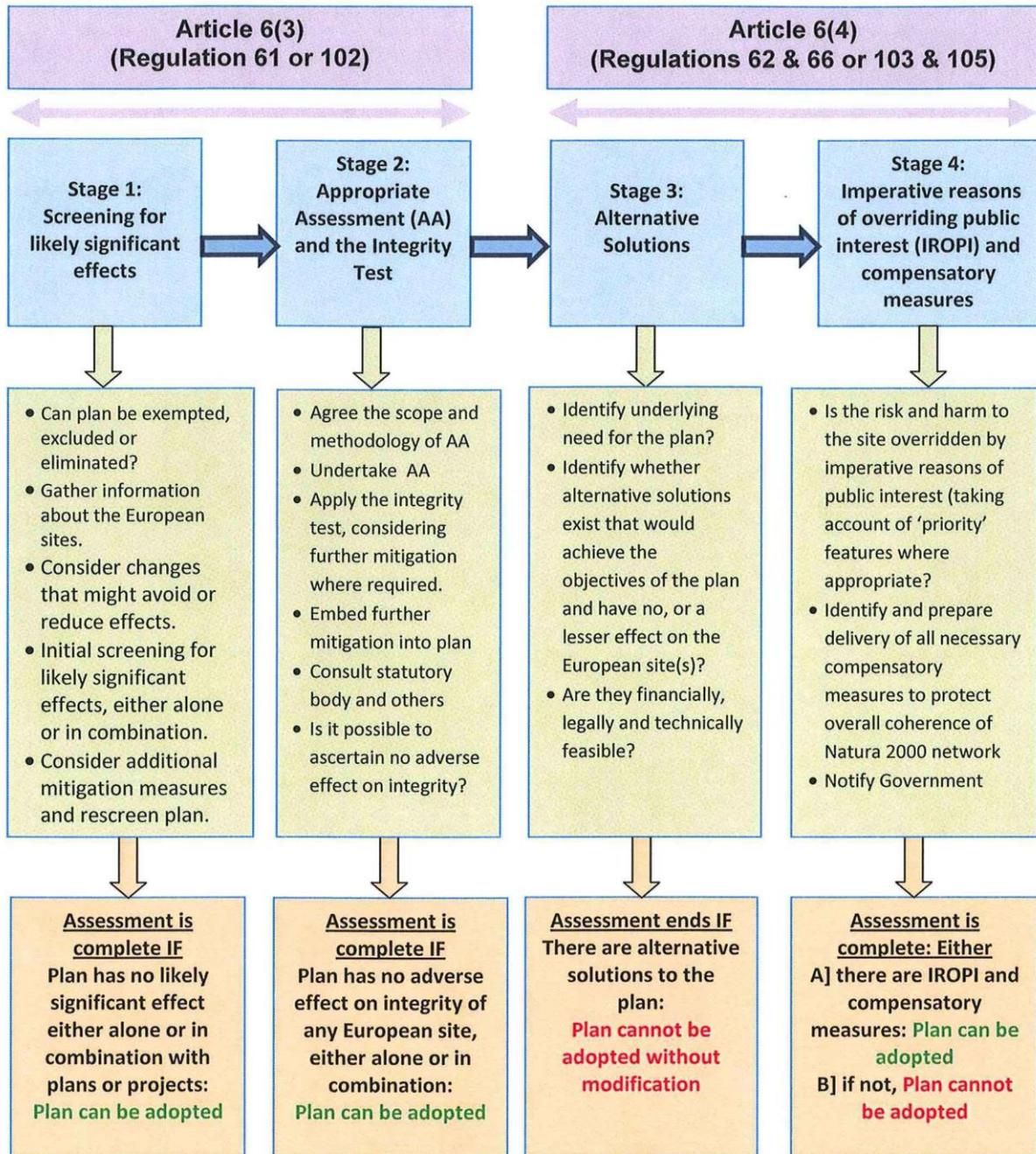
- 9.5 It should be noted that in addition to Ramsar sites, the National Planning Policy Framework also requires the legislation to be applied to potential SPAs and possible SACs, and areas identified or required for compensatory measures where previous plans or projects have not been able to rule out adverse effects on site integrity, yet their implementation needs meet the exceptional tests of Regulation 62 of the Habitats Regulations, as described below.
- 9.6 The step by step process of HRA is summarised in the diagram below. Within the Habitats Regulations, local planning authorities, as public bodies, are given specific duties as 'competent authorities' with regard to the protection of sites designated or classified for their species and habitats of European importance. Competent authorities are any public body individual holding public office with a statutory remit and function, and the requirements of the legislation apply where the competent authority is undertaking or implementing a plan or project, or authorising others to do so. Regulation 61 of the Habitats Regulations sets out the HRA process for plans and projects, which includes development proposals for which planning permission is sought. Additionally, Regulation 102 specifically sets out the process for assessing emerging land use plans.
- 9.7 The step by step approach to HRA is the process by which a competent authority considers any potential impacts on European sites that may arise from a plan or project that they are either undertaking themselves, or permitting an applicant to undertake. The step by step process of assessment can be broken down into the following stages, which should be undertaken in sequence:
- Check that the plan or project is not directly connected with or necessary for the management of the European site
 - Check whether the plan or project is likely to have a significant effect on any European site, from the plan or project alone
 - Check whether the plan or project is likely to have a significant effect on any European site, from the plan or project in-combination with other plans or projects
 - Carry out an Appropriate Assessment
 - Ascertain whether an adverse effect on site integrity can be ruled out
- 9.8 Throughout all stages, there is a continual consideration of the options available to avoid and mitigate any identified potential impacts. For projects, the project

proposer may identify potential issues and incorporate particular avoidance measures to the project, which then enables the competent authority to rule out the likelihood of significant effects. A competent authority may however consider that there is a need to undertake further levels of evidence gathering and assessment in order to have certainty, and this is the Appropriate Assessment stage. At this point the competent authority may identify the need to add to or modify the project in order to adequately protect the European site, and these mitigation measures may be added through the imposition of particular restrictions and conditions.

- 9.9 For plans, the stages of HRA are often quite fluid, with the plan normally being prepared by the competent authority itself. This gives the competent authority the opportunity to repeatedly explore options to prevent impacts, refine the plan and rescreen it to demonstrate that all potential risks to European sites have been successfully dealt with.
- 9.10 When preparing a plan, a competent authority may therefore go through a continued assessment as the plan develops, enabling the assessment to inform the development of the plan. For example, a competent authority may choose to pursue an amended or different option where impacts can be avoided, rather than continue to assess an option that has the potential to significantly affect European site interest features.
- 9.11 After completing an assessment, a competent authority should only approve a project or give effect to a plan where it can be ascertained that there will not be an adverse effect on the integrity of the European site(s) in question. In order to reach this conclusion, the competent authority may have made changes to the plan, or modified the project with restrictions or conditions, in light of their Appropriate Assessment findings.
- 9.12 Where adverse effects cannot be ruled out, there are further exceptional tests set out in Regulation 62 for plans and projects and in Regulation 103 specifically for land use plans. Exceptionally, a plan or project could be taken forward for imperative reasons of overriding public interest where adverse effects cannot be ruled out and there are no alternative solutions. It should be noted that meeting these tests is a rare occurrence and ordinarily, competent authorities seek to ensure that a plan or project is fully mitigated for, or it does not proceed.
- 9.13 In such circumstances where a competent authority considers that a plan or project should proceed under Regulations 62 or 103, they must notify the relevant Secretary of State. Normally, planning decisions and competent authority duties are then transferred, becoming the responsibility of the Secretary of State, unless on considering the information, the planning authority is directed by the Secretary of State to make their own decision on the plan or

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project at the local level. The decision maker, whether the Secretary of State or the planning authority, should give full consideration to any proposed 'overriding reasons' for which a plan or project should proceed despite being unable to rule out adverse effects on European site interest features, and ensure that those reasons are in the public interest and are such that they override the potential harm. The decision maker will also need to secure any necessary compensatory measures, to ensure the continued overall coherence of the European site network if such a plan or project is allowed to proceed.



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Figure 1: Outline of the assessment of plans under the Habitat Regulations

10. Appendix 2 – Consideration of European Site Conservation Objectives

- 10.1 As required by the Directives, 'Conservation Objectives' have been established by Natural England, which should define the required ecologically robust state for each European site interest feature. All sites should be meeting their conservation objectives. When being fully met, each site will be adequately contributing to the overall favourable conservation status of the species or habitat interest feature across its natural range. Where conservation objectives are not being met at a site level, and the interest feature is therefore not contributing to overall favourable conservation status of the species or habitat, plans should be in place for adequate restoration.
- 10.2 Natural England has embarked on a project to renew all European site Conservation Objectives, in order to ensure that they are up to date, comprehensive and easier for developers and consultants to use to inform project level HRAs in a consistent way. In 2012, Natural England issued now a set of generic European site Conservation Objectives, which should be applied to each interest feature of each European site. These generic objectives are the first stage in the project to renew conservation objectives, and the second stage, which is to provide more detailed and site-specific information for each site to support the generic objectives, is now underway.
- 10.3 The new list of generic Conservation Objectives for each European site includes an overarching objective, followed by a list of attributes that are essential for the achievement of the overarching objective. Whilst the generic objectives currently issued are standardised, they are to be applied to each interest feature of each European site, and the application and achievement of those objectives will therefore be site specific and dependant on the nature and characteristics of the site. The second stage, provision of the more supplementary information to underpin these generic objectives, will provide much more site-specific information, and this detail will play a fundamental role in informing HRAs, and importantly will give greater clarity to what might constitute an adverse effect on a site interest feature.
- 10.4 In the interim, Natural England advises that HRAs should use the generic objectives and apply them to the site-specific situation. This should be supported by comprehensive and up to date background information relating to the site.
- 10.5 For SPAs, the overarching objective is to:

10.6 'Avoid the deterioration of the habitats of qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.'

10.7 This is achieved by, subject to natural change, maintaining and restoring:

- The extent and distribution of the habitats of the qualifying features.
- The structure and function of the habitats of the qualifying features.
- The supporting processes on which the habitats of the qualifying features rely.
- The populations of the qualifying features.
- The distribution of the qualifying features within the site.

10.8 For SACs, the overarching objective is to:

'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.'

10.9 This is achieved by, subject to natural change, maintaining and restoring:

- The extent and distribution of the 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 and habitats of qualifying species rely.
- The populations of qualifying species.
- The distribution of qualifying species within the site.

10.10 Conservation objectives inform any HRA of a plan or project, by identifying what the interest features for the site should be achieving, and what impacts may be significant for the site in terms of undermining the site's ability to meet its conservation objectives.

11. Appendix 3 – The Nature Conservation Interest of European Sites

11.1 The following European sites are taken from an initial search of 10km radius of the South Lakeland Local Plan area:

- Asby Complex SAC
- Duddon Mosses SAC
- Duddon Estuary Ramsar (see also Morecambe Bay)
- Ingleborough Complex SAC
- Lake District High Fells SAC
- Leighton Moss SPA/Ramsar
- Morecambe Bay SPA/ SAC/Ramsar /Morecambe Bay and Duddon Estuary SPA
- Morecambe Bay Pavements SAC
- Naddle Forest SAC
- North Pennine Dales Meadows SAC
- North Pennine Moors SPA/SAC
- River Eden SAC
- River Kent SAC
- Roudsea Wood & Mosses SAC
- Shell Flat and Lune Deep SAC
- Subberthwaite, Blawith & Torver Low Commons SAC
- Witherslack Mosses SAC
- Yewbarrow Woods SAC

11.2 The interest features for each European site designation are listed below (Table 7). The overarching Conservation Objectives set out in Appendix 2 should be applied to each of these interest features. As noted in Appendix 2, detailed supplementary information for each interest feature will be developed as part of the Conservation Objectives in due course. Further detailed description of each interest feature in terms of its characteristics within the individual European site is provided on the JNCC website. Four figure reference numbers are the EU reference numbers given to each habitat and species listed within the Annexes of the European Directives.

Table 7: European sites where at least part of the site boundary falls within a 10km radius of the plan area. Sites listed in italics are those that are within 10km but are outside the plan area. Annex I priority habitats are denoted by an asterisk (*). Information is from site citations, information sheets, conservation objectives and site improvement plans (IPENS) retrieved from the NE and JNCC websites in April 2016. Specific objectives are given for sites for which additional supplementary guidance is available.

Asby Complex SAC	Qualifying features	Conservation objectives	Issues and threats
<p>A suite of upland sites supporting a rich mosaic of heathland with calcareous grassland, alkaline flushes and limestone pavement, important for a rare assemblage of vascular plants associated with the grassland, flushes and pavement and for upland breeding birds. Much of the site comprises common land or large upland allotments where the main land management is sheep grazing and some sporting management.</p>			
<p>http://publications.naturalengland.org.uk/publication/5510512787849216 http://publications.naturalengland.org.uk/publication/4873120351518720</p>	<ul style="list-style-type: none"> • H3140. Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp.; Calcium-rich nutrient-poor lakes, lochs and pools • H4030. European dry heaths • H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>); Dry grasslands and scrublands on chalk or limestone • H6410. <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>); Purple moor-grass meadows 	<p style="text-align: center;">**Standard SAC objectives</p>	<ul style="list-style-type: none"> • Inappropriate grazing – localised over-grazing by sheep, increased cattle grazing needed • Impacts on hydrology from abstraction poorly understood • Inappropriate supplementary feeding of stock in winter • Sources of diffuse pollution poorly understood • Nitrogen deposition exceeds site relevant critical loads. • Public access/disturbance identified as a threat if National Park extension increases public profile of site • Invasive species and fish stocking identified as a threat

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	<ul style="list-style-type: none"> • H7210. Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i>; Calcium-rich fen dominated by great fen sedge (saw sedge)* • H7220. Petrifying springs with tufa formation (<i>Cratoneurion</i>); Hard-water springs depositing lime* • H7230. Alkaline fens; Calcium-rich springwater-fed fens • H8240. Limestone pavements* • S1013. <i>Vertigo geyeri</i>; Geyer's whorl snail • S1393. <i>Drepanocladus (Hamatocaulis) vernicosus</i>; Slender green feather-moss 		
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Duddon Mosses SAC	Qualifying features	Conservation objectives	Issues and threats
A series of lowland raised bogs within a predominantly intensively managed agricultural landscape.			
http://publications.naturalengland.org.uk/publication/5497657652936704	<ul style="list-style-type: none"> • H7110. Active raised bogs* 	<ul style="list-style-type: none"> • Restore the H7110 feature over the whole site • Ensure the component vegetation communities of 	<ul style="list-style-type: none"> • Hydrological impacts of historic peat cutting and drainage have ongoing impacts

<http://publications.naturalengland.org.uk/publication/5667921359536128>

- H7120. Degraded raised bogs still capable of natural regeneration

the H7110 feature are referable to and characterised by specified bog/mire vegetation communities

- Restore the abundance of specified invertebrate, bird, reptile, bryophyte dwarf shrub species
- Restore natural hydrological processes to provide the conditions necessary to sustain H7110 feature within the site
- Maintain the surface water and groundwater supporting the hydrology of the H7110 feature at a low nutrient status
- Restore the properties of the underlying peat
- Restore the H7110 feature's ability, and that of its supporting processes, to adapt or evolve to wider environmental change

- Work to raise water table needs to be continued
- Mechanism required for management of land with unknown ownership
- Tree and scrub clearance and removal of Rhododendron needs to be continued
- Nitrogen deposition exceeds site critical loads (but any impacts are currently masked by unfavourable hydrology)

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		<ul style="list-style-type: none"> • Ensure invasive and introduced non-native species are absent or rare and not undermining restoration • Restore supporting off-site habitat 	
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<i>Leighton Moss SPA, Ramsar</i>	Qualifying features	Conservation objectives	Issues and threats
<p>Leighton Moss SPA supports the largest reedbed in north west England. The reedbeds and associated open water are important for breeding populations of Bittern and but the diversity of habitats supports a wide range of breeding birds and passage and wintering wildfowl.</p>			
<p>SPA, Ramsar http://publications.naturalengland.org.uk/publication/5406466903113728 http://publications.naturalengland.org.uk/publication/4548734637572096 http://jncc.defra.gov.uk/pdf/RIS/UK11035.pdf</p>	<p><u>SPA</u></p> <ul style="list-style-type: none"> • A021(B) <i>Botaurus stellaris</i>: Great bittern <p><u>Ramsar</u></p> <p>Ramsar criterion 1: An example of large reedbed habitat characteristic of the biogeographical region. The reedbeds are of particular importance as a northern outpost for breeding populations of</p>	<p>**Standard SPA objectives</p>	<ul style="list-style-type: none"> • Nutrient enrichment of groundwater from manure and slurry, inorganic fertilisers and septic tanks in the catchment • Water levels in summer are too high (due to high rainfall events and a constrained outflow) resulting in increased 'reed hover', reed die-back and difficulty

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	<p>bittern, marsh harrier and bearded tit <i>Panurus biarmicus</i>.</p> <p>Ramsar criterion 3: The site supports a range of breeding birds including bittern, marsh harrier and bearded tit. Species occurring in nationally important numbers outside the breeding season include northern shoveler <i>Anas clypeata</i> and water rail <i>Rallus aquaticus</i>.</p>		<p>implementing reed management.</p> <ul style="list-style-type: none"> • Red Deer movement, grazing and nutrient enrichment is damaging the reedbeds • Siltation of the reedbed and open water has resulted in the reedbed becoming drier and the water column in the pools becoming shallower. • Saline intrusion occurs as a result of exceptional high tides in Morecambe Bay
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Morecambe Bay & Duddon Estuary	Qualifying features	Conservation objectives	Issues and threats
<p>Morecambe Bay is a large embayment fed by the estuaries of the rivers Wyre, Lune, Kent, Keer, Leven and Duddon Estuary. It is one of the largest areas of intertidal flats in Britain and includes shallow subtidal sands, tide-washed channels (including the unique feature of Lune Deep) and rocky scars of glacially derived material. It comprises large shallow inlets and bays and intertidal mudflats and sandflats, glasswort and other annuals colonising mud and sand, saltmarshes, sand dunes and vegetated shingle communities. It is a component in the chain of west coast estuaries of outstanding importance for wintering and migratory waders and wildfowl along the east Atlantic flyway from breeding grounds in the Arctic.</p>			
<p>Morecambe Bay SAC http://publications.naturalengland.org.uk/publication/5314736417669120</p>	<ul style="list-style-type: none"> • H1110. Sandbanks which are slightly covered by 	<p>**Standard SAC objectives</p>	<ul style="list-style-type: none"> • Public access and recreational disturbance

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Morecambe Bay & Duddon Estuary	Qualifying features	Conservation objectives	Issues and threats
<p>http://publications.naturalengland.org.uk/publication/6708495835463680</p>	<p>sea water all the time; Subtidal sandbanks</p> <ul style="list-style-type: none"> • H1130. Estuaries • H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats • H1150. Coastal lagoons* • H1160. Large shallow inlets and bays • H1170. Reefs • H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves • H1310. Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand • H1330. Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) 		<ul style="list-style-type: none"> • Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection therefore there is a risk of harmful effects (but sensitive features are currently in favourable condition) • Diffuse pollution and/or uncontrolled release of pollutants from terrestrial sources could alter or damage habitats and species • breeding success of terns and gulls around South Walney, Foulney and Chapel Island (also Eider ducks) has been adversely affected by predation by foxes, badgers and rats • Non-native species such as <i>Rosa Rugosa</i> Japanese Rose are encroaching

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Morecambe Bay & Duddon Estuary	Qualifying features	Conservation objectives	Issues and threats
	<ul style="list-style-type: none"> • H2110. Embryonic shifting dunes 		<p>upon sand dunes around Barrow in Furness</p> <ul style="list-style-type: none"> • Research needed to ascertain whether the continued decline in breeding and overwintering bird numbers may be linked to mussel fisheries and competition for food
<p>Morecambe Bay & Duddon Estuary SPA, http://publications.naturalengland.org.uk/publication/6242841537806336 http://publications.naturalengland.org.uk/publication/3101791 http://publications.naturalengland.org.uk/publication/6708495835463680</p>	<p><u>SPA:</u></p> <ul style="list-style-type: none"> • A040 Anser brachyrhynchus; Pink-footed goose (Non-breeding) • A048 Tadorna tadorna; Common shelduck (Non-breeding) • A054 <i>Anas acuta</i>; Northern pintail (Non-breeding) • A130 <i>Haematopus ostralegus</i>; Eurasian oystercatcher (Non-breeding) • A137 <i>Charadrius hiaticula</i>; Ringed plover (Non-breeding) • A141 <i>Pluvialis squatarola</i>; Grey plover (Non-breeding) • A143 <i>Calidris canutus</i>; Red knot (Non-breeding) 	<p style="text-align: center;">**Standard SPA objectives</p>	<ul style="list-style-type: none"> • Unknown impact of habitat change (and potential introduction of invasive species) through anticipated creation of mussel fisheries • Increased/improved grazing needed on sand dunes to prevent scrub encroachment and maintain habitat • Greater monitoring and potential eradication programme for invasive alien species needed

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Morecambe Bay & Duddon Estuary	Qualifying features	Conservation objectives	Issues and threats
	<ul style="list-style-type: none"> • A149 <i>Calidris alpina alpina</i>; Dunlin (Non-breeding) • A157 <i>Limosa lapponica</i>; Bar-tailed godwit (Non-breeding) • A160 <i>Numenius arquata</i>; Eurasian curlew (Non-breeding) • A162 <i>Tringa totanus</i>; Common redshank (Non-breeding) A169 <i>Arenaria interpres</i>; Ruddy turnstone (Non-breeding) • A191 <i>Sterna sandvicensis</i>; Sandwich tern (Breeding) • Waterbird assemblage • Seabird assemblage • Additional Qualifying Features • A026 <i>Egretta garzetta</i>; Little egret (Non-breeding) • A038 <i>Cygnus cygnus</i>; Whooper swan (Non-breeding) 		<ul style="list-style-type: none"> • Changed conditions at Cavendish dock following closure of power station means likely loss of locally rare and distinctive <i>Ruppia</i> • Physical modification through drain clearance and de-silting of saltmarsh channels; dredging and modification of natural saltmarsh creeks and deposition of dredged material on marshes changes the local characteristics of the marsh flora • better consideration/ awareness of marine and coastal impacts during assessment of planning applications (terrestrial element of development)

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Morecambe Bay & Duddon Estuary	Qualifying features	Conservation objectives	Issues and threats
	<ul style="list-style-type: none"> • A140 <i>Pluvialis apricaria</i>; European golden plover (Non-breeding) • A144 <i>Calidris alba</i>; Sanderling (Non-breeding) • A151 <i>Philomachus pugnax</i>; Ruff (Non-breeding) • A156 <i>Limosa limosa islandica</i>; Black-tailed godwit (Non-breeding) • A176 <i>Larus melanocephalus</i>; Mediterranean gull (Non-breeding) • A183 <i>Larus fuscus</i>; Lesser black-backed gull (Non-breeding) • A183 <i>Larus fuscus</i>; Lesser black-backed gull (Breeding) • A184 <i>Larus argentatus</i>; Herring gull (Breeding) • A193 <i>Sterna hirundo</i>; Common tern (Breeding) • A195 <i>Sterna albifrons</i>; Little tern (Breeding) 		<p>for wind farm cables/oil and gas pipelines needed</p> <ul style="list-style-type: none"> • Where management of fisheries is introduced to safeguard N2K site features, ongoing work to ensure compliance and reporting is needed • Unclear whether bird declines are national or local, whether it is an anthropogenic problem, and whether the birds have relocated elsewhere. • There is a decline in the population of SPA gulls whilst urban gull numbers are increasing. This is leading to the increase in use of general licences, which are not regulated. • Bird eggs taken from breeding colonies, particularly Hodbarrow and South Walney for
<p>Morecambe Bay Ramsar, Duddon Estuary Ramsar</p>	<ul style="list-style-type: none"> • Ramsar criterion 4: The site is a staging area for 		

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Morecambe Bay & Duddon Estuary	Qualifying features	Conservation objectives	Issues and threats
<p>http://jncc.defra.gov.uk/pdf/RIS/UK11045.pdf http://publications.naturalengland.org.uk/publication/6708495835463680</p>	<p>migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius hiaticula</i></p> <ul style="list-style-type: none"> • Ramsar criterion 5: Assemblages of international importance: Species with peak counts in winter: 223709 waterfowl (5 year peak mean 1998/99-2002/2003) • Qualifying Species/populations (as identified at designation): <ol style="list-style-type: none"> 1. Species regularly supported during the breeding season: • Lesser black-backed gull <i>Larus fuscus graellsii</i> • Herring gull <i>Larus argentatus</i> • Sandwich tern <i>Sterna (Thalasseus) sandvicensis sandvicensis</i> 		<p>ground nesting seabirds – long term wardens needed.</p>

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Morecambe Bay & Duddon Estuary	Qualifying features	Conservation objectives	Issues and threats
	<ul style="list-style-type: none"> • Great cormorant <i>Phalacrocorax carbo carbo</i> • Common shelduck <i>Tadorna tadorna</i> • Northern pintail <i>Anas acuta</i> • Common eider <i>Somateria mollissima</i> • Eurasian oystercatcher <i>Haematopus ostralegus</i> • Ringed plover <i>Charadrius hiaticula</i> • Grey plover <i>Pluvialis squatarola</i> • Sanderling <i>Calidris alba</i> • Eurasian curlew <i>Numenius arquata</i> • Common redshank <i>Tringa totanus</i> • Ruddy turnstone <i>Arenaria interpres</i> • Lesser black-backed gull <i>Larus fuscus graellsii</i> <p style="text-align: center;">2. Species with peak counts in winter:</p> <ul style="list-style-type: none"> • Great crested grebe <i>Podiceps cristatus</i> 		

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Morecambe Bay & Duddon Estuary	Qualifying features	Conservation objectives	Issues and threats
	<ul style="list-style-type: none"> • Pink-footed goose <i>Anser brachyrhynchus</i> • Eurasian wigeon <i>Anas penelope</i> • Common goldeneye <i>Bucephala clangula</i> • Red-breasted merganser <i>Mergus serrator</i> • European golden plover <i>Pluvialis apricaria</i> • Northern lapwing <i>Vanellus vanellus</i> • Red knot <i>Calidris canutus islandica</i> • Dunlin <i>Calidris alpina alpina</i> • Bar-tailed godwit <i>Limosa lapponica lapponica</i> 		

Morecambe Bay Pavements SAC	Qualifying features	Conservation objectives	Issues and threats
<p>Includes the best British example of lowland limestone pavements, extensive areas of upland calcareous grassland and broadleaved woodlands (both ash and yew) plus an exemplar calcareous lowland lake, extensive Juniper and a population of narrow-mouthed whorl snail.</p>			
	<ul style="list-style-type: none"> • H7210 . Calcareous fens with <i>Cladium mariscus</i> 		<ul style="list-style-type: none"> • Cattle grazing needed on calcareous grasslands where grazing is

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Morecambe Bay Pavements SAC	Qualifying features	Conservation objectives	Issues and threats
	<p>and species of the Caricion davallianae</p> <ul style="list-style-type: none"> • H8240 . Limestone pavements • H5130. <i>Juniperus communis</i> formations on heaths or calcareous grasslands • S1014. <i>Vertigo angustior</i>: Narrow-mouthed whorl snail • H6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia) • H91A0. Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles • H4030. European dry heaths • H9180 . Tilio-Acerion forests of slopes, screes and ravines • H91J0 . <i>Taxus baccata</i> woods of the British Isles 		<p>inappropriate (none/sheep only)</p> <ul style="list-style-type: none"> • Difficulties on areas that are commons in setting up Commons Partnerships and getting community agreement on management • Lack of grazing/difficulties in scrub management has led to scrub encroachment – some large scale scrub removal needed • Management and monitoring following ongoing clearance of old plantations needed (particularly balance between woodland and open priority habitats) • Strategic deer control/fencing may be needed where deer browsing is preventing tree regeneration or

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Morecambe Bay Pavements SAC	Qualifying features	Conservation objectives	Issues and threats
	<ul style="list-style-type: none"> H3140 Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. 		<p>affecting ground flora and emergent vegetation in limestone pavement grikes.</p> <ul style="list-style-type: none"> Localised damage due to motorbike and off-road bikes illegally accessing land; issues with pedestrian trampling along desire lines and sheep-worrying by dogs <i>Phytophthora austrocedrae</i> is killing Juniper Inappropriate game management practices are inputting nutrients into small water bodies within the site Agricultural diffuse pollution, and also point source issues (septic tanks) are contributing to raised phosphate levels within the tarns Use of fertiliser has reduced the species

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Morecambe Bay Pavements SAC	Qualifying features	Conservation objectives	Issues and threats
			<p>richness of the grass sward as it favours competitive species, both historically and recently particularly at site margins where boundaries are indistinct</p> <ul style="list-style-type: none"> • Weak economic incentives for traditional woodland management are weak - and coppicing may not be carried out in the long term

River Kent SAC	Qualifying features	Conservation objectives	Issues and threats
<p>The River Kent SAC is the only major river system in England where populations of white-clawed crayfish can still be found throughout the catchment wherever there are suitable habitats. It also supports freshwater mussels, <i>Margaritifera margaritifera</i> in one of the upper tributaries and Bullhead <i>Cottus gobio</i> and floating vegetation dominated by water-crowfoot.</p>			
<p>http://publications.naturalengland.org.uk/publication/5256393649029120 http://publications.naturalengland.org.uk/publication/6050544158244864</p>	<ul style="list-style-type: none"> • H3260. Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation; Rivers with floating 	<p>**Standard SAC objectives</p>	<ul style="list-style-type: none"> • Diffuse water pollution is causing issues with levels of nutrients and suspended solids in some tributaries, affecting all lifecycle stages of key species

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River Kent SAC	Qualifying features	Conservation objectives	Issues and threats
	<p>vegetation often dominated by water-crowfoot</p> <ul style="list-style-type: none"> • S1029. <i>Margaritifera margaritifera</i>; Freshwater pearl mussel • S1092. <i>Austropotamobius pallipes</i>; White-clawed (or Atlantic stream) crayfish • S1163. <i>Cottus gobio</i>; Bullhead 		<ul style="list-style-type: none"> • Increased sediment supply from land management practices, bankside erosion due to inappropriate grazing and extensive, often unstable mine spoil in the upper catchment is contributing to downstream siltation and gravel accumulation. • Physical modifications such as channel alignment, weirs and extensive artificial reinforcement of banks are affecting the way the river system functions by changing river flows and altering the way sediment is sourced, transferred and deposited. Modifications also reduce the connectivity of the river with the floodplain. • Himalayan balsam and Japanese knotweed have

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River Kent SAC	Qualifying features	Conservation objectives	Issues and threats
			<p>become established along the River Kent and tributaries, contributing to bank erosion and displacing native species.</p> <ul style="list-style-type: none"> • Signal crayfish are the vector for <i>Aphanomyces astaci</i> which causes crayfish plague in the native white-clawed crayfish. it can also be transferred in water and mud containing the <i>Aphanomyces astaci</i> zoospores. Signal crayfish are presently absent from the River Kent SAC, but the threat remains. • The freshwater mussel population has experienced a significant decline with no recent recruitment. A major cause is thought to be elevated nutrient levels and siltation of riverbed

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River Kent SAC	Qualifying features	Conservation objectives	Issues and threats
			substrates preventing juvenile recruitment.

Roudsea Wood & Mosses SAC	Qualifying features	Conservation objectives	Issues and threats
<p>A range of habitats includes woodland and lowland raised bog, and transitions between them as well as a number of rare and scarce species. The bog lies in two hydrologically separate blocks and has been damaged by historic peat cutting and drainage of the surrounding land. Work to repair the hydrology is ongoing. The woodland is partly on limestone and partly on acidic substrates. Yew occurs both as dense groves and as scattered trees in the understorey of Ash or Ash-Elm <i>Fraxinus-Ulmus</i> woodland</p>			
<p>http://publications.naturalengland.org.uk/publication/4769567880511488 http://publications.naturalengland.org.uk/publication/4769567880511488</p>	<ul style="list-style-type: none"> • H7120 Degraded raised bogs still capable of natural regeneration • H7110* Active raised bogs • H9180* Tilio-Acerion forests of slopes, screes and ravines • H91J0* <i>Taxus baccata</i> woods of the British Isles 	<p>Supplementary advice available: http://publications.naturalengland.org.uk/publication/51613251519119 36</p>	<ul style="list-style-type: none"> • Due to past peat cutting and drainage in preparation for cutting, plus subsequent colonisation by trees and rhododendron, the water table on the bog is too low to conserve the peat resource and support bog vegetation in the long term • Parts of the site are affected by invasive plant species - Rhododendron is invasive, can cover large areas and smothers

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Roudsea Wood & Mosses SAC	Qualifying features	Conservation objectives	Issues and threats
			<p>bog vegetation as well as preventing rainfall from reaching the peat. <i>Kalmia angustifolia</i> is also potentially invasive</p> <ul style="list-style-type: none"> • Scrub and tree growth on the bog affects the vegetation and peat through transpiration, interception of rainwater and shading; scrub control is necessary to prevent this • Deer browsing makes it necessary to fence coppice coupes and canopy gaps to allow regeneration, meaning that it is not possible to manage certain parts of the wood • A conifer plantation on part of the bog has completely shaded out the bog vegetation and is likely to lower the water table

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Roudsea Wood & Mosses SAC	Qualifying features	Conservation objectives	Issues and threats
			<ul style="list-style-type: none"> • N deposition exceeds site critical loads; any effects are masked on the bog by unfavourable hydrology. • <i>Chalara</i> disease of ash is likely to become an issue in the future and may adversely affect the woodland through death of ash trees

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Subberthwaite, Blawith & Torver Low Commons SAC	Qualifying features	Conservation objectives	Issues and threats
<p>This site supports some of the best examples of transition mires and quaking bogs in the UK, with over 200 mires on a broad hilly plateau. Four main types of mire occur within the site. Valley mires (peatlands with a central watercourse) are the most important, and the area contains the greatest concentration and extent of the habitat in Cumbria. Basin mires (developed in rock basins, with no stream), flushes (wet hillside mires) and swamps (found on tarn edges) are also present. A large variety of different plant communities occur in these mires, sometimes in mosaics or showing transitions to other habitats such as tarns.</p>			
<p>http://publications.naturalengland.org.uk/publication/5899387632877568 http://publications.naturalengland.org.uk/publication/6537940905754624</p>	<ul style="list-style-type: none"> • H7140 Transition mires and quaking bogs • H7150 Depressions on peat substrates of the Rhynchosporion 	<p style="text-align: center;">**Standard SAC objectives</p>	<ul style="list-style-type: none"> • Historic anthropogenic modification of the SAC features (principally drainage) have altered the underlying hydrology causing drying and degradation of the features • Currently there is no agri-environment agreement in place, which would ensure appropriate grazing and nutrient input restrictions • Atmospheric nitrogen deposition currently exceeds the site-relevant critical load for ecosystem protection

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			<ul style="list-style-type: none">• The site experiences a high annual footfall, potentially damaging the SAC features through littering, noise pollution, footpath erosion, and disturbance of ground flora and fauna by dogs• Illegal use of this site for off-road vehicles could directly damage the surface of the SAC features• Deer browsing and wallowing appears to be damaging the surface of the SAC features and no management decisions have yet been made regarding their control• Diffuse water pollution stemming from intensively farmed holdings within the surrounding catchment. may be enhancing the nutrient regime of the site and altering the
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			<p>composition of the habitats</p> <ul style="list-style-type: none">• Alterations in temperature and rainfall patterns and carbon dioxide concentrations as a result of climatic change may negatively impact upon the SAC features
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**Standard SAC/SPA objectives are: With regard to the SAC/SPA and the natural habitats and/or species/ individual species and/or assemblage of species for which the site has been designated (the 'Qualifying Features' listed above for each site), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

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

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