

# Liverpool City Region Spatial Development Strategy

Habitats Regulations Assessment  
Scoping Report

Liverpool City Region Combined Authority

June 2021

## Quality information

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# 1. Introduction

- 1.1 Liverpool City Region Combined Authority (LCRCA) is in the process of producing a new Spatial Development Strategy (SDS). AECOM has been appointed to undertake the report to inform the Habitats Regulations Assessment (HRA) of the emerging SDS.
- 1.2 As part of its 2015 Devolution Deal, the LCRCA is to create a single statutory city region framework in the form of an SDS prepared in accordance with the relevant legislation and regulations. This SDS will be the first of its kind for the Liverpool City Region. It will set out the Mayoral Combined Authority's strategy for spatial development on a city region wide scale through a range of planning policies concerning development and land use.
- 1.3 The SDS will be a planning document. Its production is led by the Liverpool City Region Metro Mayor and LCRCA working in partnership with Liverpool City Council (LCC), Halton Borough Council (HBC), Knowsley Metropolitan Borough Council (KMBC), St Helens Metropolitan Borough Council (SHMBC), Sefton Metropolitan Borough Council (SMBC) and Wirral Metropolitan Borough Council (WMBC). The SDS will be developed and agreed by all the LCRCA local authorities. When it is published, it will form part of the 'Development Plan' for the six City Region local authorities alongside their own Local Plans and Neighbourhood Plans. The Development Plan is the planning policy used in assessing planning applications. It has been determined that the LCRCA SDS should establish a high-level strategic planning strategy for the region to make sure future development provides the right kind of jobs, homes and transport links in the optimum and most sustainable locations, so that everyone in the region can share in the region's success.
- 1.4 In terms of content, legislation requires that regard must be had to the National Planning Policy Framework (NPPF), and to the effect SDS proposals will have on health and health inequalities, achieving sustainable development, climate change and its consequences and ensuring consistency with national policies and the EU obligations of the UK. The SDS must also deal with the aspects of other Combined Authority policies or proposals that involve spatial development considerations.
- 1.5 The SDS will be shaped by the overarching Combined Authority objective of delivering 'clean and inclusive recovery and growth' in the LCR. It is therefore expected to respond, within its scope, to climate and ecological emergencies; housing needs including affordability; employment related needs; sustainable travel; place and environmental quality; and inequalities. Within this context, it is envisaged that the SDS will include a spatial strategy, establishing principles and parameters for a number of broad locations where development of certain types should be directed towards, with the detail of specific site allocations and amount of development left as a matter to be developed at the local authority level through the Local Plan preparation process.
- 1.6 The SDS will also include thematic policies flowing from the overarching objectives. These policies will establish the high-level principles of the strategic planning policy response to key issues facing the region – these principles should then inform the preparation of more detailed policies by local authorities within their Local Plans. This approach aims to allow LCRCA to use the SDS as a means to safeguard the region against vulnerability to speculative, piecemeal development that does not benefit communities in the region. It will aim to promote development at the most sustainable locations and seek to maximise opportunities to secure and capitalise on the infrastructure needed for clean and inclusive growth.
- 1.7 It is also recognised that the way people are working, travelling and using their leisure time has changed significantly due to Coronavirus. The SDS offers an opportunity to take a fresh look at the needs of people in the region to plan for cleaner greener recovery, ensuring new development is resilient and contributes towards reducing carbon emissions.
- 1.8 The SDS will cover a period of at least 15 years from adoption (anticipated 2023) and will apply to the administrative boundary of LCRCA.

- 1.9 The LCRCA is a Competent Authority as defined in Regulation 7 of the Conservation of Habitats and Species Regulations 2017 (as amended). Regulation 105 states that *'A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which... is likely to have a significant effect on a European site [a Special Area of Conservation, Special Protection Area or, as a matter of Government policy, a Ramsar site] or a European offshore marine site (either alone or in combination with other plans or projects) ...must make an appropriate assessment of the implications of the plan or project for that site in view of that site's conservation objectives'*. This entire process is called Habitats Regulations Assessment (HRA).
- 1.10 To inform the HRA, this scoping report is being prepared, although there is no statutory requirement to do so. Its purpose is to set out:
- The HRA methodology;
  - The European sites that will be covered in the HRA and their conservation objectives and relevant threats and pressures (as per the Natural England Site Improvement Plans for each European site and Conservation Objectives Supplementary Advice notes where available);
  - The impact pathways that will be covered in the HRA;
  - Key evidence sources; and
  - The list of other plans and projects that will be covered in the HRA.
- 1.11 This scoping report has been shared with key stakeholders: Natural England, Environment Agency and Marine Management Organisation to agree a baseline for the HRA process and some of the methodological details of assessment, particularly noting the very strategic high-level nature of a SDS as distinct from a Local Plan. Merseyside EAS, as part of the LCR CA contract management arrangements completed a Peer Review of the draft Scoping Report and this updated report takes account of comments made by the three key stakeholders.



## 2. HRA Methodology

### Legislative Context

- 2.1 The UK left the EU on 31 January 2020 under the terms set out in the European Union (Withdrawal Agreement) Act 2020 (“the Withdrawal Act”). This established a transition period, which ended on 31 December 2020. The Withdrawal Act retains the body of existing EU-derived law within our domestic law. During the transition period EU law applies to and in the UK. From 1 January 2021, the UK is no longer a member of the European Union. However, Habitats Regulations Assessment will continue as set out in the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019<sup>1</sup>.
- 2.2 The need for Appropriate Assessment (**Figure 1**) is set out in the Conservation of Habitats and Species Regulations 2017 (as amended).
- 2.3 The HRA process applies the ‘Precautionary Principle’<sup>2</sup> to European sites. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the European site(s) in question. Plans and projects with predicted adverse impacts on European sites may still be permitted if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.
- 2.4 In order to ascertain whether or not site integrity will be affected, an Appropriate Assessment should be undertaken of the plan or project in question:

**Figure 1: The legislative basis for Appropriate Assessment**

#### **Conservation of Habitats and Species Regulations 2017 (As Amended)**

The Regulations state that:

*“A competent authority, before deciding to ... give any consent for a plan or project which is likely to have a significant effect on a European site ... shall make an appropriate assessment of the implications for the site in view of that sites conservation objectives... The authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site”.*

- 2.5 Over time the phrase ‘Habitats Regulations Assessment’ (HRA) has come into wide currency to describe the overall process set out in the Habitats Directive from screening through to IROPI. This has arisen in order to distinguish the process from the individual stage described in the law as an ‘Appropriate Assessment’.
- 2.6 In spring 2018 the ‘Sweetman’ European Court of Justice ruling<sup>3</sup> clarified that ‘mitigation’ (i.e. measures that are specifically introduced to avoid or reduce a harmful effect on a European site that would otherwise arise) should **not** be taken into account when forming a view on likely significant effects. Mitigation should instead only be considered at the Appropriate Assessment stage.
- 2.7 In 2018 the Court of Justice of the European Union (CJEU) also ruled in combined cases C-293/17 and C-294/17 (often dubbed the Dutch Nitrogen case). The case related to atmospheric nitrogen deposition from agriculture and the concept of ‘headroom’ for further deposition. The Dutch government argued that because other measures they were taking (through a national programme known as the PAS) would reduce atmospheric nitrogen deposition considerably, this would create headroom for agricultural growth, such that individual farms would not need

<sup>1</sup> these don't replace the 2017 Regulations but are just another set of amendments

<sup>2</sup> The Precautionary Principle, which is referenced in Article 191 of the Treaty on the Functioning of the European Union, has been defined by the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2005) as: “When human activities may lead to morally unacceptable harm [to the environment] that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm. The judgement of plausibility should be grounded in scientific analysis”.

<sup>3</sup> People Over Wind and Sweetman v Coillte Teoranta (C-323/17)

Appropriate Assessment or mitigation as long as they remained within that headroom. However, there was considerable uncertainty over the effectiveness of the PAS reductions, and even with the PAS reductions taken into account, large areas of the relevant European sites would still be above the critical load (i.e. the empirically derived threshold below which damage could be ruled out with confidence). As a result, the Advocate-General advising the court disagreed with the Dutch Government on the basis of the degree of uncertainty over the effectiveness of the PAS, and that if the critical load was still exceeded there was effectively no headroom available since damage would still arise from further deposition. In other words, to create sufficient headroom at a national level to entirely avoid the need for Appropriate Assessment or mitigation, one would need to not just reduce nitrogen inputs from other sources but do so to such an extent the damage thresholds for the European site was no longer exceeded. The Court concurred, ruling that where a site is already in a deleterious state the room for permitting further harm is necessarily limited.

2.8 The SDS HRA will be cognisant of these rulings.

## Introduction to HRA Methodology

2.9 The HRA will be carried out with reference to the general EC guidance on HRA<sup>4</sup>; Natural England has produced its own internal guidance<sup>5</sup> as has the UK government<sup>6</sup>. These will be referred to in undertaking this HRA.

2.10 **Figure 2** below outlines the stages of HRA according to current guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the plan until no significant adverse effects remain.

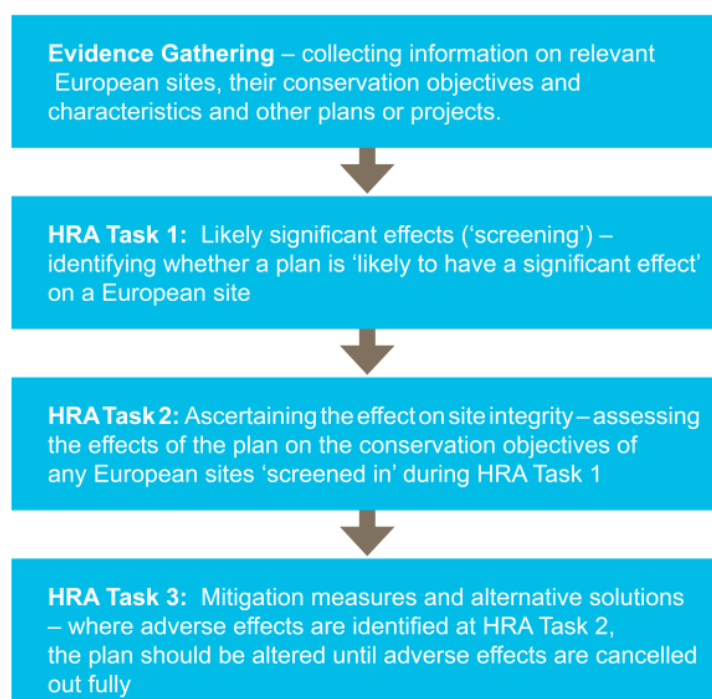


Figure 2. Four Stage Approach to Habitats Regulations Assessment. Source EC, 2001<sup>1</sup>.

<sup>4</sup> European Commission (2001): Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive.

<sup>5</sup> [http://www.ukmpas.org/pdf/practical\\_guidance/HRGN1.pdf](http://www.ukmpas.org/pdf/practical_guidance/HRGN1.pdf)

<sup>6</sup> <https://www.gov.uk/guidance/appropriate-assessment>

## Description of HRA Tasks

### HRA Task 1 – Test of Likely Significant Effects (ToLSE)

- 2.11 Following evidence gathering, the first stage of any Habitats Regulations Assessment is a Test of Likely Significant Effects (ToLSE) test - essentially a brief, high-level assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:
- 2.12 *"Is the project, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?"*
- 2.13 The objective is to 'screen out' those plans and projects that can, without any detailed appraisal, be concluded to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction.
- 2.14 The ToLSE is based on identification of the Source of impact, the Pathway of that impact that exists to Receptors and then confirmation of the specific European Site receptors. These are normally designated features but also include habitats and species fundamental to those designated features achieving favourable conservation status (notably functionally linked land outside the European site boundary).
- 2.15 In the Waddenzee case<sup>7</sup>, the European Court of Justice ruled on the interpretation of Article 6(3) of the Habitats Directive, including that:
- An effect should be considered 'likely', *"if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site"* (para 44);
  - An effect should be considered 'significant', *"if it undermines the conservation objectives"* (para 48); and
  - Where a plan or project has an effect on a site *"but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned"* (para 47).
- 2.16 The ToLSE consists of two parts: firstly, determining whether there are any policies that could result in negative impact pathways and secondly determining whether there are any European sites that might be affected.
- 2.17 This scoping report identifies European designated sites that could be affected by the SDS and also those impact pathways that are most likely to require consideration in the ToLSE within the HRA report.
- 2.18 Note that as a result of aforementioned 2018 case law, the conclusion of 'no likely significant effect' must not take account of any measures specifically introduced to avoid or reduce harm to European sites (consideration of such measures must be deferred to the appropriate assessment), although embedded measures (i.e. those that are integral to the plan itself) can be considered at this stage.
- 2.19 It is important to note that the ToLSE must generally follow the precautionary principle as its main purpose is to determine whether the subsequent stage of 'appropriate assessment' (i.e. a more detailed investigation) is required. A ToLSE will be required for the SDS, although experience of the various LCR Local Plan HRA strongly indicates appropriate assessment will be required.

### HRA Task 2 – Appropriate Assessment (AA)

- 2.20 Where it is determined that a conclusion of 'no Likely Significant Effect' cannot be drawn, the analysis must proceed to the next stage of HRA known as Appropriate Assessment. Case law has clarified that 'Appropriate Assessment' is not a technical term. In other words, there are no particular technical analyses, or level of technical analysis, that are classified by law as belonging to appropriate assessment rather than ToLSE. Appropriate Assessment refers to whatever level

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<sup>7</sup> Case C-127/02

of assessment is appropriate to form a conclusion regarding effects on the integrity (coherence of structure and function) of European sites in light of their conservation objectives.

- 2.21 By virtue of the fact that it follows the ToLSE process, there is a clear implication that the analysis will be more detailed than undertaken at the previous stage. One of the key considerations during Appropriate Assessment is whether there is available mitigation that would entirely address the potential effect. In practice, the Appropriate Assessment would take any policies or allocations that could not be dismissed following the high-level Likely Significant Effects Test analysis and assess the potential for an effect in more detail, with a view to concluding whether there would actually be an adverse effect on site integrity (in other words, disruption of the coherent structure and function of the European site(s)).
- 2.22 In 2018 the Holohan ruling<sup>8</sup> handed down by the European Court of Justice included among other provisions paragraph 39 of the ruling stating that *'As regards other habitat types or species, which are present on the site, but for which that site has not been listed, and with respect to habitat types and species located outside that site, ... typical habitats or species must be included in the appropriate assessment, if they are necessary to the conservation of the habitat types and species listed for the protected area'* [emphasis added].
- 2.23 Where necessary, measures will be recommended for incorporation into the emerging SDS in order to avoid or mitigate adverse effects on European sites. There is considerable precedent, both nationally and locally, concerning the level of detail that a Plan document needs to contain regarding mitigation for recreational impacts on European sites, for example. The implication of this precedent is that it is not necessary for all measures that will be deployed to be fully developed prior to adoption of the SDS, but the SDS must provide an adequate policy framework within which these measures can be delivered.
- 2.24 In evaluating significance, AECOM will rely on professional judgement as well as the results of bespoke studies, supported by appropriate evidence/data, and previous stakeholder consultation regarding development impacts on the European sites considered within this assessment.
- 2.25 When discussing 'mitigation' for a SDS document, one is concerned primarily with the policy framework to enable the delivery of such mitigation rather than the details of the mitigation measures themselves since the SDS document is a high-level policy document.

## Mitigation

- 2.26 Once the appropriate assessment has been completed there may be a requirement for mitigation. If required, this is most likely to consist of amendments to policy wording of the SDS (because detailed site allocations for development lie within the scope of the Local Plans), to ensure an adequate framework exists to protect European sites from any identified adverse effects.
- 2.27 Consideration will also be given to the role of the Environment Bill, new legislative requirements including Biodiversity Net Gain (BNG) and Local Nature Recovery Strategies. While land delivered to achieve BNG should not also be claimed as mitigation for impacts on European sites, there are ways in which the delivery of new habitats and greenspace as part of BNG requirements may reduce or entirely remove the need for mitigation for impacts on European sites. For example, if large areas of semi-natural greenspace are being provided as part of a general drive to achieve biodiversity net gain across the LCR this will also increase the amount of semi-natural greenspace away from the coast that is available for casual recreation (suitable alternative natural greenspace), thus reducing the risk of increased recreational activity being focussed in the coastal European sites.
- 2.28 LCR have established a natural capital baseline<sup>9</sup> for the region. The baseline includes an asset map of the region's habitat stock, natural capital, and ecosystem services valuation of the benefits that flow from the asset map.
- 2.29 The natural capital baseline will "...support the Liverpool City Region Combined Authority (LCA) and Local Authorities (LA) to engage with and manage funds created by natural capital policy

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<sup>8</sup> Case C-461/17

<sup>9</sup> <https://www.liverpoolcityregion-ca.gov.uk/wp-content/uploads/LCR-Natural-Capital-Baseline-Report.pdf> [accessed 24/02/2021]

*mechanisms and to enhance the economic and social welling of the LCR. These policy mechanisms include an Environmental Net Gain approach (including Biodiversity net gain), DEFRA's Environmental Land Management System (public money for public goods), as well as private investment in natural capital..."*

- 2.30 Since both recreational pressure and loss of functionally linked habitat for the European sites are going to be issues requiring mitigation, there would be value in building a strong network of new greenspaces, large parks and accessible Green Infrastructure (GI) corridors into the SDS from the start, located appropriately to draw new residents away from sensitive European sites and to deliver other benefits. This natural capital baseline can also be used to target GI delivery across the region, providing a multi-functional GI approach across the LCR to feed into future mitigation, including the emerging LCR Recreational Mitigation Strategy. A challenge with HRA of any Spatial Development Strategy is that, intentionally, the SDS is broad in terms of quantum and location of growth across the area it covers. For example, precise and full determination of the impacts and significant effects of a large new mixed-use development will require extensive details concerning the design of the new housing sites, including layout of greenspace and type of development to be delivered in particular locations, yet these data will not be decided until subsequent stages. This information will not be available at SDS level but only developed for lower tier Local Plans.
- 2.31 The draft Communities and Local Government (MHCLG) guidance makes it clear that when implementing HRA of land-use plans, the Appropriate Assessment (AA) should be undertaken at a level of detail that is appropriate and proportional to the level of detail provided within the plan itself:
- *"The comprehensiveness of the [Appropriate] assessment work undertaken should be proportionate to the geographical scope of the option and the nature and extent of any effects identified. An AA need not be done in any more detail, or using more resources, than is useful for its purpose. It would be inappropriate and impracticable to assess the effects [of a strategic land use plan] in the degree of detail that would normally be required for the Environmental Impact Assessment (EIA) of a project."*
  - More recently, the Court of Appeal<sup>10</sup> ruled that providing the Council (competent authority) was duly satisfied that proposed mitigation could be 'achieved in practice' to satisfy that the proposed development would have no adverse effect, then this would suffice. This ruling has since been applied to a planning permission (rather than a Local Plan)<sup>11</sup>. In this case the High Court ruled that for 'a multistage process, so long as there is sufficient information at any particular stage to enable the authority to be satisfied that the proposed mitigation can be achieved in practice it is not necessary for all matters concerning mitigation to be fully resolved before a decision maker is able to conclude that a development will satisfy the requirements of Regulation 102 of the Habitats Regulations'.
- 2.32 In other words, there is a tacit acceptance that AA can be tiered and that all impacts are not necessarily appropriate for consideration to the same degree of detail at all tiers. For example, when considering loss of functionally-linked habitat different levels of investigation are appropriate to the emerging SDS, Local Plans and subsequent planning applications. The fullest level of detail, including wintering bird surveys, would be necessary for planning applications at that is the last level at which impacts on European sites can be investigated. In contrast, detailed bird surveys would normally be disproportionate for a Local Plan, given that European sites can be protected in the absence of such surveys by having a strong policy dictating the need for further investigation and prohibiting development until surveys are complete.
- 2.33 Similarly, in any SDS, there are numerous policies for which there is a limit to the degree of assessment that is possible at this plan level. This is because:
- The policy in question does not contain any specifics as to what will be delivered so literally cannot be assessed in detail at the plan level. In these cases, the appropriate assessment would focus on precautionary mitigation that can be included in the plan to ensure that whatever proposals come forward will not result in adverse effects on integrity; or

<sup>10</sup> No Adastral New Town Ltd (NANT) v Suffolk Coastal District Council Court of Appeal, 17<sup>th</sup> February 2015

<sup>11</sup> High Court case of R (Devon Wildlife Trust) v Teignbridge District Council, 28 July 2015

- The nature of the potential impacts (notably lighting, noise and visual disturbance during construction, or loss of functionally-linked land or water) are very closely related to exactly how the development will be designed and constructed, or detailed development site-specific bird survey data, and therefore cannot be assessed in detail at the plan level and certainly not at the SDS level where site allocations will not be made. In these instances, the appropriate assessment focusses on the available mitigation measures, the extent to which such measures would be achievable and effective and whether an adequate protective framework exists to ensure that the policy would not lead to an adverse effect on the integrity of any European designated sites.
  - There are no site allocations as broad strategic locations are identified.
- 2.34 On these occasions the advice of Advocate-General Kokott<sup>12</sup> is worth considering. She commented that: *'It would ...hardly be proper to require a greater level of detail in preceding plans [rather than planning applications] or the abolition of multi-stage planning and approval procedures so that the assessment of implications can be concentrated on one point in the procedure. Rather, adverse effects on areas of conservation must be assessed at every relevant stage of the procedure to the extent possible on the basis of the precision of the plan. This assessment is to be updated with increasing specificity in subsequent stages of the procedure'* [emphasis added]. This is the approach that will be taken in the HRA of the SDS and is in line with the Department of Communities and Local Government guidance and Court rulings that the level of detail of the assessment.
- 2.35 Therefore, when discussing the likelihood of significant effects or adverse effects on integrity for a high-level strategic plan such as the LCRCA SDS, which contains no site allocations and often only a broad indication of growth quantum across the North West of England or per district/authority, one is concerned primarily with establishing an overarching policy framework that will enable and require:
- Any further investigations required at the Local Plan level and how those investigations should proceed (for example, detailing any specific further assessment that is required for all housing development within a certain distance of a specific European site, along with examples of mitigation that may be needed for such development);
  - Constraints that must be taken into account by local authorities in selecting site allocations;
  - Any strategic multi-authority mitigation strategies that may be required, to ensure a consistent multi-authority approach, such as relating to recreational pressure or loss of functionally-linked habitat;
  - Any strategic multi-authority modelling (e.g. for air quality) or surveys (e.g. for recreational pressure) that may be required, to ensure a consistent multi-authority approach;
  - Development that would adversely affect the integrity of European sites and functionally linked habitat to only come forward once adequate mitigation (if needed) was devised; and
  - The delivery of mitigation rather than the details of the mitigation measures themselves which would be devised for the Local Plans.
- 2.36 It is that policy framework that will enable the HRA of the SDS to conclude that the plan will not result in adverse effects on European sites because of safeguards built into the delivery mechanism.
- 2.37 Most LCR local authorities have recently adopted Local Plans or are currently undergoing Examination of their Local Plans so will not be revising their Local Plans until the formal 5-year Local Plan Review requirement is triggered. For many of the Local Plans this will be post-publication of the SDS. As such, there is a significant opportunity for the SDS and its HRA to guide and feed into the next generation of Local Plans for the LCR.

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<sup>12</sup> Opinion of Advocate General Kokott, 9th June 2005, Case C-6/04. Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland, paragraph 49 <http://curia.europa.eu/juris/document/document.jsf?docid=58359&doclang=EN>

## Assessment 'in combination'

- 2.38 It is a requirement of the Regulations that the impacts and effects of any land use plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the European site(s) in question. In practice, 'in combination assessment' is of greatest importance when the policy would otherwise be screened out because the individual contribution is not significant. It is important to avoid double-counting since projects that deliver housing and employment in the North West of England are part of the individual Local Plans. In these instances, the development of a planning application essentially provides further detail on those aspects of Local Plan growth rather than presenting a new project.
- 2.39 Similarly, where housing and employment is being delivered in surrounding authorities this is captured in the 'in combination' assessment through consideration of the relevant Local Plan that sets out the total amount of housing and employment growth that will be delivered across that authority during its plan period.
- 2.40 Projects and Plans that require consideration are identified in **Chapter 5** of this scoping report.

## Geographical Scope of the HRA

- 2.41 There are no standard criteria for determining the ultimate physical scope of an HRA. Rather, the source-pathway-receptor model should be used to determine whether there is any potential pathway connecting development to any European sites.

## 3. European Designated Sites

3.1 In the case of the Liverpool City Region Combined Authority, it was determined that for the initial coarse screen European sites identified in **Table 1** required consideration.

3.2 The locations of the below European designated sites are illustrated in **Appendix A, Figure A1**.

**Table 1 European Designated Sites for Consideration and their Location in Relation to the Liverpool City Region Combined Authority Boundary**

European Designated Site	Location
Mersey Estuary SPA Mersey Estuary Ramsar site	Located within the LCRCA boundary (Liverpool City, Halton and the Wirral).
Mersey Narrows and North Wirral Foreshore SPA Mersey Narrows and North Wirral Foreshore Ramsar site	Located within the LCRCA boundary (Sefton and the Wirral)
The Dee Estuary SAC The Dee Estuary SPA The Dee Estuary Ramsar site	Located within the LCRCA boundary (Wirral)
Sefton Coast SAC Ribble and Alt Estuaries SPA Ribble and Alt Estuaries Ramsar site	Located within the LCRCA boundary (Sefton)
Liverpool Bay/ Bae Lerwpl SPA	Located within the LCRCA boundary (Liverpool City, Sefton and Wirral)
Martin Mere SPA Martin Mere Ramsar sites	Located c.5km from the LCRCA boundary
Manchester Mosses SAC River Eden SAC	Located c.5.4km from the LCRCA boundary Located c.90km from the LCRCA boundary. The site has been included as Haweswater is likely to become a principal reservoir for Merseyside and is within the catchment of the River Eden SAC.
Oak Mere SAC River Dee and Bala Lake/ Afon Dyfrdwy a Llyn Tegid SAC	Located c.10.4km from the LCRCA boundary Located c.12.5km from the LCRCA boundary
Halkyn Mountain/ Mynydd Helygain SAC Deeside and Buckley Newt Sites SAC	Located c.5.5km from the LCRCA boundary Located c.9km from the LCRCA boundary
Alyn Valley Wood/ Coedwigoedd Dyffryn Alun SAC	Located c.12km from the LCRCA boundary

3.3 The scoping process also evaluated whether pathways existed to the following European sites, but it was concluded that they could be scoped out of consideration:



- Rixton Clay Pits SAC – This site is designated for its populations of great crested newts. The pits are not fed by ground water but by surface water. As such there is no realistic pathway present;
- Midland Meres and Mosses Phase 1 & Phase 2 Ramsar site - Located within 10km of Halton. Due to the distance of these sites from the borough, there are no realistic linking impact pathways to the environmental vulnerabilities of these sites (invasive non-native species and hydrological changes as a result of runoff.).
- West Midlands Mosses SAC – The site is potentially vulnerable to changes in air quality and is located close to the A49 and lies within 10km of Halton. However, the site lies more than 200m from the A49 which is outside the core impact zone with regard to local air quality (see Chapter 3 for further discussion of this zone).
- Rostherne Mere Ramsar site – Located approximately 14km from Halton. The site is vulnerable to changes in hydrology as a result of agricultural runoff. Due to the distance involved, it is considered that there are no realistic impact pathways present.
- Llywyn SAC – Located 20.4km from the LCRCA boundary. Due to the distance of these sites from the borough, there are no realistic linking impact pathways to the environmental vulnerabilities of this site (forestry and plantation activities, invasive non-native species, changes in hydraulic conditions).
- Elwy Valley Woods/ Coedwigoedd Dyffryn Elwy SAC – Located 20.4km from the LCRCA boundary. Due to the distance of these sites from the borough, there are no realistic linking impact pathways to the environmental vulnerabilities of this site (forestry and plantation activities, grazing, pollution, invasive non-native species).

3.4 The reason for designation, conservation objectives, supplementary advice and environmental vulnerabilities of the European designated sites are detailed below.

## Mersey Estuary SPA

### Reason for Designation<sup>13</sup>

3.5 The site is designated as a SPA for its:

Qualifying Annex 1 species:

- Golden plover *Pluvialis apricaria*

Migratory species:

- Shelduck *Tadorna tadorna*
- Teal *Anas crecca*
- Pintail *Anas acuta*
- Dunlin *Calidris alpina alpina*
- Black-tailed godwit *Limosa limosa islandica*
- Redshank *Tringa totanus*

Waterbird assemblage: great crested grebe *Podiceps cristatus*, shelduck, wigeon *Anas penelope*, teal, pintail, ringed plover *Charadrius hiaticula*, golden plover, grey plover *Pluvialis squatarola*, lapwing *Vanellus vanellus*, dunlin, black-tailed godwit, curlew *Numenius arquata* and redshank.

<sup>13,12</sup> <http://publications.naturalengland.org.uk/publication/5790848037945344> [accessed 10/02/2021]

## Conservation Objectives<sup>14</sup>

- 3.6 *“With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the ‘Qualifying Features’ listed below), and subject to natural change;*
- 3.7 *Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;*
- *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 population of each of the qualifying features, and,*
  - *The distribution of the qualifying features within the site.”*

## Environmental Vulnerabilities

- 3.8 The Site improvement Plan<sup>15</sup> identifies the following pressures and threats to the SPA:
- Changes in species distributions i.e., bird declines
  - Invasive species
  - Public access/ disturbance

## Mersey Estuary Ramsar site

### Reason for Designation<sup>16</sup>

- 3.9 The site is designated as a Ramsar site for the following Criteria:

Criterion 5: Assemblages of international importance –

**Species with peak counts in winter:** 89576 waterfowl (5 year peak mean 1998/99-2002/2003)

Criterion 6: Species/populations occurring at levels of international importance –

**Qualifying Species/populations (as identified at designation):**

**Species with peak counts in spring/autumn:**

- Shelduck
- Black-tailed godwit
- Redshank

**Species with peak counts in winter:**

- Teal
- Pintail
- Dunlin

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<sup>15</sup> <http://publications.naturalengland.org.uk/publication/6273450410770432> [accessed 10/02/2021]

<sup>16</sup> <https://jncc.gov.uk/jncc-assets/RIS/UK11041.pdf> [accessed 10/02/2021]

## Environmental Vulnerabilities

3.10 The Information Sheet on Ramsar Sites<sup>17</sup> does not identify any pressures and threats to the Ramsar site.

## Mersey Narrows and North Wirral Foreshore SPA

### Reason for Designation<sup>18</sup>

3.11 The site is designated as a SPA for its:

Qualifying Annex I species:

- Bar-tailed godwit *Limosa lapponica*
- Common tern *Sterna hirundo*

Waterbird assemblage: cormorant *Phalacrocorax carbo*, oystercatcher *Haematopus ostralegus*, grey plover, sanderling *Calidris alba*, knot *Calidris canutus*, dunlin, bar-tailed godwit, redshank.

### Conservation Objectives<sup>19</sup>

3.12 “With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the ‘Qualifying Features’ listed below), and subject to natural change;

3.13 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- 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 population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.”

## Environmental Vulnerabilities

3.14 The Site improvement Plan<sup>20</sup> (which also covers The Dee Estuary SPA/ Ramsar/ SAC) identifies the following pressures and threats to the SPA:

- Public access/ disturbance
- Changes in species distributions i.e., petalwort *Petalophyllum ralfsii*
- Invasive species
- Climate change
- Coastal squeeze
- Inappropriate scrub control
- Fisheries: Commercial marine and estuarine
- Inappropriate coastal management
- Overgrazing
- Direct impact from third party

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<sup>17</sup> Ibid

<sup>18</sup> <http://publications.naturalengland.org.uk/publication/6521906232557568> [accessed 10/02/2021]

<sup>19</sup> <http://publications.naturalengland.org.uk/publication/6521906232557568> [accessed 10/02/2021]

<sup>20</sup> <http://publications.naturalengland.org.uk/publication/6579320399069184> [accessed 10/02/2021]

- Marine litter
- Predation of tern colonies
- Planning permission: general
- Marine consents and permits
- Wildfire/ arson
- Air pollution: impact of atmospheric nitrogen deposition
- Transportation and service corridors
- Physical modification i.e., impacts of reduced freshwater inputs flushing through the Estuary

## Mersey Narrows and North Wirral Foreshore Ramsar site

### Reason for Designation<sup>21</sup>

3.15 The site is designated as a Ramsar site for the following Criteria:

Criterion 4: The site regularly supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions e.g., important numbers of non-breeding little gulls *Hydrocoloeus minutus* and common terns.

Criterion 5: Assemblages of international importance. The site regularly supports 20,000 or more waterbirds.

Criterion 6: The site regularly supports 1% of the individuals in the populations of the following species or subspecies of waterbird in any season: *islandica* and *lapponica* sub-species of bar-tailed godwits, non-breeding knot.

### Environmental Vulnerabilities

3.16 The Information Sheet on Ramsar Sites<sup>22</sup> identifies the following pressures and threats to the Ramsar site:

- Unspecific development urban use
- Recreation/ tourism disturbance
- Vegetation succession

## The Dee Estuary/ Aber Dyfrdwy SAC

### Reason for Designation<sup>23</sup>

3.17 The site is designated as a SAC for its:

Qualifying Annex I habitats:

- Annual vegetation of drift lines
- Atlantic salt meadows
- Embryonic shifting dunes
- Estuaries

<sup>21</sup> <https://rsis.ramsar.org/RISapp/files/RISrep/GB2202RIS.pdf> [accessed 10/02/2021]

<sup>22</sup> Ibid

<sup>23</sup> <http://publications.naturalengland.org.uk/publication/6124489284780032> [accessed 10/02/2021]

- Fixed dunes with herbaceous vegetation ('grey dunes')\*
- Humid dune slacks
- Mudflats and sandflats not covered by seawater at low tide
- *Salicornia* and other annuals colonising mud and sand
- Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes')
- Vegetated sea cliffs of the Atlantic and Baltic coasts

Annex I priority habitats are denoted by an asterisk (\*).

### 3.18 Qualifying Annex II species:

- Petalwort *Petalophyllum ralfsii*
- River lamprey *Lampetra fluviatilis*
- Sea lamprey *Petromyzon marinus*

## Conservation Objectives<sup>24</sup>

3.19 "With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

3.20 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 the habitats of qualifying species
- The structure and function of the habitats of qualifying species
- The supporting processes on which the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site."

## Environmental Vulnerabilities

3.21 The Site improvement Plan<sup>25</sup> identifies the following pressures and threats to the SAC:

- Public access/ disturbance
- Changes in species distributions i.e., petalwort *Petalophyllum ralfsii*
- Invasive species
- Climate change
- Coastal squeeze
- Inappropriate scrub control
- Fisheries: Commercial marine and estuarine
- Inappropriate coastal management
- Overgrazing
- Direct impact from third party
- Marine litter
- Predation of tern colonies

<sup>24</sup> <http://publications.naturalengland.org.uk/publication/6124489284780032> [accessed 10/02/2021]

<sup>25</sup> <http://publications.naturalengland.org.uk/publication/6579320399069184> [accessed 10/02/2021]

- Planning permission: general
- Marine consents and permits
- Wildfire/ arson
- Air pollution: impact of atmospheric nitrogen deposition
- Transportation and service corridors
- Physical modification i.e., impacts of reduced freshwater inputs flushing through the Estuary

## The Dee Estuary SPA

### Reason for Designation<sup>26</sup>

3.22 The site is designated as a SPA for its:

Qualifying Annex I species:

- Bar-tailed godwit
- Common tern
- Little tern *Sterna albifrons*
- Sandwich tern *Sterna sandvicensis*

Regular use by the following migratory species (other than those listed in Annex I):

- Redshank (passage and wintering)
- Shelduck (wintering)
- Teal (wintering)
- Pintail (wintering)
- Oystercatcher (wintering)
- Grey plover (wintering)
- Knot (wintering)
- Dunlin (wintering)
- Black-tailed godwit (wintering)
- Curlew *Numenius arquata* (wintering)

Waterbird assemblage: great crested grebe, cormorant *Phalacrocorax carbo*, shelduck, wigeon *Anas penelope*, teal, pintail, oystercatcher, grey plover, lapwing, knot, sanderling, dunlin, black-tailed godwit, bar-tailed godwit, curlew and redshank.

### Conservation Objectives<sup>27</sup>

3.23 *“With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the ‘Qualifying Features’ listed below), and subject to natural change;*

3.24 *Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;*

- *The extent and distribution of the habitats of the qualifying features*
- *The structure and function of the habitats of the qualifying features*

<sup>26</sup> <http://publications.naturalengland.org.uk/publication/6557770283220992> [accessed 10/02/2021]

<sup>27</sup> <http://publications.naturalengland.org.uk/publication/6557770283220992> [accessed 10/02/2021]

- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.”

## Environmental Vulnerabilities

3.25 The Site improvement Plan<sup>28</sup> identifies the following pressures and threats to the SPA:

- Public access/ disturbance
- Changes in species distributions i.e., petalwort *Petalophyllum ralfsii*
- Invasive species
- Climate change
- Coastal squeeze
- Inappropriate scrub control
- Fisheries: Commercial marine and estuarine
- Inappropriate coastal management
- Overgrazing
- Direct impact from third party
- Marine litter
- Predation of tern colonies
- Planning permission: general
- Marine consents and permits
- Wildfire/ arson
- Air pollution: impact of atmospheric nitrogen deposition
- Transportation and service corridors
- Physical modification i.e., impacts of reduced freshwater inputs flushing through the Estuary

## The Dee Estuary Ramsar site

### Reason for Designation<sup>29</sup>

3.26 The site is designated as a Ramsar for the following Criteria:

Criterion 1: The site comprises extensive intertidal mud and sand flats (20 km by 9 km) with large expanses of saltmarsh towards the head of the estuary, including Annex I habitats.

Criterion 2: The site supports breeding colonies of the vulnerable natterjack toad, *Epidalea calamita*.

Criterion 5: Assemblages of international importance. In the non-breeding season, the site regularly supports 120,726 individual waterbirds.

Criterion 6: Species/populations occurring at levels of international importance –

**Qualifying Species/populations (as identified at designation):**

**Species with peak counts in spring/autumn:**

<sup>28</sup> <http://publications.naturalengland.org.uk/publication/6579320399069184> [accessed 10/02/2021]

<sup>29</sup> <https://jncc.gov.uk/jncc-assets/RIS/UK11082.pdf> [accessed 10/02/2021]

- Redshank

**Species with peak counts in winter:**

- Teal
- Shelduck
- Oystercatcher
- Curlew
- Pintail
- Grey plover
- Knot
- Black-tailed godwit
- Bar-tailed godwit
- Redshank

## Environmental Vulnerabilities

3.27 The Information Sheet on Ramsar Sites<sup>30</sup> identifies the following pressures and threats to the Ramsar site:

- Introduction/ invasion of exotic animal species i.e., the Chinese mitten crab *Eriocheir sinensis*
- Introduction/invasion of non-native plant species
- Overfishing
- Pollution – industrial waste
- General disturbance from human activities
- Transport infrastructure development
- Sand dune erosion and accretion along North Wales open coast

## Sefton Coast SAC

### Reason for Designation<sup>31</sup>

3.28 The site is designated as a SAC for its:

Qualifying Annex I habitats:

- Atlantic decalcified fixed dunes (*Calluno-Ulicetea*). (Coastal dune heathland)\*
- Dunes with *Salix repens* ssp. *argentea* (*Salicion arenariae*). (Dunes with creeping willow)
- Embryonic shifting dunes
- Fixed dunes with herbaceous vegetation (“grey dunes”). (Dune grassland)\*
- Humid dune slacks
- Shifting dunes along the shoreline with *Ammophila arenaria* (“white dunes”). (Shifting dunes with marram)

Annex I priority habitats are denoted by an asterisk (\*).

3.29 Qualifying Annex II species:

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<sup>30</sup> Ibid

<sup>31, 30</sup> <http://publications.naturalengland.org.uk/publication/6588974160150528> [accessed 10/02/2021]



- Great crested newt *Triturus cristatus*
- Petalwort *Petalophyllum ralfsii*

## Conservation Objectives<sup>32</sup>

- 3.30 “With regard to the SAC and the natural habitats and/or species for which the site has been designated (the ‘Qualifying Features’ listed below), and subject to natural change;
- 3.31 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 habitats of qualifying species rely
  - The populations of qualifying species, and,
  - The distribution of qualifying species within the site.”

## Environmental Vulnerabilities

3.32 The Site improvement Plan<sup>33</sup> identifies the following pressures and threats to the SAC:

- Coastal squeeze
- Air pollution: risk of atmospheric nitrogen deposition
- Inappropriate scrub control
- Invasive species
- Hydrological changes
- Public access/ disturbance
- Inappropriate coastal management
- Fisheries: Commercial marine and estuarine
- Change to site conditions
- Shooting/ scaring
- Feature location/ extent/ pressure condition unknown i.e., seabird assemblage and waterbird assemblage

## Ribble and Alt Estuaries SPA

### Reason for Designation<sup>34</sup>

3.33 The site is designated as a SPA for its:

Qualifying Annex I species:

- Ruff *Philomachus pugnax*
- Common tern

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<sup>33</sup> <http://publications.naturalengland.org.uk/publication/6274126599684096> [accessed 10/02/2021]

<sup>34</sup> <http://publications.naturalengland.org.uk/publication/4868920422957056> [accessed 10/02/2021]

- Bewick's swan *Cygnus columbianus bewickii*
- Whooper swan *Cygnus Cygnus*
- Golden plover
- Bar-tailed godwit

Regular use by the following migratory species (other than those listed in Annex I):

- Lesser black-backed gull *Larus fuscus graellsii*
- Ringed plover
- Sanderling
- Redshank
- Pink-footed goose *Anser brachyrhynchus*
- Shelduck
- Wigeon
- Teal
- Pintail
- Oystercatcher
- Grey Plover
- Knot
- Sanderling
- Dunlin
- Black-tailed Godwit
- Redshank

Waterbird assemblage: cormorant, Bewick's swan, whooper swan, pink-footed goose, shelduck, wigeon, teal, pintail, scaup *Aythya marila*, common scoter *Melanitta nigra*, oystercatcher, ringed plover, golden plover, grey plover, lapwing, knot, sanderling, dunlin, black-tailed godwit, bar-tailed godwit, whimbrel *Numenius phaeopus*, curlew and redshank.

## Conservation Objectives <sup>35</sup>

3.34 "With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), 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 aims of the Wild Birds Directive, by maintaining or 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 population of each of the qualifying features, and,*
- *The distribution of the qualifying features within the site."*

## Environmental Vulnerabilities

3.35 The Site improvement Plan<sup>36</sup> identifies the following pressures and threats to the SPA:

<sup>35</sup> <http://publications.naturalengland.org.uk/publication/4868920422957056> [accessed 10/02/2021]

<sup>36</sup> <http://publications.naturalengland.org.uk/publication/6274126599684096> [accessed 10/02/2021]

- Coastal squeeze
- Air pollution: risk of atmospheric nitrogen deposition
- Inappropriate scrub control
- Invasive species
- Hydrological changes
- Public access/ disturbance
- Inappropriate coastal management
- Fisheries: Commercial marine and estuarine
- Change to site conditions
- Shooting/ scaring
- Feature location/ extent/ pressure condition unknown i.e., seabird assemblage and waterbird assemblage

## Ribble and Alt Estuaries Ramsar site

### Reason for Designation<sup>37</sup>

3.36 The site is designated as a Ramsar for the following Criteria:

Criterion 2: The site supports up to 40% of the Great Britain population of natterjack toads.

Criterion 5: Assemblages of international importance. Species with peak counts in the winter – 222,038 waterfowl (5 year peak mean 1998/99-2002/2003).

Criterion 6: Species/populations occurring at levels of international importance –

#### **Qualifying Species/populations (as identified at designation):**

##### **Species regularly supported during the breeding season:**

- Lesser black-backed gull

##### **Species with peak counts in spring/autumn:**

- Ringed plover *Charadrius hiaticula*
- Grey plover
- Red knot *Calidris canutus islandica*
- Sanderling
- Dunlin
- Black-tailed godwit
- Redshank
- Lesser black-backed gull

##### **Species with peak counts in winter:**

- Tundra/ Bewick's swan
- Whooper swan
- Pink-footed goose
- Shelduck

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<sup>37</sup> <https://jncc.gov.uk/jncc-assets/RIS/UK11057.pdf> [accessed 10/02/2021]

- Wigeon
- Teal
- Pintail
- Oystercatcher
- Bar-tailed godwit

## Environmental Vulnerabilities

3.37 The Information Sheet on Ramsar Sites<sup>38</sup> identifies the following pressure and threat to the Ramsar site:

- Erosion

## Liverpool Bay/ Bae Lerwpl SPA

### Reason for Designation<sup>39</sup>

3.38 The site is designated as a SPA for its:

Qualifying Annex I species:

- Red-throated diver *Gavia stellata* (non-breeding)
- Little gull (non-breeding)
- Little tern (breeding)
- Common tern (breeding)

Regular use by the following migratory species (other than those listed in Annex I):

- Common scoter

Waterbird assemblage: Main components include non-breeding red-throated diver, common scoter, red-breasted merganser *Mergus serrator* and great cormorant.

### Conservation Objectives<sup>40</sup>

3.39 “With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the ‘Qualifying Features’ listed below), 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 aims of the Wild Birds Directive, by maintaining or 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 population of each of the qualifying features, and,*
- *The distribution of the qualifying features within the site.”*

## Environmental Vulnerabilities

3.40 The Site improvement Plan<sup>41</sup> identifies the following pressures and threats to the SPA:

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<sup>38</sup> Ibid

<sup>39</sup> <http://publications.naturalengland.org.uk/publication/5089733892898816> [accessed 25/02/2021]

<sup>40</sup> Ibid

<sup>41</sup> <http://publications.naturalengland.org.uk/publication/5296526586806272> [accessed 25/02/2021]

- Fisheries: Commercial marine and estuarine
- Transportation and service corridors
- Fisheries: Recreational marine and estuarine
- Extraction: non-living resources e.g. aggregate dredging
- Siltation
- Water pollution

## Martin Mere SPA

### Reason for Designation<sup>42</sup>

3.41 The site is designated as a SPA for its:

Migratory bird species:

- Pink-footed goose
- Teal
- Pintail
- Bewick's swan
- Gadwall *Anas strepera*
- Mallard *Anas platyrhynchos*
- Whooper swan
- Shoveler *Anas clypeata*
- Snipe *Gallinago gallinago*
- Lapwing
- Bar-tailed godwit
- Ruff

Breeding bird species:

- Greylag goose *Anser anser*
- Gadwall
- Mallard
- Snipe

### Conservation Objectives<sup>43</sup>

3.42 "With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

3.43 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- 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

<sup>42</sup> <http://publications.naturalengland.org.uk/publication/4833056372293632> [accessed 10/02/2021]

<sup>43</sup> <http://publications.naturalengland.org.uk/publication/4833056372293632> [accessed 10/02/2021]

- *The population of each of the qualifying features, and,*
- *The distribution of the qualifying features within the site”.*

## Environmental Vulnerabilities

3.44 The Site improvement Plan<sup>44</sup> identifies the following pressures and threats to the SPA:

- Hydrological changes
- Invasive species
- Water pollution

## Martin Mere Ramsar site

### Reason for Designation<sup>45</sup>

3.45 The site is designated as a Ramsar for the following Criteria:

Criterion 5: Assemblages of international importance. Species with peak counts in the winter – 25,306 waterfowl (5 year peak mean 1998/99-2002/2003).

Criterion 6: Species/populations occurring at levels of international importance –

**Qualifying Species/populations (as identified at designation):**

**Species with peak counts in spring/autumn:**

- Pink-footed goose

**Species with peak counts in winter:**

- Tundra/ Bewick’s swan
- Whooper swan
- Wigeon
- Pintail

## Environmental Vulnerabilities

3.46 The Information Sheet on Ramsar Sites<sup>46</sup> does not identify any pressures and threats to the Ramsar site.

## Manchester Mosses SAC

### Reason for Designation<sup>47</sup>

3.47 The site is designated as a SAC for its:

Qualifying Annex 1 habitat:

- Degraded raised bogs still capable of natural regeneration

<sup>44</sup> <http://publications.naturalengland.org.uk/publication/6181803727519744> [accessed 10/02/2021]

<sup>45</sup> <https://jncc.gov.uk/jncc-assets/RIS/UK11039.pdf> [accessed 10/02/2021]

<sup>46</sup> Ibid

<sup>47, 43</sup> <http://publications.naturalengland.org.uk/publication/5283870555504640> [accessed 10/02/2021]

## Conservation Objectives<sup>48</sup>

- 3.48 “With regard to the SAC and the natural habitats and/or species for which the site has been designated (the ‘Qualifying Features’ listed below), and subject to natural change;
- 3.49 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
  - The structure and function (including typical species) of qualifying natural habitats, and,
  - The supporting processes on which qualifying natural habitats rely”.

## Environmental Vulnerabilities

- 3.50 The Site improvement Plan<sup>49</sup> identifies the following pressures and threats to the SAC:
- Hydrological changes
  - Air pollution: impact of atmospheric nitrogen deposition

## Oak Mere SAC

### Reason for Designation<sup>50</sup>

- 3.51 The site is designated as a SAC for its:

#### Qualifying Annex I habitats:

- Oligotrophic waters containing very few minerals of sandy plains: *Littorelletalia uniflorae*. (Nutrient-poor shallow waters with aquatic vegetation on sandy plains)
- Transition mires and quaking bogs. (Very wet mires often identified by an unstable ‘quaking’ surface)

## Conservation Objectives<sup>51</sup>

- 3.52 “With regard to the SAC and the natural habitats and/or species for which the site has been designated (the ‘Qualifying Features’ listed below), and subject to natural change;
- 3.53 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
  - The structure and function (including typical species) of qualifying natural habitats, and
  - The supporting processes on which qualifying natural habitats rely”

## Environmental Vulnerabilities

- 3.54 The Site improvement Plan<sup>52</sup> identifies the following pressures and threats to the SAC:
- Water pollution
  - Invasive species

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<sup>49</sup> <http://publications.naturalengland.org.uk/publication/6676598321315840> [accessed 10/02/2021]

<sup>50,46</sup> <http://publications.naturalengland.org.uk/publication/4577218189590528> [accessed 10/02/2021]

<sup>52</sup> <http://publications.naturalengland.org.uk/publication/5056911862923264> [accessed 10/02/2021]

- Hydrological changes
- Air pollution: impact of atmospheric nitrogen deposition

## River Dee and Bala Lake/ Afon Dyfrdwy a Llyn Tegid SAC

### Reason for Designation<sup>53</sup>

3.55 The site is designated as a SAC for its:

Qualifying Annex I habitat:

- Water courses of plain to montane levels with the *Ranunculon fluitantis* and *Callitricho-Batrachion* vegetation. (Rivers with floating vegetation often dominated by water-crowfoot)

Qualifying Annex II species:

- Atlantic salmon *Salmo salar*
- Brook lamprey *Lampetra planeri*
- Bullhead *Cottus gobio*
- Floating water-plantain *Luronium natans*
- Otter *Lutra lutra*
- River lamprey *Lampetra fluviatilis*
- Sea lamprey *Petromyzon marinus*

### Conservation Objectives<sup>54</sup>

3.56 “With regard to the SAC and the natural habitats and/or species for which the site has been designated (the ‘Qualifying Features’ listed below), and subject to natural change;

3.57 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”.

### Environmental Vulnerabilities

3.58 The Standard Data Form<sup>55</sup> does not identify any pressures and threats to the SAC.

<sup>53</sup> <http://publications.naturalengland.org.uk/publication/4660149109129216> [accessed 10/02/2021]

<sup>54</sup> <http://publications.naturalengland.org.uk/publication/4660149109129216> [accessed 10/02/2021]

<sup>55</sup> <https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0030252.pdf> [accessed 10/02/2021]



## River Eden SAC

### Reason for Designation<sup>56</sup>

3.59 The site is designated as a SAC for its:

#### Qualifying Annex I habitats:

- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*). (Alder woodland on floodplains)\*
- Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoeto-Nanojuncetea*. (Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels)
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation. (Rivers with floating vegetation often dominated by water-crowfoot)

Annex I priority habitats are denoted by an asterisk (\*).

#### Qualifying Annex II species:

- Atlantic salmon
- Brook lamprey
- Bullhead
- Otter
- River lamprey
- Sea lamprey
- White-clawed (or Atlantic stream) crayfish *Austropotamobius pallipes*

### Conservation Objectives<sup>57</sup>

3.60 *With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;*

3.61 *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."*

### Environmental Vulnerabilities

3.62 The Site improvement Plan<sup>58</sup> identifies the following pressures and threats to the SAC:

- Water pollution

<sup>56</sup> <http://publications.naturalengland.org.uk/publication/5935614042046464> [accessed 10/02/2021]

<sup>57</sup> <http://publications.naturalengland.org.uk/publication/5935614042046464> [accessed 10/02/2021]

<sup>58</sup> <http://publications.naturalengland.org.uk/publication/5920746052255744> [accessed 10/02/2021]

- Agricultural management practices
- Physical modification
- Invasive species
- Changes in species distributions i.e., salmon
- Forestry and woodland management
- Hydrological changes
- Disease i.e., from signal crayfish *Pacifastacus leniusculus*

## Halkyn Mountain/ Mynydd Helygain SAC

### Reason for Designation<sup>59</sup>

3.63 The site is designated as a SAC for its:

Qualifying Annex I habitat:

- Calaminarian grasslands of the *Violetalia calaminariae*

Qualifying Annex I habitats present as a qualifying feature, but not a primary reason for selection:

- European dry heaths
- Semi-natural dry grassland and scrubland facies on calcareous substrates (*Festuco – Brometalia*) (\*important orchid sites)
- *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)

Qualifying Annex II species:

- Great crested newt

### Conservation Objectives<sup>60</sup>

3.64 To maintain favourable conservation status as defined in Articles 1(e) and 1(i) of the Habitats Directive:

*“The conservation status of a natural habitat is the sum of the influences acting on it and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical species. The conservation status of a natural habitat will be taken as favourable when:*

- *Its natural range and areas it covers within that range are stable or increasing, and*
- *The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and*
- *The conservation status of its typical species is favourable.*

*The conservation status of a species is the sum of the influences acting on the species that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as ‘favourable’ when:*

- *population dynamics data on the species indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and*

<sup>59</sup> <https://sac.incc.gov.uk/site/UK0030163> [accessed 11/02/2021]

<sup>60</sup> [https://naturalresources.wales/media/672548/Halkyn%20SAC%20Plan%20Eng\\_.pdf](https://naturalresources.wales/media/672548/Halkyn%20SAC%20Plan%20Eng_.pdf) [accessed 11/02/2021]

- *the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and*
- *There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.”*

## Environmental Vulnerabilities

3.65 The Standard Data Form<sup>61</sup> identifies the following pressures and threats to the SAC:

- Grazing
- Mining and quarrying
- Utility and service lines
- Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)
- Outdoor sports and leisure activities, recreational activities
- Air pollution, air-borne pollutants
- Soil pollution and solid waste (excluding discharges)
- Invasive non-native species
- Problematic native species
- Fire and fire suppression
- Human induced changes in hydraulic conditions
- Biocenotic evolution, succession i.e., the process by which the structure of a biological community evolves over time.

## Deeside and Buckley Newt Sites SAC

### Reasons for Designation<sup>62</sup>

3.66 The site is designated as a SAC for its:

Qualifying Annex I habitat:

- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles

Qualifying Annex II species:

- Great crested newt

### Conservation Objectives<sup>63</sup>

3.67 To maintain favourable conservation status as defined in Articles 1(e) and 1(i) of the Habitats Directive:

*“The conservation status of a natural habitat is the sum of the influences acting on it and its typical species that may affect its long-term natural distribution, structure and functions as well as the*

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<sup>61</sup> <https://sac.jncc.gov.uk/site/UK0030163> [accessed 11/02/2021]

<sup>62</sup> <https://sac.jncc.gov.uk/site/UK0030132> [accessed 11/02/2021]

<sup>63</sup> [https://naturalresources.wales/media/671740/Deeside\\_and\\_Buckley\\_WES32\\_Plan\\_English.pdf](https://naturalresources.wales/media/671740/Deeside_and_Buckley_WES32_Plan_English.pdf) [accessed 11/02/2021]

*long-term survival of its typical species. The conservation status of a natural habitat will be taken as favourable when:*

- *Its natural range and areas it covers within that range are stable or increasing, and*
- *The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and*
- *The conservation status of its typical species is favourable.*

*The conservation status of a species is the sum of the influences acting on the species that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as 'favourable' when:*

- *population dynamics data on the species indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and*
- *the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and*
- *There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis."*

## Environmental Vulnerabilities

3.68 The Standard Data Form<sup>64</sup> identifies the following pressures and threats to the SAC:

- Mowing/ cutting of grassland
- Grazing
- 'Other' forestry activities
- Air pollution, air-borne pollutants
- Soil pollution and solid waste (excluding discharges)
- Invasive non-native species
- Problematic native species
- Other ecosystem modifications
- Biocenotic evolution, succession

## Alyn Valley Woods/ Coedwigoedd Dyffryn Alun SAC

### Reason for Designation<sup>65</sup>

3.69 The site is designated as a SAC for its:

Qualifying Annex I habitat:

- *Tilio-Acerion* forests of slopes, screes and ravines\*

Annex I priority habitats are denoted by an asterisk (\*).

Qualifying Annex I habitats present as a qualifying feature, but not a primary reason for selection:

- Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (\*important orchid sites)

<sup>64</sup> <https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0030132.pdf> [accessed 11/02/2021]

<sup>65</sup> <https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0030078.pdf> [accessed 23/02/2021]

- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

Qualifying Annex II species:<sup>66</sup>

- Otter
- Lesser horseshoe bat *Rhinolophus hipposideros*

## Conservation Objectives<sup>67</sup>

3.70 To maintain favourable conservation status as defined in Articles 1(e) and 1(i) of the Habitats Directive:

*“The conservation status of a natural habitat is the sum of the influences acting on it and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical species. The conservation status of a natural habitat will be taken as favourable when:*

- *Its natural range and areas it covers within that range are stable or increasing, and*
- *The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and*
- *The conservation status of its typical species is favourable.*

*The conservation status of a species is the sum of the influences acting on the species that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as ‘favourable’ when:*

- *population dynamics data on the species indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and*
- *the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and*
- *There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.”*

## Environmental Vulnerabilities

3.71 The Standard Data Form<sup>68</sup> identifies the following pressures and threats to the SAC:

- Grazing
- Forest and Plantation management and use
- Forestry activities not previously referred to
- Other urbanisation, industrial and similar activities
- Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)
- Outdoor sports and leisure activities, recreational activities
- Air pollution, air-borne pollutants
- Invasive non-native species
- Problematic native species

<sup>66</sup> <https://eunis.eea.europa.eu/sites/UK0030078#tab-species> [accessed 24/02/2021]

<sup>67</sup> <https://naturalresources.wales/media/670837/Alyn%20Valley%20Woods%20WES32%20Plan.pdf> [accessed 24/02/2021]

<sup>68</sup> <https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0030078.pdf> [accessed 23/02/2021]

- Biocenotic evolution, succession
- Interspecific floral relations

## 4. Impact Pathways for Consideration

4.1 This section discusses potential impact pathways that could potentially link the SDS to a European designated site (as identified in **Chapter 3**). These are briefly identified in **Table 2**. Where existing evidence exists in relation to a specific impact pathway or a European designated site, further discussion is undertaken in the subsequent section. This list has been derived from the Site Improvement Plans, Ramsar Information Sheets, Conservation Objectives, Supplementary Advice on the Conservation Objectives and professional judgement based on extensive experience of HRA in the LCR. It is subject to revision as the SDS HRA process moves through each stage.

**Table 2: Potential Impact Pathways that Could Link the SDS to a European Designated Site**

European Designated Site	Potential Linking Impact Pathways
Mersey Estuary SPA	<ul style="list-style-type: none"> <li>Recreational pressure</li> <li>Visual/ noise disturbance</li> <li>Water quality</li> <li>Coastal squeeze</li> <li>Loss of functionally-linked habitat</li> <li>Renewable energy and global trading policies</li> </ul>
Mersey Estuary Ramsar site	<ul style="list-style-type: none"> <li>Recreational pressure</li> <li>Visual/ noise disturbance</li> <li>Water quality</li> <li>Coastal squeeze</li> <li>Loss of functionally-linked habitat</li> <li>Renewable energy policies</li> <li>Unspecified development, urban use</li> <li>Recreation/ tourism disturbance</li> <li>Vegetation succession</li> </ul>
Mersey Narrows and North Wirral Foreshore SPA	<ul style="list-style-type: none"> <li>Recreational pressure</li> <li>Visual/ noise disturbance</li> <li>Water quality</li> <li>Coastal squeeze</li> <li>Loss of functionally-linked habitat</li> <li>Direct land-take</li> <li>Renewable energy and global trading policies</li> </ul>

## European Designated Site

## Potential Linking Impact Pathways

Mersey Narrows and North Wirral Foreshore Ramsar site	<p>Recreational pressure</p> <p>Visual/ noise disturbance</p> <p>Water quality</p> <p>Coastal squeeze</p> <p>Loss of functionally-linked habitat</p> <p>Direct land-take</p> <p>Renewable energy policies</p>
The Dee Estuary SAC	<p>Recreational pressure</p> <p>Loss of, and disturbance to, functionally linked habitat</p> <p>Invasive species</p> <p>Coastal squeeze</p> <p>Inappropriate coastal management</p> <p>Wildfire/ direct impact from third party arson</p> <p>Air pollution: impact of atmospheric pollution and resulting nitrogen deposition</p> <p>Physical modification i.e., impacts of reduced freshwater inputs flushing through the Estuary</p>
The Dee Estuary SPA	<p>Recreational pressure</p> <p>Visual/ noise disturbance</p> <p>Water quality</p> <p>Coastal squeeze</p> <p>Invasive species</p> <p>Physical modification i.e., impacts of reduced freshwater inputs flushing through the Estuary</p> <p>Renewable energy policies</p>
The Dee Estuary Ramsar site	<p>Public access/ disturbance</p> <p>Visual/ noise disturbance</p> <p>Water quality</p> <p>Coastal squeeze</p> <p>Renewable energy policies</p>
Sefton Coast SAC	<p>Hydrological changes</p> <p>Public access/ disturbance</p>



## European Designated Site

## Potential Linking Impact Pathways

	<p>Air quality: impact of atmospheric pollution and resulting nitrogen deposition</p> <p>Inappropriate coastal management</p> <p>Loss of, and disturbance to, functionally linked habitat</p> <p>Wildfire/ direct impact from third party arson</p> <p>Invasive species</p>
Ribble and Alt Estuaries SPA	<p>Public access/ disturbance</p> <p>Recreational pressure</p> <p>Visual/ noise disturbance</p> <p>Water quality</p> <p>Coastal squeeze</p> <p>Loss of functionally-linked habitat</p> <p>Renewable energy policies</p> <p>Physical modification i.e., impacts of reduced freshwater inputs flushing through the Estuary</p>
Ribble and Alt Estuaries Ramsar site	<p>Recreational pressure</p> <p>Visual/ noise disturbance</p> <p>Water quality</p> <p>Coastal squeeze</p> <p>Loss of functionally-linked habitat</p> <p>Renewable energy policies</p> <p>Air pollution: impact of atmospheric pollution and resulting nitrogen deposition on natterjack toad habitat</p> <p>Physical modification i.e., impacts of reduced freshwater inputs flushing through the Estuary</p>
Liverpool Bay/ Bae Lerwpl SPA	<p>Public access/ disturbance</p> <p>Recreational pressure</p> <p>Visual/ noise disturbance</p> <p>Water quality</p> <p>Coastal squeeze</p> <p>Loss of functionally-linked habitat</p> <p>Renewable energy and global trading policies</p>
Martin Mere SPA	<p>Recreational pressure</p>

## European Designated Site

## Potential Linking Impact Pathways

	Renewable energy policies
	Loss of functionally-linked habitat
Martin Mere Ramsar site	Recreational pressure
	Renewable energy policies
	Loss of functionally-linked habitat
Manchester Mosses SAC	Air quality: impact of atmospheric pollution and resulting nitrogen deposition
River Eden SAC	Water quality and resources
Oak Mere SAC	Air quality: impact of atmospheric pollution and result nitrogen deposition
River Dee and Bala Lake, Afon Dyfrdwy a Llyn Tegid SAC	Recreational pressure
	Water quality and resources
Halkyn Mountain/ Mynydd Helygain SAC	Air quality: impact of atmospheric pollution and resulting nitrogen deposition
Deeside and Buckley Newt Sites SAC	Air quality: impact of atmospheric pollution and resulting nitrogen deposition
Alyn Valley Woods/ Coedwigoedd Dyffryn Alun SAC	Hunting and collection of wild animals
	Outdoor sports and leisure activities, recreational activities
	Air quality: impact of atmospheric pollution and resulting nitrogen deposition
	Invasive non-native species

4.2 It should be noted that all the above European designated sites will be included within the Habitats Regulations Assessment. However, it is likely that the focus will be on the Mersey Estuary SPA/ Ramsar, Mersey Narrows and Wirral Foreshore SPA/ Ramsar, The Dee Estuary SAC/ SPA/ Ramsar, Liverpool Bay/ Bae Lerwpl SPA, Sefton Coast SAC and Ribble and Alt Estuaries SPA/ Ramsar and Martin Mere SPA/ Ramsar as it is these European designated sites that are most likely to be affected by development in the Liverpool City Region Combined Authority Area due to their proximity to the LCRCA boundary.

## 5. Key Evidence

- 5.1 Where present, current and relevant, existing and emerging evidence and stakeholder knowledge will be drawn upon to inform the Habitats Regulations Assessment of the emerging SDS. The following discussion identifies existing evidence and includes a summary of its relevance to the SDS HRA. This is a live list and will be updated as necessary during the HRA process.

### Recreational Pressure

- 5.2 All of the Local Plans across the Liverpool City Region (LCR) include housing targets and policies for tourism which have the potential to increase recreational pressure on designated sites. In recognition of this, work is ongoing in the preparation of a Recreation Mitigation Strategy (RMS) which is due to be completed and implemented at the earliest June 2023 (timescale revised due to Covid pandemic restrictions). LCR authorities bringing forward Local Plans prior to that date are to prepare and implement an 'Interim Approach' that demonstrates avoidance and mitigation of recreational effects on European sites. The most advanced of these currently is that for Liverpool, with Halton developing their equivalent.
- 5.3 Recently submitted Local Plans have also set out a commitment to finalising and adopting the RMS – these Local Plans are Liverpool, Halton and St Helens and Wirral intend to make the same commitment in their Regulation 19 consultation later this summer.
- 5.4 Merseyside Environmental Advisory Service (MEAS) are also in the process of preparing a recreational mitigation strategy evidence report, due to be published in late 2021 (draft v.23 published March 2021 as part of Halton Local Plan examination documents).
- 5.5 A study on recreational activity on the north-west coast found that 97% of recreational visitors to the north-west coastal European sites and SSSIs were on a short visit directly from home and interviewees visiting directly from home typically lived within a short radius of the survey point (a mean distance of 5.3 km). Half of these interviewees lived within 1.9 km (median value) and three quarters within 5.2km. For the Mersey Estuary SPA, 75% of people visiting the site from home lived within 8.3km of the survey point, although this was only based on a single survey location. Most of these lived along the coast, within easy access of the coast (e.g. clear line along the A595) or within highly populated areas (e.g. Liverpool):
- Liley, D., Panter, C., Marsh, P. & Roberts, J. (2017) Recreational activity and interactions with birds within the SSSIs on the North-West coast of England<sup>69</sup>.
- 5.6 A study on the recreational users of Sefton's Natural Coast estimated that half of the recreational users to be 'local residents' (i.e. residents within the Borough of Sefton). With respect to reasons for visiting the coast the main reason cited by over half of the respondents was either dog walking/walking/fresh air or visiting the coast. Nature based attractions including visiting the red squirrels, bird watching, and fishing accounted for approximately 20% of the visitors. The majority of visitors were focused on Formby and Crosby.
- 5.7 The study did not explore where the remaining 50% of visitors (i.e. not local residents from Sefton) came from. However, since Liverpool is located just 4.5km from the Sefton Coast SAC at its closest point it is considered likely that Liverpool will be one of the primary sources of visitors to the SAC from the LCR, after Sefton itself:
- England's North West Research Service for Economic Development and Tourism (May 2009) Sefton's Natural Coast Local Users of the Coast (Version 2)
- 5.8 Actions AR1 AND AR2 of the Sefton Coast Plan commit to production of a Visitor Management Strategy (VMS). The Sefton Coast Plan includes an outline of the contents of the VMS, a

<sup>69</sup> <http://publications.naturalengland.org.uk/publication/5473987963650048>

timetable for its production and proposals for monitoring its delivery and effectiveness. The Sefton Coast Plan therefore provides a framework to deliver measures to mitigate increased recreational pressure in the Sefton Coast SAC and Ribble & Alt Estuaries SPA and Ramsar sites that would arise from LCRCA growth:

- <https://modgov.sefton.gov.uk/documents/s70764/Appendix%201.%20Sefton%20Coast%20Plan.pdf>
- 5.9 After observing large numbers of people travelling to locations along its 22-mile coastline, during fine weather Sefton Council also drew up a Coastal Action Plan. Although focusing on 2020, many of the actions are 'ongoing':
- SMBC (2020) Summer 2020 Coastal Gateway Visitor Action Plan
- 5.10 Access to greenspace in the LCR provides an opportunity for maintaining physical and mental wellbeing. LCR has devised a natural capital baseline to support the LCRCA and Local Authorities (LA) to engage with and manage funds created by natural capital policy mechanisms and to enhance the economic and social wellbeing of the LCRCA. This natural capital baseline can also be used to target Green Infrastructure (GI) delivery across the region, providing a multi-functional GI approach across the LCR to feed into future mitigation for recreation:
- [LCR-Natural-Capital-Baseline-Report.pdf \(liverpoolcityregion-ca.gov.uk\)](#)

## Functionally Linked Habitat

### Avian Sites

- 5.11 Natural England (NE) with support from MEAS has carried out a Functionally Linked Habitat mapping exercise, the results of which are expected in late 2021. This report will help inform local plans by identifying important supporting habitats and opportunities for habitat creation and enhancement.
- 5.12 In order to identify important areas of functionally linked habitat, the following reports will be utilised:
- Natural England Commissioned Report NECR172. 2015. Waterbird population trend analysis of the Mersey Estuary SPA, Mersey Narrows & North Wirral Foreshore pSPA and Ribble & Alt Estuaries SPA;
  - Natural England Commissioned Report NECR173. 2015. Review and Analysis of Changes in Waterbird Use of the Mersey Estuary SPA, Mersey Narrows & North Wirral Foreshore pSPA and Ribble & Alt Estuaries SPA;
  - Assessment of Supporting Habitat (Docks) for Use by Qualifying Features of Natura 2000 Sites in the Liverpool City Region, Ornithology Report, TEP Version 3.0, Ref 4157 005. August 2015;
  - The Lancashire Bird Reports <https://lacfs.org.uk/publications/>; and
  - Halton HRA Bird Surveys on behalf of Halton Borough Council: Non-Breeding Bird Surveys – Interim Report 1 September – mid-November 2018. Avian Ecology.
- 5.13 The aforementioned TEP study identified that features such as the docks within Liverpool are used by bird features associated with European sites. Similarly, the study by Avian Ecology identified functionally linked habitat within the Halton District around the River Mersey.
- 5.14 In addition to utilising the reports listed above, the following organisations' web-sites will be reviewed for publicly available information that they may be able to provide on functionally linked habitat:
- Dee Estuary Bird Club;
  - Lancashire & District Bird Society; and

- Cheshire and Wirral Ornithological Society (CAWOS).
- 5.15 Natural England Impact Risk Zones for each SSSI and guidance that underlies those zones will be utilised. The main document of reference is:
- Natural England (2019). Impact Risk Zones Guidance Summary Sites of Special Scientific Interest Notified for Birds. Version 1.1
- 5.16 This identifies the typical distances that wintering waterfowl will travel from their SPAs to forage. Relevant Impact Risk Zones are identified as follows:

**Table 3 Natural England Impact Risk Zones for Designated Bird Features**

Assemblage	Impact Risk Zone (foraging distance)
Wintering birds (except wintering waders and grazing wildfowl; wigeon and geese)	Up to 500m
Dabbling ducks such as teal, mallard and gadwall	Home ranges could extend beyond site boundaries at coastal sites, but less likely to do so at inland water bodies.
Wintering waders (except golden plover and lapwing), brent goose & wigeon	Maximum foraging distance is 500m
Wintering lapwing and golden plover	Maximum foraging distance is 15-20km.  Golden plover can forage up to 15km from a roost site within a protected site. Lapwing can also forage similar distances. Both species use lowland farmland in winter and it is difficult to distinguish between designated populations and those present within the wider environment.  Developments affecting functionally linked land more than 10km from the site are unlikely to impact significantly on designated populations.
Wintering white-fronted goose, greylag goose, Bewick's swan, whooper swan, pink-footed goose & wintering bean goose	Maximum foraging distance is 10km although studies have shown that pink-footed geese will fly 20km from their roosting site to feed <sup>70</sup> .  A bespoke functional land IRZ has replaced the individual Birds 6/7 IRZs for sites supporting the following goose and swan species: pink-footed geese, barnacle goose, Bewick's swan, white-fronted goose and whooper swan.  The IRZ is based on GIS distribution records of feeding pink-footed geese from a study undertaken for Natural England by the Wildfowl & Wetlands Trust <sup>71</sup> and the results of work undertaken by the British Trust for Ornithology to identify functionally connected habitat used by barnacle goose, Bewick's swan, white-fronted goose and whooper swan based on WeBS site and BirdTrack data and focuses on only the areas of land that we know are being used as functional habitat by designated populations
5.17 Wetland Bird Survey (WeBS) Core Count data for sectors outside the European sites will also be analysed in order to identify areas of functionally linked habitat.	

<sup>70</sup> <https://monitoring.wwt.org.uk/wp-content/uploads/2018/12/Mapping-feeding-Pinkfeet-in-England-Final-report-vFinal.Jan15-2.pdf> [accessed 14/04/2021]

<sup>71</sup> Ilib

## Water Quality

- 5.18 Water quality has been raised as a potential linking impact pathway between the SDS and the coastal waters of the LCR. Relevant pollutants include non-toxic chemicals such as phosphorus and nitrogen. They are essential nutrients for plant growth but in excess can affect the nutrient status of the waterbody and may cause eutrophication (excessive microbial and vegetative growth) if other environmental conditions are suitable, such as sufficiently low suspended sediment load to allow light penetration for growth, sufficiently warm water temperatures to allow rapid growth during the summer and sufficiently low wave action or adequately sheltered conditions to prevent the breakup of smothering algal mats during the winter. In coastal waters nitrogen is generally the primary growth-limiting nutrient.
- 5.19 Nitrogen and phosphorus enter the estuarine environment via point or diffuse sources. Point sources are generally consented discharges and a direct result of human activities including; sewage effluent from treatment works (WwTWs), discharges from some industrial processes (including detergents and fertilizers), agricultural fertiliser and animal waste. Diffuse inputs originate from both natural and anthropogenic sources. These comprise run-off/leaching from the land catchment (either directly into estuaries and coastal waters or via rivers and groundwater), atmospheric deposition, imports from off-shore waters and nitrogen fixation by plant life. Some forms of nitrogen, such as ammonia, are both directly toxic and contribute to eutrophication.
- 5.20 However, the estuaries of north-west England have a high sediment load, low water temperatures and high wave action. As such, smothering macroalgal growth is generally not an issue for these European sites.
- 5.21 The following on-line resource will be utilised to inform the HRA:
- <http://environment.data.gov.uk/catchment-planning/>
- 5.22 In September 2020 Defra and Natural England announced a £3.9m nitrate trading platform which will allow developers to build new housing schemes in nitrate sensitive areas<sup>72</sup>. Launched in south-east Hampshire, the scheme may be extended nationally. An online 'nitrate trading' auction platform was launched which will allow housing developers to buy nitrate credits, with the proceeds used to create new habitats. The nitrate trading platform pilot will be delivered jointly with the Ministry for Housing, Communities and Local Government, Natural England and the Environment Agency. If successful, it will be rolled out nationally, over the next two years and would be incorporated into the emerging SDS.

## Other Key Evidence

- United Utilities Water Resource Management Plan. This plans for water provision across the LCRCA area to 2045 and are based on robust population projections that take account of climate change. The plan has been subjected to its own HRA.
  - Site Improvement Plans (noting that these can be out of date), detailed Conservation Objectives and Supplementary Advice
  - Bespoke reports / data to support the production of the Habitats Regulations Assessment such as traffic modelling forecasts and associated air quality assessments.
  - Draft Liverpool City Region Combined Authority Initial Air Quality Action Plan (2019). This document supports existing action by the local authority partners and other bodies across the city region to tackle the problem of poor air quality. It sets out a vision and series of actions to improve air quality.
- 5.23 Regarding air quality impacts from traffic, the extent to which this can be explored in detail at the SDS level will depend upon the availability of traffic and air quality modelling for the intended growth scenario(s). In turn this will depend upon the level of detail available to the traffic modellers concerning the distribution of growth, noting that the SDS will be identifying broad

<sup>72</sup> <https://deframedia.blog.gov.uk/2020/09/11/environment-minister-and-natural-england-chair-launch-wildlife-protection-plan-to-unlock-hampshire-housebuilding/> [accessed 14/04/2021]

growth areas but not making site allocations. To undertake detailed air quality modelling for growth scenarios it would be necessary to have, from the traffic modellers:

- 24hr Annual Average Daily Traffic, average vehicle speeds and percentage heavy duty vehicles for each growth scenario for each of the following:
- Baseline
- Do Minimum (i.e. end of plan period without the SDS but including growth from other sources including surrounding local authorities)
- Do Something (i.e. end of plan period with the SDS and growth from other sources including surrounding local authorities)

5.24 This would be required for every significant road within 200m of relevant European sites i.e. A565 Liverpool Road past The Dee Estuary SAC, Coastal Road and Marine Drive running adjacent to the Sefton Coast SAC and the M62 past Manchester Mosses SAC. If these data are not available then there is no way that the air quality impact of growth can be modelled. It is unknown at this stage whether that level of detail will be available, although it appears to be unlikely.

5.25 Therefore, the HRA will need to undertake a high-level assessment of potential air quality issues, identifying a strong sustainable travel framework for the SDS and the possible need for further multi-authority strategic mitigation to be developed. Individual Local Plans would then undertake more detailed assessments along the lines discussed above in their Local Plan HRAs. However, the HRA of the SDS could seek to define the recommended parameters of that down-the-line assessment for Local Plans, taking care to ensure that anything identified at the SDS level can be taken on board in Local Plans and their HRAs. It would be advisable for the LCRCA authorities to collaborate on a transport model to inform each Local Plan, to avoid a proliferation of traffic models examining impacts on the same European sites.

5.26 For the purposes of the SDS HRA it will be possible to identify the very broad areas that may be most likely to have air quality impacts on those European sites of greatest sensitivity to traffic related air quality (specifically Sefton Coast SAC, Dee Estuary SAC and Manchester Mosses SAC) if they are focal areas for growth. However, it is impossible to quantify the impact without being able to quantify the precise location of growth and the associated trip distribution across the road network

## 6. Other Plans and Projects

6.1 Other plans and projects that will be considered when undertaking the Habitats Regulations Assessment include<sup>73</sup>:

- Existing LCRCA strategies and plans:
  - Year One Climate Action Plan 2021/22
  - LCR Sustainable Energy Action Plan, 1<sup>st</sup> Edition
  - LCRCA Building Back Better – Improving our Air Quality, December 2020
  - LCRCA Local Industrial Strategy Draft, 2020
  - LCRCA Rights of Way Improvement Plan 2018 – 2028
  - LCRCA Local Cycling and Walking Infrastructure Plan (LCWIP)
  - Merseytravel LCR Bus Strategy
  - LCRCA Transport Plan – June 2019
  - LCRCA Long Term Rail Strategy
  - LCRCA Local Journeys Strategy
  - LCR Road Safety Strategy
  - LCRCA Housing Statement 2019 – 2024
  - LCRCA Statement of Cooperation on Local Planning
- Local Plan documents for authorities within the LCRCA area and those of surrounding authorities:
  - Liverpool Local Plan 2018 (Post-examination and preparing for Main Modifications consultation)
  - Submitted St. Helens Local Plan
  - St. Helens Core Strategy Local Plan (adopted 2012)
  - Bold Forest Park Area Action Plan (adopted 2017)
  - Sefton Local Plan (adopted 2017)
  - Lydiate Neighbourhood Development Plan 2017 – 2030 (2016)
  - Maghull Neighbourhood Plan 2017 – 2037 (2019)
  - Knowsley Local Plan Core Strategy (adopted 2016)
  - Wirral Local Plan (in preparation)
  - Submitted Halton Local Plan
  - Liverpool John Lennon Airport Masterplan to 2050 (March 2018)
  - Mersey Ports Masterplan (Consultation draft; June 2011)
  - Flintshire Local Development Plan Preferred Strategy November 2017
  - Hoylake Vision A Hoylake Neighbourhood Development Plan 2015-2020
  - Denbighshire Local Development Plan (adopted 2013);

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<sup>73</sup> Full detail of the documents to be drawn upon will be updated when the HRA itself is undertaken. This is because documents may change over time as consultation stages progress.



- Wrexham Local Plan (submission stage)
- Conwy Local Development Plan 2013
- The Trafford Core Strategy (adopted 2012)
- Warrington Local Plan (in development)
- West Lancashire Local Plan Adopted 2013
- Adopted Cheshire West and Chester Local Plan
- Warrington Local Plan Core Strategy (adopted 2014)
- Transport Plan documents
  - The third Local Transport Plan for Merseyside (2011); covers the LCRCA Area
- Minerals and Waste Plans
  - Joint Merseyside & Halton Waste Local Plan Adopted 2013
  - Greater Manchester Joint Waste Plan updated 2015
- Water Resource Management Plans
  - Part 1 North West River Basin District River Basin Management Plan (updated 2015)<sup>74</sup>
  - Alt / Crossens Catchment Flood Management Plan (adopted 2009)
  - United Utilities Water Resources Management Plan 2019-2045
  - Dee River Basin Management Plan 2015 – 2021<sup>75</sup>
- Coastal and Marine Plans
  - North West England & North Wales Shoreline Management Plan 2 (SMP 22 Great Ormes Head to Scotland) (2011), incorporating: Great Ormes Head to Formby Point Shoreline Management Plan, and Formby Point to River Wyre Shoreline Management Plan
  - Sefton Coast Plan 2030 and beyond (consultation draft, 2016);
  - North West Marine Plan (to be adopted in 2021).
  - Welsh National Marine Plan (November 2019);
- Individual Projects
  - Peel Waters: Wirral and Liverpool Waters
  - Mersey Ports
  - Alexandra Dock Biomass Project (currently at pre-application stage)
  - Leasowe Cockle Fishery (included as may be an ongoing project subject to review)
  - Wallasey Embankment, Leasowe Toe Protection Works
  - Awel y Môr Offshore Wind Farm (currently at pre-application stage)

6.2 It should be noted that rather than undertaking HRA of the individual projects and plans listed above, the SDS HRA will draw upon those HRAs of the projects and plans listed above in drawing its conclusions.

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<sup>74</sup> This plan will be undergoing a 'refresh' in the near future led by the Environment Agency (pers. comm. MMO Marine Planner, email dated 17/05/2021))

<sup>75</sup> The 2021 – 2027 Plan is currently open for consultation until 22 June 2021

## 7. Next Steps

- 7.1 It is the intention of this document to present the initial scoping exercise to the relevant stakeholders, including Natural England. At this stage we would be interested in stakeholder comments on the proposed approach and of any further scoping details that require inclusion or mention in the subsequent appropriate assessment.

# Appendix A

## Figure A1: Location of European Designated Sites in relation to the Liverpool City Region Combined Authority Area.

