
Asland Walks Energy Park

on behalf of The Bretherton Energy Co-Operative and GA Pet Food Partners

Appendix 7: Report to Inform a Habitats Regulations Assessment



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1 PURPOSE OF REPORT

- 1.1.1 This report has been produced to assist in the undertaking of a Habitats Regulations Assessment (HRA) by the relevant Competent Authority (Chorley Council) for the proposed installation of a solar and wind energy park, together with associated infrastructure (the 'Proposed Development') on land at Plocks Farm near Bretherton, Lancashire (termed the 'Site'), as illustrated on the Site Location Plan (**Figure 1** of the Ecological Assessment Report). The Site's central grid reference is SD 4607 1933..
- 1.1.2 It provides the Competent Authority with the necessary ecological information regarding the Proposed Development with respect to its potential for Likely Significant Effects (LSEs) upon the qualifying features of European sites in the UK.
- 1.1.3 The Proposed Development includes the construction, operation and subsequent decommissioning of a single turbine, solar photovoltaic (PV) solar array and associated infrastructure, as illustrated on Site Layout Plan ( wing numbers XXXXXXXX), for a period of 30 years.

2 LEGISLATIVE BACKGROUND

- 2.1.1 Council Directives 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive') and 2009/147/EC on the conservation of wild birds (the 'Birds Directive') provide for the designation of sites for the protection of certain species and habitats – Special Area of Conservations (SACs) and Special Protection Areas (SPAs). Such sites designated under the Directives together with Ramsar sites (Wetlands of International Importance) are collectively termed 'European sites' and form part of a network of protected sites across Europe, known as the Natura 2000 Network.
- 2.1.2 In the UK, the Conservation of Habitats and Species Regulations (2017) (the '2017 Regulations') transpose the Habitats and Birds Directives into national law. Changes were made to the 2017 Habitats Regulations by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (the '2019 Regulations'). The 2017 and 2019 Regulations are collectively referred to as the 'Habitats Regulations'.
- 2.1.3 Under the amendment made by the 2019 Regulations SACs and SPAs in the UK no longer form part of the EU's Natura 2000 network, but form part of a National Site Network. The National Site Network includes:
- existing SACs and SPAs; and,
 - new SACs and SPAs designated under the 2019 Regulations.
- 2.1.4 Ramsar sites do not form part of the National Site Network, but many overlap with SACs and SPAs, and may be designated for the same or different qualifying features. Under UK Planning Policy, Ramsar sites are afforded the same protection as European sites.
- 2.1.5 As a Competent Authority, an assessment under the Habitats Regulations, known as a Habitats Regulations Assessment (HRA), must be carried out to test if a project or plan could significantly effect the qualifying features of a European site, in order to decide whether to approve the project or plan.
- 2.1.6 The Competent Authority may only approve a project or plan, where it can be concluded that it will not adversely affect the integrity of a European site. The exception to this is where there are Imperative Reasons of Overriding Public Interest (IROPI) and there are no other feasible alternatives, which would not affect the integrity of the European site. In this case the competent authority must assess all compensatory measures required to ensure the protection of the overall coherence of the National Site Network.

2.1.7 This HRA process can involve up to four stages, as summarised in Box 1.

Box 1 Stages of Habitats Regulations Assessment

Stage 1 – Screening:

This stage identifies the likely impacts upon a European Site of a project or Plan, either alone or 'in combination' with other projects or plans, and considers whether these impacts are likely to be significant.

Stage 2 – Appropriate Assessment:

Where there are likely significant impacts, this stage considers the impacts of the Plan or project on the integrity of the relevant European Sites, either alone or 'in combination' with other projects or plans, with respect to the sites' structure and function and their conservation objectives. Where there are adverse impacts, it also includes an assessment of the potential mitigation for those impacts.

Stage 3 – Assessment of Alternative Solutions:

Where adverse impacts [on the integrity of the site] are predicted, this stage examines [whether or not there are] alternative ways of achieving the objectives of the project or Plan that avoid adverse impacts on the integrity of European Sites.

Stage 4 – Assessment Where No Alternative Solutions Exist and Where Adverse Impacts Remain:

This stage assesses compensatory measures where it is deemed that the project or Plan should proceed for imperative reasons of overriding public interest (IROPI).

- 2.1.8 Stages 1 and 2 are covered by Regulation 63 and Stages 3 and 4 are covered by Regulation 64 and 68 of the Habitats Regulations.
- 2.1.9 With respect to Stage 2, the integrity of a European Site relates to the site's conservation objectives and has been defined in guidance as "the coherent sum of the site's ecological structure, function and ecological processes, across its whole area, which enables it to sustain the habitats, complex of habitats and/or populations of species for which the site is designated"¹. An adverse effect on integrity, therefore, is likely to be one which prevents the site from making the same contribution to favourable conservation status for the relevant qualifying feature as it did at the time of designation.
- 2.1.10 The HRA screening process of Stage 1 uses the threshold of LSE to determine whether effects on European sites should be the subject of further assessment. The Habitats Regulations do not define the term LSE. However, in the Waddenzee case (Case C127/02)², the European Court of Justice found that an LSE should be presumed and an Appropriate Assessment (AA) carried out if it cannot be excluded on the basis of objective information that the plan or project will not have significant effects on the conservation objectives of the site concerned, whether alone or in combination with any other project. The Advocate General's opinion of the Sweetman case (Case C-258/11)³ further clarifies the position by noting that for a conclusion of an LSE to be made "there is no need to establish such an effect...it is merely necessary to determine that there may be such an effect" (original emphasis).

¹ Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, at section 4.6.3 (Updated Version, November 2018)

² Judgment of the Court (Grand Chamber) of 7 September 2004. Landelijke Vereniging tot Behoud van de Waddenzee and Nederlandse Vereniging tot Bescherming van Vogels v Staatssecretaris van Landbouw, Natuurbeheer en Visserij. Reference for a preliminary ruling: Raad van State - Netherlands. Case C-127/02

³ Judgment of the Court (Third Chamber), 11 April 2013 Peter Sweetman and Others v An Bord Pleanála. Request for a preliminary ruling from the Supreme Court (Ireland) Case C-258/11

- 2.1.11 For the reasons highlighted above the assessment process follows the precautionary principle throughout and the word ‘likely’ is regarded as a description of a risk (or possibility) rather than in a legal sense an expression of probability.
- 2.1.12 Screening can be used to screen-out European sites and elements of works from further assessment, if it is possible to determine that significant effects are unlikely (e.g., if sites or qualifying features are clearly not vulnerable (exposed and / or sensitive) to the outcomes of the proposal due to the absence of any reasonable impact pathways).
- 2.1.13 The screening process has two potential conclusions, namely that a project or plan, alone or in combination with other developments, could result in:
- No LSE on any of the qualifying features of the European site; or
 - LSE identified, or cannot be ruled out, on one or more of the qualifying features of the European site.
- 2.1.14 Only the second of these outcomes will trigger an AA. If one or more LSE are identified, or cannot be ruled out, it is then necessary to proceed to Stage 2 and undertake an AA.
- 2.1.15 On 12 April 2018, the Court of Justice of the European Union (CJEU) issued a judgment on Case C323/17 (People over Wind, Peter Sweetman v Coillte Teoranta)⁴ which stated (at paragraph 41):
- “Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects [mitigation] of the plan or project on that site.”*
- 2.1.16 This means that any mitigation relating to protected sites will no longer be considered at the screening stage but taken forward and considered at the appropriate assessment stage to inform a decision on whether no adverse effects on site integrity can be demonstrated.
- 2.1.17 The assessment provided within this report takes into account the CJEU ruling on ‘People over Wind’ and the precautionary principle has been applied as per Waddenzee case.

⁴ Judgment of the Court (Seventh Chamber) of 12 April 2018 People Over Wind and Peter Sweetman v Coillte Teoranta Request for a preliminary ruling from the High Court (Ireland) Case C-323/17.

3 INFORMATION TO INFORM THE ASSESSMENT

3.1 Site Description

- 3.1.1 The Main Site comprises a parcel of arable land bordered with grassland strips and watercourses. The River Douglas runs directly along the eastern Site boundary, with the Leeds and Liverpool Canal located along the western Site boundary.
- 3.1.2 Access to the Main Site is from the north via A59, as well as from the south of the Site via Eyes Lane. Two proposed cable routes are included in the Site boundary. One heads north from the Main Site parcel and connects to the GA Pet Food Ltd manufacturer, whilst the other heads north-east to connect to a proposed substation through Bretherton.
- 3.1.3 The area surrounding the Site comprises farmland, scattered woodlands and residential housing. Tarleton village is located north-west of the Site (separated by the Leeds and Liverpool Canal), with Bretherton village located within the Site's north-eastern proposed cable route.

3.2 Project Description


- 3.2.1 The Proposed Development is for the construction and operation of single wind turbine, solar farm and battery energy storage with associated infrastructure (Asland Walks Energy Park), as shown on the Site Layout Plan, presented in **Figure 1** of the Ecological Assessment Report, and  wing Numbers XXXXXX.
- 3.2.2 The Proposed Development includes associated access, landscaping and infrastructure. The solar farm would be capable of generating up to 12 MW (AC) of electricity, with the addition of a single proposed wind turbine that can generate 4.2 MW (AC) and battery storage of 5 MW (AC). The combined renewable energy resource of Asland Walks Energy Park would be 21.2 MW (AC). The solar panel array is situated within the southern section of the Main Site and comprises 11.80 ha. HV cable routes are proposed to be laid in 1 m deep trenches and to be passed under the River Douglas in two locations using Horizontal Directional Drilling (HDD).
- 3.2.3 The turbine specification for the Enercon E-138 model is outlined in **Table 3.1** below.

Table 3.1: Proposed Turbine Parameters

Enercon E-138	
Hub height	110.64m
Blade diameter	138m
Maximum height to blade tip	179.8m
Number of blades	3

- 3.2.4 The HV cable routes are proposed to be laid in 1 m deep trenches and to be passed under the River Douglas in two locations using Horizontal Directional Drilling (HDD).
- 3.2.5 The Proposed Development is not directly connected to or necessary for the management of any European site and is considered to be a 'Project' under the provisions of the Habitats Regulations.

3.3 European Sites

- 3.3.1 A statutory designated site plan is provided in **Figure 2** of the Ecological Assessment Report. All European sites within 2km or where connectivity exists (e.g., via watercourses) were considered, extended to 20km where migratory bird (e.g. geese and swan) qualifying features are present and to 30km for SAC's with bats as a qualifying feature.
- 3.3.2 The Site is not located within any European site, with no such sites present within 2km of the Site or considered to have connectivity to the Site.
- 3.3.3 While no European or Ramsar sites are present within 2km of the Site, several European sites with migratory ornithological qualifying features are located within 20km of the Site. The Site is located approximately 4.35 km south-east of the Ribble and Alt Estuaries SPA / SPA Marine Components (GB) and Ramsar site (5.08 km from Main Site), as well as 4.94 km north-east of the Martin Mere SPA and Ramsar site. These sites are designated for a number of qualifying bird species, including some species which are alone qualifying breeding and migratory species, and others which can form part of a qualifying non-breeding waterbird assemblage. Liverpool Bay / Bae Lerpwl SPA is also located approximately 13.60 km west of the Site.
- 3.3.4 The Site is therefore within the core wintering foraging range for SPA/Ramsar site associated geese and swan species, upon which potential connectivity may be identified in accordance with NatureScot guidance (2016⁵). It is therefore considered that some of the qualifying interests for which these European sites are designated for may rely on habitats outside of the designated sites boundaries. Critically, such habitats (also known as functionally linked land (FLL)) can play an essential role in maintaining SPA/Ramsar site bird populations, and proposals affecting these habitats and/or the birds /populations using them may therefore have the potential to affect the integrity of the European Site.
- 3.3.5 **Table 3.2** below identifies all relevant European and Ramsar sites within 20km of the Site and outlines their qualifying features, as described within the corresponding *European Site Conservation Objectives* document and *Information Sheets on Ramsar Wetlands* for the Sites, presented in **Annex 1**.
- 3.3.6 There are no SACs designated for bats within 30km of the Site.

Table 3.2: European sites qualifying features.

European Site	Approximate Distance and Direction from Main Site	Approximate Distance and Direction from Site Cable Routes	Qualifying Features
Ribble and Alt Estuaries SPA / SPA Marine Components (GB)	5.08 km north-west	4.35 km north-west	<p>Qualifying features comprise:</p> <ul style="list-style-type: none"> • Bewick's swan (non-breeding); • Whooper swan (non-breeding); • Pink-footed goose (non-breeding); • Shelduck (non-breeding); • Wigeon (non-breeding); • Teal (non-breeding); • Pintail (non-breeding); • Oystercatcher (non-breeding); • Ringed plover (non-breeding); • Golden plover (non-breeding); • Grey plover (non-breeding);

⁵ SNH (2016) Assessing Connectivity with Special Protection Areas (SPAs). Scottish Natural Heritage (SNH), Inverness.

European Site	Approximate Distance and Direction from Main Site	Approximate Distance and Direction from Site Cable Routes	Qualifying Features
			<ul style="list-style-type: none"> • Knot (non-breeding); • Sanderling (non-breeding); • Dunlin (non-breeding); • Ruff (breeding); • Black-tailed godwit (non-breeding); • Bar-tailed godwit (non-breeding); • Redshank (non-breeding); • Lesser black-backed gull (breeding); • Common tern (breeding); • Waterbird assemblage⁶; and, • Seabird assemblage⁷.
Ribble and Alt Estuaries Ramsar site	5.08 km north-west	4.35 km north-west	<p>Designated under Ramsar criterion 2, 4, 5 and 6. Qualifying species listed as part of qualification under Ramsar Criterion 2, 5 and 6 include:</p> <p>Ramsar criterion 2</p> <ul style="list-style-type: none"> • Natterjack toad. <p>Ramsar criterion 5</p> <p>Wintering bird assemblages of international importance.</p> <p>Ramsar criterion 6</p> <p>Species occurring at levels of international importance:</p> <ul style="list-style-type: none"> • Black-tailed godwit (non-breeding); • Redshank (non-breeding); • Dunlin (non-breeding); • Grey plover (non-breeding); • Knot (non-breeding); • Ringed plover (non-breeding); • Sanderling (non-breeding); • Bar-tailed godwit (non-breeding); • Oystercatcher (non-breeding); • Teal; (non-breeding) • Wigeon (non-breeding); • Pintail (non-breeding); • Pink-footed goose (non-breeding); • Tundra swan (non-breeding); and, • Whooper swan (non-breeding).
Martin Mere SPA	4.94 km south-west	5.87 km south-west	<p>Qualifying features comprise:</p> <ul style="list-style-type: none"> • Bewick's swan (non-breeding);

⁶ The site qualifies under article 4.2 of the Directive (79/409/EEC) as it is used regularly by over 20,000 waterbirds (waterbirds as defined by the Ramsar Convention) in any season. The non-breeding waterbird assemblage includes cormorant, Bewick's swan, whooper swan, pink-footed goose, shelduck, wigeon, teal, pintail, scaup, common scoter, oystercatcher, ringed plover, golden plover, grey plover, lapwing, knot, sanderling, dunlin, black-tailed godwit, bar-tailed godwit, whimbrel, curlew and redshank.

⁷ The site qualifies under article 4.2 of the Directive (79/409/EEC) as it is used regularly by over 20,000 seabirds in any season: The breeding seabird assemblage includes black-headed gull, lesser black-backed gull and common tern.

European Site	Approximate Distance and Direction from Main Site	Approximate Distance and Direction from Site Cable Routes	Qualifying Features
			<ul style="list-style-type: none"> • Whooper swan (non-breeding); • Pink-footed goose (non-breeding); • Teal (non-breeding); • Pintail (non-breeding); and, • Waterbird assemblage⁸.
Martin Mere Ramsar site	4.94 km south-west	5.87 km south-west	<p>Designated under Ramsar criterion 5 and 6.</p> <p>Ramsar criterion 5 Wintering bird assemblages of international importance.</p> <p>Ramsar criterion 6 Species occurring at international levels of importance:</p> <ul style="list-style-type: none"> • Pink-footed goose (passage); • Bewick's swan (wintering); • Whooper swan (wintering); • Wigeon (wintering); and • Pintail (wintering).
Liverpool Bay / Bae Lerpwl SPA	13.60 km west	13.60 km west	<p>Qualifying features include:</p> <ul style="list-style-type: none"> • Red-throated diver (non-breeding); • Common scoter (non-breeding); • Little gull (non-breeding); • Common tern (breeding); • Little tern (breeding); and, • Waterbird assemblage⁹.

3.4 European Site Conservation Objectives

- 3.4.1 A HRA is required to assess if a project (or plan) is likely to have a significant adverse effect on the conservation objectives of a European site.
- 3.4.2 The Conservation objectives of a European site are a statement of standards which must be met to maintain (or restore) the qualifying features of the European Site at (or to) "favourable conservation status" (FCS).
- 3.4.3 The conservation status of a species will be taken as "favourable" when:
- population dynamics data on the species concerned indicate that it is maintaining itself on a long term basis as a viable component of its natural habitat(s);

⁸ Although not definitively specified in SPA citation, waterbird species that make up the assemblage likely to include gadwall, mallard, shoveler, snipe, lapwing, black-tailed godwit and ruff.

⁹ The site qualifies under article 4.2 of the Directive (79/409/EEC) as it is used regularly by over 20,000 waterbirds (waterbirds as defined by the Ramsar Convention) in any season. The non-breeding waterbird assemblage includes cormorant, red-breasted merganser, red throated diver, little gull and common scoter.

- 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.

3.4.4 The conservation objectives of the SPAs listed in **Table 3.2** are provided within Natural England's Conservation Objectives documents for each site^{10, 11, 12} and are to '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.'

3.4.5 Natural England do not produce specific conservation advice packages for Ramsar sites, but where a Ramsar Site overlaps with a SPA it is considered that the SPA conservation advice package provides sufficient information.

3.5 Non-breeding Walk-over Surveys

Methodology

Survey Methodology

- 3.5.1 Full survey methodology is included within **Appendix 2** of the Ecological Assessment Report (*Ornithology Baseline Report*)¹³.
- 3.5.2 Non-breeding walk-over surveys were undertaken twice monthly (roughly fortnightly) between September 2022 to March 2023 (Year 1) and September 2023 to March 2024 (Year 2).
- 3.5.3 The 'Wintering Survey Area' comprised of all habitats within the Site (excluding cable routes) and fields within a 600 m buffer from the Site ('Wider Survey Area').
- 3.5.4 The focus of the surveys was to determine whether the Site and surrounding land is regularly used by species which are defined as a qualifying feature of the European sites, or those part of the European Sites waterbird assemblage.

Assessment of Functional Linkage

- 3.5.5 For the purposes of this report, the importance of the Wintering Survey Area (the Site and Wider Survey Area) for qualifying species of the nearby Ribble and Alt Estuaries SPA/Ramsar site and Martin

¹⁰ <https://publications.naturalengland.org.uk/publication/4868920422957056>

¹¹ <https://publications.naturalengland.org.uk/publication/4833056372293632>

¹² <https://publications.naturalengland.org.uk/publication/5089733892898816>

¹³ Avian Ecology (2025) Asland Walks Energy Park-Appendix 2: Ornithology Baseline Report.

Mere SPA/Ramsar site is assessed using functional linkage, based on current Natural England guidance (2021)¹⁴.

3.5.6 Given the habitats present within the Site and qualifying species present (i.e., seabirds) functional linkage to the Liverpool Bay/ Bae Lerpwl SPA is not assessed.

3.5.7 'Functionally Linked Land' (FLL) is the term used to describe areas of land (or sea) occurring outside a designated site, which are considered important (or necessary) in supporting and/or maintaining the viability of the qualifying features of a European site (i.e. SPA, SAC and/or Ramsar site).

3.5.8 The above report published by Natural England (2021)⁹ mapped potential areas of FLL used by waterbirds comprising qualifying features of European sites in the northwest of England, and defined thresholds for the identification of such areas.

3.5.9 The definition of FLL within the report, developed and agreed with Natural England and RSPB, is 'areas of land occurring within 20km of an SPA⁵, that are regularly used by significant number of qualifying bird species', with:

- a 'significant number' of birds defined as 0.5% of the Great British (GB) population or 1,000 individuals; and,
- 'regular' defined, with reference to Stroud *et al.* (2001)¹⁵, as when a threshold is met in two thirds of the season for which adequate data is available.

3.5.10 This report determines functional linkage using the same 'regular' definition above; however, a 'significant number' for non-breeding birds is based on a more precautionary count of 1% of the non-breeding SPA or Ramsar site population (based on BTO WeBS data¹⁶). Therefore, functional linkage for non-breeding birds is where counts of Component Species (defined below) of the Ribble and Alt Estuaries SPA/Ramsar site and/or Martin Mere SPA/Ramsar site regularly (i.e. over 9 visits in Year 1 and 8 visits in Year 2 per season (66.66%)) exceed 1% of that species' non-breeding SPA population for the Site and/or Wider Survey Area.

3.5.11 Component Species are defined as:

- Non-breeding qualifying species listed on the SPA or Ramsar citation; and,
- Non-breeding waterbird species occurring in numbers exceeding 1% of the national population according to the latest WeBS count (termed Important Component Species).

3.5.12 Component Species are listed in **Table 3.3** below.

Table 3.3: Non-breeding Qualifying species features and Important Component Species of relevant European Sites

European Site(s)	Qualifying Features	Important Component Species (excludes qualifying species)
Martin Mere SPA	<ul style="list-style-type: none"> • Bewick's swan (non-breeding); • Whooper swan (non-breeding); • Pink-footed goose (non-breeding); 	None

¹⁴ Bowland Ecology (2021). *Identification of Functionally Linked Land supporting SPA waterbirds in the North West of England*.

NERC361. Natural England

¹⁵ Stroud, D.A., Chambers, D., Cook, S., Buxton, N., Fraser, B., Clement, P., Lewis, P., McLean, I., Baker, H. & Whitehead, S. (eds). (2001). *The UK SPA network: its scope and content*. JNCC, Peterborough, p56.

¹⁶ SPA populations estimated from latest 5 year average WeBS counts (2019/20 to 2023/24). Available at: <https://app.bto.org/webs-reporting/numbers.jsp> (Accessed 11th September 2025). The Ribble and Alt Estuaries SPA population combines average 5 year BTO data for the Ribble Estuary and Alt Estuary sites, whilst the Martin Mere SPA population is based on 5 year average BTO data at the WWT Martin Mere site.

European Site(s)	Qualifying Features	Important Component Species (excludes qualifying species)
	<ul style="list-style-type: none"> • Teal (non-breeding); • Pintail (non-breeding); 	
Martin Mere Ramsar	<ul style="list-style-type: none"> • Pink-footed goose (non-breeding); • Bewick's swan (non-breeding); • Whooper swan (non-breeding); 	
Ribble and Alt Estuaries SPA	<ul style="list-style-type: none"> • Bewick's swan (non-breeding); • Whooper swan (non-breeding); • Pink-footed goose (non-breeding); • Shelduck (non-breeding); • Wigeon (non-breeding); • Teal (non-breeding); • Pintail (non-breeding); • Oystercatcher (non-breeding); • Ringed plover (non-breeding); • Golden plover (non-breeding); • Grey plover (non-breeding); • Knot (non-breeding); • Sanderling (non-breeding); • Dunlin (non-breeding); • Black-tailed godwit (non-breeding); • Bar-tailed godwit (non-breeding); • Redshank (non-breeding); 	<ul style="list-style-type: none"> • Lapwing • Common scoter • Curlew • Cormorant • Shoveler • Avocet • Little egret • Whimbrel
Ribble and Alt Estuaries Ramsar	<ul style="list-style-type: none"> • Black-tailed godwit (non-breeding); • Redshank (non-breeding); • Dunlin (non-breeding); • Grey plover (non-breeding); • Knot (non-breeding); • Ringed plover (non-breeding); • Sanderling (non-breeding); • Bar-tailed godwit (non-breeding); • Oystercatcher (non-breeding); • Teal (non-breeding); • Wigeon (non-breeding); • Pintail (non-breeding); • Pink-footed goose (non-breeding); • Bewick's swan (non-breeding); and, • Whooper swan (non-breeding). 	
Liverpool Bay / Bae Lerpwl SPA	<ul style="list-style-type: none"> • Red-throated diver (non-breeding); • Common scoter (non-breeding); • Little gull (non-breeding); 	None

3.5.13 For the purposes of this report, functional linkage for any of the Important Component Species of the SPA/Ramsar site's waterbird assemblages was determined where at least one of the following thresholds were 'regularly' reached for the Wintering Survey Area as a whole:

- 1%, or more of an Important Component Species' SPA population; and,
- Cumulatively over 2,000 individuals of an Important Component Species.

3.5.14 The assessment of functional linkage was also extended to the broader waterbird assemblages of the Ribble and Alt Estuaries SPA/Ramsar site and Martin Mere SPA/Ramsar site. The threshold for the waterbird assemblage was considered to have been met when over 2,000 individual waterbirds were observed.

- 3.5.15 The breeding seabird assemblage of the Ribble and Alt Estuaries SPA/Ramsar site, and the individual Important Component Species thereof are not considered here as the surveys undertaken to inform the assessment of functional linkage only covered the non-breeding season.

Results

- 3.5.16 The following describe the Non-breeding Walkover Surveys in terms of the number and proportion of survey visits in which significant numbers of SPA Component Species were recorded, as summarised in **Table 3.4**.

Ribble and Alt Estuary SPA and Ramsar

- 3.5.17 The only Qualifying Species found to exceed the 1% threshold for the Ribble and Alt Estuaries SPA was whooper swan. Whooper swan were recorded in significant numbers on 3 of 14 (21%) surveys in Year 1 but were not recorded in significant numbers in Year 2 and so was not found to occur regularly (i.e., over 66% of surveys).
- 3.5.18 Additionally, the Important Component Species of lapwing and little egret were also recorded in numbers in exceeding the 1% threshold for the Ribble and Alt Estuaries SPA. Significant numbers of lapwing were recorded in 2 of 14 surveys in Year 2 and not recorded in significant numbers in Year 1. Significant numbers of little egret were recorded on 1 of 14 (7%) surveys in Year 1 and 1 of 13 (7%) surveys Year 2.

Martin Mere SPA and Ramsar

- 3.5.19 The only Qualifying Species found to exceed the 1% threshold for the Ribble and Alt Estuaries SPA were pink-footed goose and whooper swan. Pink-footed goose was recorded in significant numbers on 1 of 13 (7%) surveys in Year 2 and not recorded in significant numbers in Year 1. Whooper swan was recorded in significant numbers on 2 of 13 (15%) surveys in Year 1 and not recorded in significant numbers in Year 2. Neither species were found to be regularly occurring (i.e., over 66% of surveys).

Table 3.4: Number of surveys on which 1% threshold was exceeded within the Wintering Survey Area (Site and Wider Survey Area combined)

Species*	Ribble and Alt Estuary SPA/ Ramsar		Martin Mere SPA/ Ramsar	
	Yr 1	Yr2	Yr 1	Yr2
Pink-footed goose ^{M, R}	-	-	-	1 (7%)
Whooper swan ^{M, R}	3 (21%)	-	2 (15%)	-
Teal ^{M, R}	-	-	-	-
Shelduck ^R	-	-	-	-
Golden plover ^R	-	-	-	-
Oystercatcher ^R	-	-	-	-
Redshank ^R	-	-	-	-
Dunlin ^R	-	-	-	-
Curlew ^R	-	-	-	-
Lapwing ^R	-	2 (14%)	-	-
Little egret ^R	1 (7%)	1 (7%)	-	-

* R & M = Qualifying or Important Component Species of Ribble and Alt Estuaries SPA/Ramsar Site or Martin Mere SPA/Ramsar.

Waterbird Assemblage

- 3.5.20 On no occasion did the waterbird assemblage within the wintering Survey Area meet the criteria to be assessed as functionally linked land. Numbers of water birds remained below the 2,000 bird threshold to meet the importance criteria for the Waterbird Assemblage with numbers peaking at 416 birds (excluding gull species) on survey 15.

3.6 Vantage Point Flight Activity Surveys

Methodology

- 3.6.1 Full survey methodology is included within **Appendix 2** of the Ecological Assessment Report (*Ornithology Baseline Report*)¹³, however for the purpose of this report only species listed as non-breeding qualifying features and those included as Important Component Species of the waterbird assemblage of the Ribble and Alt Estuaries SPA/Ramsar site or Martin Mere SPA/Ramsar site (see **Table 3.2**) are considered.
- 3.6.2 VP Flight Activity surveys were carried out between September 2022 and May 2023 (Year 1) and September 2023 and May 2024 (Year 2). A single VP, located at SD 46114 18798, gave an extensive area of visibility of the Site (cable routes excluded), and partially for a 600 m Site buffer (Wider Survey Area).
- 3.6.3 The following height bands (HT) were used in the field to record Target Species activity at, below or above collision risk height for subsequent use in the calculation of collision mortality risks (CMR).
- HT1: 0-25m;
 - HT2: 25-50m;
 - HT3: 50-75m;
 - HT4: 75-100m;
 - HT5: 100-125m;
 - HT6: 125-150m; and,
 - HT7: >150m.

Assessment of Collision Mortality Risk

- 3.6.4 Based on VP flight activity survey results, Collision Risk Modelling (CRM) calculations have been carried out to determine the potential collision mortality impacts upon relevant ornithological interests, as a result of the wind turbine component of the Proposed Development. Only relevant species associated with designated sites are detailed in this report, with full details of CRM provided in **Appendix 6** of the Ecological Assessment Report (*Collision Risk Model Calculations*)¹⁷.
- 3.6.1 Collision mortality estimates have only been calculated for those species for which there is a potential for a significant effect. For species with few at-risk flights and recorded in very low numbers during baseline surveys it can reasonably be predicted that the risk of collision mortality would be very small (i.e. a negligible impact at any population level) and no significant effect can be concluded for these ornithological features without the requirement for undertaking a detailed assessment.
- 3.6.2 For the purposes of the analysis, a Target Species qualified for inclusion in the CRM if there were three or more 'at-risk' flights, or 10 or more individuals, within either baseline survey year (September 2022 to May 2023 (Year 1) or October 2023 to May 2024 (Year 2)).

¹⁷ Avian Ecology (2025) Asland Walks Energy Park-Appendix 6: Collision Risk Model Calculations.

Results

- 3.6.3 Target Species recorded during the Vantage Point Year 1 survey period associated as non-breeding qualifying species of either the Ribble and Alt Estuaries SPA/Ramsar site or Martin Mere SPA/Ramsar site comprised of pink-footed goose, whooper swan, golden plover, oystercatcher, redshank, shelduck and teal. Lapwing, curlew and little egret are classified as Important Component Species the Ribble and Alt Estuary SPA / Ramsar site.
- 3.6.4 Target Species recorded during the Vantage Point Year 2 survey period listed as non-breeding qualifying species of the Ribble and Alt Estuaries SPA and Ramsar and/or Martin Mere SPA and Ramsar comprised of pink-footed goose, whooper swan, golden plover, oystercatcher, redshank, dunlin, shelduck and teal. Important Component Species of the Ribble and Alt Estuary SPA and Ramsar comprised lapwing, curlew and little egret.
- 3.6.5 Following the results of VP surveys, CRM analysis was conducted for seven species that are either listed as non-breeding qualifying species or Important Component Species of the Ribble and Alt Estuaries SPA / Ramsar site and Martin Mere SPA / Ramsar site.
- 3.6.6 Apart from lapwing (1.14), the CRM assessment resulted in an estimated annual mortality of less than one individual bird for all species included in the assessment (cormorant: 0.03; golden plover: 0.06; oystercatcher: 0.03; pink-footed goose: 0.99; shelduck: 0.19; whooper swan: 0.14).

4 POTENTIAL FOR LIKELY SIGNIFICANT EFFECTS (SCREENING)

4.1 Introduction

- 4.1.1 **Table 4.1** provides a summary of the consideration of the potential for LSEs upon the qualifying features of European sites listed in **Table 3.2**.

4.2 Potential Effects upon Habitats of Relevant European Sites

- 4.2.1 This section addresses the potential for effects upon habitat associated with the relevant European sites.
- 4.2.2 The Site does not form part of any European site or is located within 2km of such a site, and therefore there will be no direct effects on any habitats associated with the relevant European sites as a result of the Proposed Development. Similarly, due to the separation distance between such sites it is considered that there is no potential for the degradation of supporting habitats within these European Sites.
- 4.2.3 The potential for LSEs upon habitats associated with the relevant European sites is therefore screened out.
- 4.2.4 Potential effects on supporting habitats of qualifying species are addressed in the relevant section below.

4.3 Potential Effects upon Qualifying Species of European Sites

- 4.3.1 This section addresses the potential for effects upon qualifying species, including species assemblages, of the Ribble and Alt Estuaries SPA / Ramsar site and Martin Mere SPA / Ramsar site, as outlined in **Table 3.2**.
- 4.3.2 Construction will involve limited earthworks and does not require the extensive use of chemicals or materials that pose a notable pollution risk. Following Institute of Air Quality Management guidance¹⁸ impacts of dust on ecological receptors can usually be screened out where they are:
- beyond 50 m of the boundary of the site; and,
 - beyond 50 m of the route(s) used by construction vehicles on the public highway, up to 250 m from the site entrance(s)
- 4.3.3 All relevant SPA and Ramsar sites lie outside of these screening distances and as such no impacts from dust emissions during construction or decommissioning are considered reasonably likely to occur.
- 4.3.4 The potential effects of the Proposed Development relate to the loss of functionally linked land (via disturbance or displacement of qualifying bird features) and turbine collision mortality risks. **Table 4.1** provides a summary of the consideration of the potential for LSEs upon the qualifying species features of European sites listed in **Table 3.2**.
- 4.3.5 No other pathways have been identified.

¹⁸ IAQM (2024) Guidance on the assessment of dust from demolition and construction

Table 4.1: Assessment of LSE.

Qualifying Species Feature(s)	Ribble and Alt Estuaries SPA/ Ramsar
	Potential for Likely significant Effects (LSE)
<ul style="list-style-type: none"> • Qualifying non-breeding bird species • Qualifying breeding bird species • Waterbird assemblage • Seabird assemblage 	<p>The potential for LSEs is considered to arise from:</p> <ul style="list-style-type: none"> • Disturbance on, or displacement from, favoured areas resulting in a reduction in survival (construction, operational and decommissioning phases); • Loss of functionally linked land used by non-breeding ornithological features for foraging and or roosting. Such effects may affect the habitats upon which qualifying features rely, and impact upon the distribution and population sizes within the SPA; • Direct mortality as a result of collision with infrastructure (most especially turbines) (operational phase only). <p>Surveys have demonstrated the Site does not meet the criteria for FLL for any qualifying feature, and so no LSE are considered with regards to permanent loss of FLL.</p> <p>Surveys have identified all assessed Target Species, apart from lapwing, to have an estimated annual mortality of less than one individual following CRM. Such numbers are considered inconsequential relative to the populations of each species' associated with the SPA/Ramsar site and not of sufficient magnitude to give rise to LSE.</p>
Qualifying Species Feature(s)	Martin Mere SPA / Ramsar
	Potential for Likely significant Effects (LSE)
<ul style="list-style-type: none"> • Qualifying non-breeding bird species • Waterbird assemblage 	<p>The potential for LSEs is considered to arise from:</p> <ul style="list-style-type: none"> • Disturbance to non-breeding ornithological features foraging or roosting within adjacent functionally linked land (construction and decommissioning phase). • Loss of functionally linked land used by non-breeding ornithological features for foraging and or roosting. Such effects may affect the habitats upon which qualifying features rely, and impact upon the distribution and population sizes within the SPA (construction and operation). <p>Surveys have demonstrated the Site does not meet the criteria for FLL for any qualifying feature, and so no LSE are considered with regards to permanent loss of FLL.</p> <p>Surveys have identified all assessed Target Species to have an estimated annual mortality of less than one individual following CRM. Such numbers are considered inconsequential relative to the populations of each species' associated with the SPA/Ramsar site and not of sufficient magnitude to give rise to LSE.</p>
Qualifying Species Feature(s)	Liverpool Bay/ Bae Lewpwl SPA
	Potential for Likely significant Effects (LSE)
<ul style="list-style-type: none"> • Qualifying breeding bird species • Qualifying non-breeding bird species • Waterbird assemblage 	<p>Screened out on the basis of spatial separation and absence of suitable habitats for supporting this designated site's qualifying interests which are strongly affiliated with coastal and marine habitats.</p> <p>AA is not required.</p>

Ribble and Alt Estuaries SPA and Ramsar site

- 4.3.6 Due to the shared boundaries and similar qualifying features (i.e., non-breeding ornithological features) the Ribble and Alt Estuaries SPA and Ribble and Alt Estuaries Ramsar site are considered together.
- 4.3.7 The following section details the potential for LSE on mobile qualifying interest species.
- 4.3.8 The Proposed Development is located approximately 4.35km from the SPA and Ramsar site, and as such due to physical separation distances there will be no direct or indirect effects to qualifying species or habitats which support such species within the designated site boundaries. Such impacts are screened out.

Non-breeding bird interest and waterbird assemblage

- 4.3.9 Wintering waterbirds regularly roost and forage within habitats beyond European site boundaries for which they are qualifying features, such as those within the Site and Wider Survey Area, and therefore the loss of such habitat in proximity to European sites could impact upon qualifying waterbird features. With the Ribble and Alt Estuaries SPA and Ramsar site located approximately 4.35km from the Site's proposed cable route (5.08km from the Main Site), the Site is therefore located within the core foraging range for associated SPA geese and swan species (with documented range information taken from SNH, 2016⁵), and is considered likely to also be within the foraging ranges of other less widely ranging waterfowl species listed as qualifying features of the SPA/Ramsar site.
- 4.3.10 Ornithological surveys have been undertaken on land within and surrounding the Site, with methodologies and results presented in full in the **Appendix 2** of the Ecological Assessment Report (*Ornithology Baseline Report*)¹³.
- 4.3.11 The presence of solar panels within the Main Site may physically displace non-breeding qualifying species or Important Component Species of the Ribble and Alt Estuaries SPA/ Ramsar site. Similarly, construction activity and the presence of the proposed wind turbine may result in displacement of birds through noise and visual disturbance.
- 4.3.12 As detailed above, results of the non-breeding walk-over surveys indicated the land within the Main Site and Wider Survey Area are not regularly utilised by significant numbers of qualifying species or Important Component Species of the Ribble and Alt Estuaries SPA/ Ramsar site, and as such the Wintering Survey Area is not considered to represent FLL of the Ribble and Alt Estuaries SPA/ Ramsar site.
- 4.3.13 Whooper swan, lapwing and little egret were occasionally recorded utilising the Main Site in significant numbers. Considering the baseline agricultural usage of the Main Site and immediate surrounds, it is considered that non-breeding ornithological features will be somewhat habituated to the movement of personnel and machinery and associated noise. Furthermore, it is also considered that movement between areas of arable farmland is a normal behaviour for these species during the non-breeding season. Therefore, given the irregular use of the Main Site it is not considered that displacement would result in a LSE on the populations of the relevant qualifying species of the Ribble and Alt Estuaries SPA/ Ramsar site.
- 4.3.14 Throughout operation there is a risk of collision with the turbine resulting in mortality of birds. However, the annual collision mortality estimates for all qualifying or Important Component Species of the Ribble and Alt Estuaries SPA/ Ramsar site were predicted to represent less than 0.05% of their respective SPA populations. The only species with a predicted mortality of greater than one bird per year was lapwing (1.14). Latest WeBS data indicates that approximately 15,804 lapwing occur within the Ribble and Alt Estuaries WeBS sectors and as such this level of mortality represents approximately 0.007% of the population. These predicted annual mortality rates are considered to be

inconsequential and therefore it is not considered that collision risk would result in a LSE on the populations of the relevant qualifying species of the Ribble and Alt Estuaries SPA/ Ramsar site.

Breeding bird interest and seabird assemblage

- 4.3.15 The Site and surrounding area do not offer suitable breeding habitat for ruff, black-headed gull, lesser black-backed gull and common tern, all of which typically nest in coastal wetland and marine habitats. Due to the absence of suitable breeding or foraging habitat for qualifying breeding bird interests, no LSEs have been identified in relation to breeding bird qualifying features.

Natterjack toad

- 4.3.16 Aside from the Ribble and Alt Estuaries SPA/ Ramsar site's ornithological interests, the Ramsar site is also designated for its natterjack toad population. However, as the Site is located approximately 4.35km from the SPA/Ramsar site and this species is only found in coastal sand dunes, saltmarshes and sandy heathlands which are not present within the Site there is considered to be no risk of LSE to natterjack toad.

Martin Mere SPA and Ramsar

- 4.3.17 Due to the shared boundaries and similar qualifying features (i.e., non-breeding ornithological features) the Martin Mere SPA and Martin Mere Ramsar site are considered together.
- 4.3.18 The following section details the potential for LSE on mobile qualifying interest species.
- 4.3.19 The Proposed Development is located approximately 4.94km from the SPA and Ramsar site, and as such due to physical separation distances there will be no direct or indirect effects to qualifying species or habitats which support such species within the Designated Site boundaries. Such impacts are screened out.

Non-breeding bird interest and waterbird assemblage

- 4.3.20 The Martin Mere SPA is located approximately 4.95km from the Site, and therefore the Site is located within the core foraging range for associated SPA geese and swan species (with documented range information taken from SNH, 2016⁵), and is considered likely to also be within the foraging ranges of other less widely ranging waterfowl species listed as qualifying features of this SPA/Ramsar site.
- 4.3.21 Ornithological surveys have been undertaken on land within and surrounding the Site, with methodologies and results presented in full in **Appendix 2** of the Ecological Assessment Report (*Ornithology Survey Report*).
- 4.3.22 Results of the non-breeding walk-over surveys indicated the land within the Site and Wider Survey Area are not regularly utilised by significant numbers of qualifying species or Important Component Species of the Martin Mere SPA/ Ramsar site, and as such the Wintering Survey Area is not considered to represent FLL of the Martin Mere SPA/ Ramsar site.
- 4.3.23 Pink-footed goose and whooper swan were recorded utilising the Site in significant numbers on occasion. Considering the baseline agricultural usage of the Site and immediate surrounds, it is considered that non-breeding ornithological features will be somewhat habituated to the movement of personnel and machinery and associated noise. Furthermore, it is also considered that movement between areas of arable farmland is a normal behaviour for these species during the non-breeding season. Therefore, given the irregular use of the Main Site it is not considered that displacement would result in a LSE on the populations of the relevant qualifying species of the Martin Mere SPA/ Ramsar site.

- 4.3.24 Pink-footed goose and whooper swan were the only qualifying species of Martin Mere SPA/ Ramsar site which were regularly recorded flying over the Main Site. However, the annual collision mortality estimates for both species were predicted to represent less than 0.05% of their respective SPA populations. These predicted mortality rates are considered to be inconsequential and therefore it is not considered that collision risk would result in a LSE on the populations of these two qualifying species of the tin Mere SPA/ Ramsar site.

Liverpool Bay/ Bae Lerpwl SPA

Non-breeding bird interest and waterbird assemblage

- 4.3.25 Non-breeding birds for which this site is designated, including red-throated diver, common scoter and little gull are restricted to marine, intertidal and wetland habitats, none of which are present within the Site. Due to the absence of suitable habitats for qualifying non-breeding bird interests within the Site, no LSEs have been identified in relation to non-breeding qualifying bird features of Liverpool Bay/ Bae Lerpwl SPA.

Breeding bird interest

- 4.3.26 The Site and surrounding area do not offer suitable breeding habitat for common or little tern, both of which typically nest on shingle beaches. Due to the absence of suitable breeding or foraging habitat for these qualifying breeding bird interests, no LSEs have been identified in relation to breeding bird qualifying features of Liverpool Bay/ Bae Lerpwl SPA.

4.4 Screening Conclusion

- 4.4.1 Based on the assessment presented above, the potential for LSE to occur on the Ribble and Alt Estuaries SPA/ Ramsar site, Martin Mere SPA/ Ramsar site and Liverpool Bay/ Bae Lerpwl SPA and their respective qualifying interests with have been screened out, and as such AA is not required.

5 ASSESSMENT OF IN-COMBINATION EFFECTS

- 5.1.1 Regulation 63 requires that the HRA process must consider the potential for a LSE of a proposed development either alone or in combination with other plans and projects. In-combination effects are subsequently considered to be restricted to potential direct effects from habitat loss and displacement (indirect habitat loss).
- 5.1.2 Due to the very low predicted annual collision rates, the Proposed Development is considered to have an inconsequential impact to relevant SPA populations and hence would not contribute to LSE when considered in combination with other projects.
- 5.1.3 In-combination effects must be practically feasible and interpreted and applied in a proportionate manner. As such, only applications for wind turbines and major schemes resulting in loss of agricultural farmland habitat were considered. Only schemes that are consented or the application is still active are considered, with withdrawn or refused schemes omitted from assessment, unless an appeal is lodged.
- 5.1.4 Review of Chorley Council¹⁹, West Lancashire Borough Council²⁰ and South Ribble Council²¹ identified nine schemes with the potential for cumulative impacts, as outlined in **Table 5.1** below.

Table 5.1: Review of Other Projects for Assessment of In-combination Effects.

Planning Authority and reference	Status	Development Description	Description of cumulative impacts
South Ribble 07/2025/00498/FUL	In determination	Full application for the erection of 140 no. dwellings (Use Class C3), with access, landscaping, and other associated works	No Ribble and Alt Estuaries SPA/Ramsar site qualifying bird species using the application site. Martin Mere SPA/Ramsar site species not specifically assessed however no qualifying species identified.
Chorley 24/00361/FULMAJ	Granted	Section 73 application to vary condition 2 (time limit for removal) attached to planning permission 07/00568/FULMAJ (appeal ref. APP/D2320/A/08/2069152) (Erection of 3 No. wind turbines) to extend the life of the wind farm from 25 years to 45 years.	No HRA or ornithological survey information available. Impacts assumed to be comparable to below original application.
Chorley 07/00568/FULMAJ	Granted	Erection of 3 No. wind turbines	No HRA available. Ornithological survey indicated negligible collision risk for whooper swan (1 in 45,000 flights). Other species not assessed.

¹⁹ https://planning.chorley.gov.uk/online-applications/search.do?action=simple&searchType=Application&_gl=1*18zwbcq*_ga*NzExMTkyNDg1LjE3NTY0NiUxODM.*_ga_E4THJ7TK6M*cze3Nji5NDI2MTkbbzlkZzEkdDE3Nji5NDI4OTIkajQ5JGwwJGgw (Accessed: 12th November 2025).

²⁰ <https://pa.westlancs.gov.uk/online-applications/search.do?action=simple&searchType=Application> (Accessed: 12th November 2025).

²¹ <https://publicaccess.southribble.gov.uk/online-applications>

Planning Authority and reference	Status	Development Description	Description of cumulative impacts
West Lancashire 2020/0933/FUL	Granted	Erection of a single wind turbine on agricultural land at Tawdside Farm for generation of renewable energy for onsite use	No HRA available. Accompanying ecological information concludes no significant impact with mitigation (secured by condition).
Chorley 12/00247/FUL	Granted	Erection of 11 KW Wind Turbine (re-submission of withdrawn application 11/00996/FUL)	No HRA or ornithological survey data available. No assessment of cumulative impacts able to be made.
Chorley 12/00782/FUL	Granted	Application for a two room stable with hay store & tack room with wind turbine (height 7.77m to hub, 8.65 m to blade tip) and poly-tunnel	No HRA or ornithological survey data available. No assessment of cumulative impacts able to be made
West Lancashire 2010/0990/FUL	Granted	Erection of one 10kw 15m high wind turbine	No HRA or ornithological survey data available. No assessment of cumulative impacts able to be made.
West Lancashire 2007/060/FUL	Granted	Erection of wind turbine	No HRA or ornithological survey data available. No assessment of cumulative impacts able to be made.
South Ribble 07/2010/0487/FUL	Granted	Siting of a 18.3m high wind turbine	No HRA or ornithological survey data available. No assessment of cumulative impacts able to be made.

- 5.1.5 Of the applications assessed two (Chorley 07/00568/FULMAJ and South Ribble 07/2025/00498/FUL) included ornithological information from which an assessment of cumulative impacts could be drawn. On review of the information submitted alongside these applications, it has been determined that no LSE are predicted to occur on the Ribble and Alt Estuaries SPA/ Ramsar, Martin Mere SPA/ Ramsar or Liverpool Bay/ Bae Lerpwl SPA when the effects from the Proposed Development are considered in in-combination with other projects.

6 CONCLUSION

- 6.1.1 The Site has not been assessed as FLL due to only irregular use by significant numbers of qualifying species or Important Component Species of the Ribble and Alt Estuaries SPA/ Ramsar or Martin Mere SPA/ Ramsar. Similarly, collision risk to qualifying species and Important Component Species of the aforementioned designated sites from the Proposed Development's single turbine is considered to be insignificant relative to the relevant species' SPA/Ramsar site populations and not of a magnitude that could give rise to LSE.
- 6.1.2 No LSE on either the Ribble and Alt Estuaries SPA/ Ramsar, Martin Mere SPA/ Ramsar or Liverpool Bay/ Bae Lerpwl SPA have been identified as a result of the Proposed Development either alone or in combination with cumulative developments.

ANNEX 1: CITATIONS

Martin Mere SPA

European Site Conservation Objectives for Martin Mere Special Protection Area Site Code: UK9005111



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.

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

- A037 *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding)
 - A038 *Cygnus cygnus*; Whooper swan (Non-breeding)
 - A040 *Anser brachyrhynchus*; Pink-footed goose (Non-breeding)
 - A052 *Anas crecca*; Eurasian teal (Non-breeding)
 - A054 *Anas acuta*; Northern pintail (Non-breeding)
- Waterbird assemblage

ANNEX 1: CITATIONS

Explanatory Notes: European Site Conservation Objectives

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2017 (as amended) ('the Habitats Regulations'). They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives, and the accompanying Supplementary Advice (where this is available), will also provide a framework to inform the management of the European Site and the prevention of deterioration of habitats and significant disturbance of its qualifying features

These Conservation Objectives are set for each bird feature for a [Special Protection Area \(SPA\)](#).

Where these objectives are being met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

Publication date: 21 February 2019 (version 3). This document updates and replaces an earlier version dated 30 June 2014 to reflect the consolidation of the Habitats Regulations in 2017.

ANNEX 1: CITATIONS

Martin Mere Ramsar site

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX.22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

Joint Nature Conservation Committee
Monkstone House
City Road
Peterborough
Cambridgeshire PE1 1JY
UK
Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948
Email: RIS@JNCC.gov.uk

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DD MM YY

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

Designated: 28 November 1985

3. Country:

UK (England)

4. Name of the Ramsar site:

Martin Mere

5. Designation of new Ramsar site or update of existing site:

This RIS is for: Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area:

** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

ANNEX 1: CITATIONS

7. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

- i) **hard copy** (required for inclusion of site in the Ramsar List): *yes* ✓ -or- *no* ☐;
- ii) **an electronic format** (e.g. a JPEG or ArcView image) *Yes*
- iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** *yes* ✓ -or- *no* ☐;

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

8. Geographical coordinates (latitude/longitude):

53 37 24 N 02 52 37 W

9. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Southport

Martin Mere lies between Ormskirk and Southport, close to the village of Burscough.

Administrative region: Lancashire

10. Elevation (average and/or max. & min.) (metres): 11. Area (hectares): 119.89

Min.	3
Max.	4
Mean	4

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Martin Mere occupies part of a former lake and mire which extended over some 1300 hectares of the Lancashire Coastal Plain during the 17th century. In 1972 the Wildfowl and Wetlands Trust purchased 147 hectares of the former Holcrofts Farm, consisting mainly of rough damp pasture, with the primary aim of providing grazing and roosting opportunities for wildfowl. Since acquisition the rough grazed pastures have been transformed by means of positive management into a wildfowl refuge of international importance. Areas of open water with associated muddy margins have been created, whilst maintaining seasonally flooded marsh and reed swamp habitats via water level control. In addition large areas of semi-improved damp grassland, unimproved species rich damp grassland and rush pasture have been maintained and enhanced via appropriate grazing management. Of the pastures the most botanically important are those species rich areas supporting whorled caraway, present here at one of very few sites in northern England. Such pastures are nationally important. However, the outstanding importance of Martin Mere is as a refuge for its large and diverse wintering, passage and breeding bird community. In September 2002, an additional 63 hectares of land were purchased on the southern most part of the refuge at Woodend Farm, with the aid of the Heritage Lottery Fund, to restore arable land to a variety of wetland habitats including seasonally flooded grassland, reedbed, wet woodland and open water habitats. These are all key Biodiversity Action Plan habitats within the Lancashire Plain and Valleys Natural Area.

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13. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

5, 6

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 5

Assemblages of international importance:

Species with peak counts in winter:

25306 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar 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, *Anser brachyrhynchus*,
Greenland, Iceland/UK

8186 individuals, representing an average of
3.4% of the population (5 year peak mean
1998/9-2002/3)

Species with peak counts in winter:

Tundra swan, *Cygnus columbianus bewickii*,
NW Europe

61 individuals, representing an average of 0.7%
of the GB population (5 year peak mean 1998/9-
2002/3)

Whooper swan, *Cygnus cygnus*,
Iceland/UK/Ireland

1320 individuals, representing an average of
6.3% of the population (5 year peak mean
1998/9-2002/3)

Eurasian wigeon, *Anas penelope*, NW Europe

3062 individuals, representing an average of
0.7% of the GB population (5 year peak mean
1998/9-2002/3)

Northern pintail, *Anas acuta*, NW Europe

415 individuals, representing an average of 1.4%
of the GB population (5 year peak mean 1998/9-
2002/3)

Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.

Details of bird species occurring at levels of National importance are given in Section 22

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Atlantic

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- b) biogeographic regionalisation scheme (include reference citation):
Council Directive 92/43/EEC

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	acidic, sand, mud, clay, alluvium, peat, nutrient-poor, sedimentary, sandstone
Geomorphology and landscape	lowland, coastal, floodplain
Nutrient status	eutrophic, highly eutrophic
pH	alkaline, circumneutral
Salinity	fresh
Soil	mainly organic
Water permanence	usually permanent, usually seasonal / intermittent
Summary of main climatic features	Annual averages (Blackpool, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/blackpool.html) Max. daily temperature: 12.9° C Min. daily temperature: 6.4° C Days of air frost: 40.3 Rainfall: 871.3 mm Hrs. of sunshine: 1540.3

General description of the Physical Features:

Martin Mere comprises open water, seasonally-flooded marsh and damp, neutral hay meadows overlying deep peat.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

Martin Mere comprises open water, seasonally-flooded marsh and damp, neutral hay meadows overlying deep peat.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Other, Recharge and discharge of groundwater, Flood water storage / desynchronisation of flood peaks

19. Wetland types:

Human-made wetland, Inland wetland

Code	Name	% Area
Ts	Freshwater marshes / pools: seasonal / intermittent	78
O	Freshwater lakes: permanent	13.7
U	Peatlands (including peat bogs swamps, fens)	7.1
Xf	Freshwater, tree-dominated wetlands	1.2

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20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Large areas of open water with muddy margins associated with seasonally flooded grazing marsh and reed swamp. There are also large areas of surrounding damp species-rich grassland and semi-improved areas of damp grassland maintained by grazing.

Ecosystem services

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.

Nationally important species occurring on the site.

Higher Plants.

Carum verticillatum, *Rumex maritimus*, *Oenanthe fisulosa*, *Oenanthe aquatica*, *Lemna gibba*

Lower Plants.

Leucagaricus serenus

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.

Birds

Species currently occurring at levels of national importance:

Species with peak counts in spring/autumn:

Eurasian teal, <i>Anas crecca</i> , NW Europe	3494 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1998/9-2002/3)
---	---

Species with peak counts in winter:

Common shelduck, <i>Tadorna tadorna</i> , NW Europe	936 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1998/9-2002/3)
Common pochard, <i>Aythya ferina</i> , NE & NW Europe	829 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3)
Ruff, <i>Philomachus pugnax</i> , Europe/W Africa	139 individuals, representing an average of 19.8% of the GB population (5 year peak mean 1998/9-2002/3)
Spotted redshank, <i>Tringa erythropus</i> , Europe/W Africa	2 individuals, representing an average of 1.4% of the GB population (5 year peak mean 1991/92-1995/96)

Species Information

None reported

23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic

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Aquatic vegetation (e.g. reeds, willows, seaweed)
Archaeological/historical site
Environmental education/ interpretation
Livestock grazing
Non-consumptive recreation
Scientific research
Tourism

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? **No**

If Yes, describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	
Private		+
Other	+	+

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism	+	+
Current scientific research	+	+
Arable agriculture (unspecified)		+
Permanent arable agriculture		+
Grazing (unspecified)	+	+
Rough or shifting grazing	+	+
Permanent pastoral agriculture	+	+
Flood control		+

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26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.
2. Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
No factors reported	NA				

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?

Is the site subject to adverse ecological change? NO

27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation for nature conservation	+	
Site management statement/plan implemented	+	

b) Describe any other current management practices:

The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Fauna.

Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl &

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Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.

Considerable amounts of research continues to be undertaken by the Wildfowl and Wetlands Trust at Martin Mere on the feeding/breeding and behavioural ecology of individual species of wildfowl, in addition to fresh water grazing marsh management.

Environment.

Daily weather records, water level and water quality monitoring is undertaken by wardening staff.

Habitat.

Invertebrate and plant species records are collected by volunteers on a regular basis.

Miscellaneous.

Visitor and educational usage of the Refuge is monitored on a daily basis at this extremely popular and well visited Wildfowl & Wetlands Trust Refuge.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

WWT employs a number of warden-teacher staff who undertake environmental education work and escort large numbers of school parties around the refuge throughout most of the year. Various educational programmes have also been run for adults in recent years. WWT has excellent visitor and schoolroom facilities as part of its Interpretative Centre on the Refuge.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Activities, Facilities provided and Seasonality.

The WWT Refuge at Martin Mere has excellent bird watching and interpretative facilities, including toilets a tea room/restaurant and shop for the selling of WWT goods and other commodities, as well as educational/interpretative materials and an adventure playground based on a bird theme. In addition its waterfowl collection allows close contact with many species of duck, goose and swan from all over the world.

The latter compliments large areas of refuge which remain free from disturbance for wintering, passage and breeding wildfowl and wading birds. The latter being overlooked from many well constructed tower hides. The Refuge including its waterfowl gardens are extremely well visited throughout the year by large numbers of visitors and parties of school children alike. The Refuge features in tourist literature and is well known throughout the country. People management is of the highest order and from a tourist point of view is sustainable without causing detrimental effects upon the wildlife interest of the refuge.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs,
European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay, Bristol,
BS1 6EB

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House,
Northminster Road, Peterborough, PE1 1UA, UK

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34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Site-relevant references

Phase I Habitat Survey

Cranswick, PA, Waters, RJ, Musgrove, AJ & Pollitt, MS (1997) *The Wetland Bird Survey 1995–96: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge

Environment Agency (1997) *Martin Mere Water Level Management Plan*. Environment Agency

Forshaw, DW (****) *Wild geese and swans in Lancashire 1995–1998*

Gray, LC (1980) *Environmental bibliography of north-west England (vice-counties 59, 60, 69 and 70) 1850–1979*. University of Lancaster Library, Lancaster (Library Occasional Paper, No. 10)

Hale, WG (1985) *Martin Mere. Its history and natural history*. Causeway Press, Ormskirk

Huddart, D & Glasser, NF (2002) *Quaternary of northern England*. Joint Nature Conservation Committee, Peterborough (Geological Conservation Review Series, No. 25)

Musgrove, AJ, Pollitt, MS, Hall, C, Hearn, RD, Holloway, SJ, Marshall, PE, Robinson, JA & Cranswick, PA (2001) *The Wetland Bird Survey 1999–2000: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge.
www.wwt.org.uk/publications/default.asp?PubID=14

Nature Conservancy Council (1987) *Invertebrate Site Register – Lancashire*. Nature Conservancy Council

Stroud, DA, Chambers, D, Cook, S, Buxton, N, Fraser, B, Clement, P, Lewis, P, McLean, I, Baker, H & Whitehead, S (eds.) (2001) *The UK SPA network: its scope and content*. Joint Nature Conservation Committee, Peterborough (3 vols.)
www.jncc.gov.uk/UKSPA/default.htm

Wildfowl and Wetlands Trust (****) *Draft Management Plan*. Wildfowl and Wetlands Trust

Please return to: **Ramsar Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**
Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • email: ramsar@ramsar.org

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Ribble and Alt Estuaries SPA

European Site Conservation Objectives for Ribble and Alt Estuaries Special Protection Area Site Code: UK9005103



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.

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

- A037 *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding)
- A038 *Cygnus cygnus*; Whooper swan (Non-breeding)
- A040 *Anser brachyrhynchus*; Pink-footed goose (Non-breeding)
- A048 *Tadorna tadorna*; Common shelduck (Non-breeding)
- A050 *Anas penelope*; Eurasian wigeon (Non-breeding)
- A052 *Anas crecca*; Eurasian teal (Non-breeding)
- A054 *Anas acuta*; Northern pintail (Non-breeding)
- A130 *Haematopus ostralegus*; Eurasian oystercatcher (Non-breeding)
- A137 *Charadrius hiaticula*; Ringed plover (Non-breeding)
- A140 *Pluvialis apricaria*; European golden plover (Non-breeding)
- A141 *Pluvialis squatarola*; Grey plover (Non-breeding)
- A143 *Calidris canutus*; Red knot (Non-breeding)

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A144 *Calidris alba*; Sanderling (Non-breeding)
A149 *Calidris alpina alpina*; Dunlin (Non-breeding)
A151 *Philomachus pugnax*; Ruff (Breeding)
A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
A157 *Limosa lapponica*; Bar-tailed godwit (Non-breeding)
A162 *Tringa totanus*; Common redshank (Non-breeding)
A183 *Larus fuscus*; Lesser black-backed gull (Breeding)
A193 *Sterna hirundo*; Common tern (Breeding)
Waterbird assemblage
Seabird assemblage



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This is a European Marine Site

This SPA is a part of the Ribble and Alt Estuaries European Marine Site (EMS). These Conservation Objectives should be used in conjunction with the Conservation Advice document for the EMS. Natural England's formal Conservation Advice for European Marine Sites can be found via [GOV.UK](https://www.gov.uk).

Explanatory Notes: European Site Conservation Objectives


These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2017 (as amended) ('the Habitats Regulations'). They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives, and the accompanying Supplementary Advice (where this is available), will also provide a framework to inform the management of the European Site and the prevention of deterioration of habitats and significant disturbance of its qualifying features

These Conservation Objectives are set for each bird feature for a [Special Protection Area \(SPA\)](#).

Where these objectives are being met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

Publication date: 21 February 2019 (version 4). This document updates and replaces an earlier version dated 30 June 2014 to reflect the consolidation of the Habitats Regulations in 2017.



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Ribble and Alt Estuaries Ramsar site

Information Sheet on Ramsar Wetlands (RIS)

1. Name and address of the compiler of this form: Joint Nature Conservation Committee Monkstone House City Road Peterborough Cambridgeshire PE1 1JY UK Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948 Email: RIS@JNCC.gov.uk	FOR OFFICE USE ONLY. DD MM YY <table border="1"><tr><td></td><td></td><td></td></tr></table> Designation date <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> Site Reference Number									
2. Date this sheet was completed/updated: Designated: 16 February 1995 / Updated: May 2005										
3. Country: UK (England)										
4. Name of the Ramsar site: Ribble and Alt Estuaries										
5. Map of site included: a) hard copy (required for inclusion of site in the Ramsar List): yes ✓ -or- no b) digital (electronic) format (optional): Yes										
6. Geographical coordinates (latitude/longitude): 53° 42' 41'' N 02° 58' 44'' W										
7. General location: Nearest town/city: Preston The site occupies a stretch of coastline between Liverpool and Preston on the north-west coast of England. It lies between the Mersey estuary and Morecambe Bay. Administrative region: Lancashire; Merseyside; Sefton										
8. Elevation (average and/or max. & min.) (metres): Min. 0 Max. 25 Mean No information available										
9. Area (hectares): 13,464										
10. Overview: A large area including two estuaries which form part of the chain of west coast sites which fringe the Irish Sea. The site is formed by extensive sand and mudflats backed, in the north, by the saltmarsh of the Ribble Estuary and, to the south, the sand dunes of the Sefton Coast. The tidal flats and saltmarsh support internationally important populations of waterfowl in winter and the sand dunes support vegetation communities and amphibian populations of international importance.										
11. Ramsar Criteria: 2, 5, 6 Secretariat Comment: The RIS provides information requiring the application of Criterion 4. This need to be included in the next update.										

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12. Justification for the application of each Criterion listed in 11. above:

Ramsar criterion 2

This site supports up to 40% of the Great Britain population of natterjack toads *Bufo calamita*. As plant species: *Petalophyllum ralfsii* (Conservation status: European Red List: Vulnerable; EC Habitats Directive: Annex II)

Ramsar criterion 5

Assemblages of international importance:

Species with peak counts in winter:

222,038 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar criterion 6

Species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation):

Species regularly supported during the breeding season:

Species with peak counts in spring/autumn:

Black-tailed godwit , <i>Limosa limosa islandica</i> , Iceland/W Europe	3323 individuals, representing an average of 7% of the population (5 year peak mean 1998/9- 2002/3)
Common redshank , <i>Tringa totanus totanus</i> ,	4465 individuals, representing an average of 1.7% of the population (5 year peak mean 1998/9-2002/3)
Dunlin , <i>Calidris alpina alpina</i> , W Siberia/W Europe	38,196 individuals, representing an average of 2.8% of the population (5 year peak mean 1998/9-2002/3 - spring peak)
Grey plover , <i>Pluvialis squatarola</i> , E Atlantic/W Africa -wintering	11,021 individuals, representing an average of 4.4% of the population (5 year peak mean 1998/9-2002/3 - spring peak)
Red knot , <i>Calidris canutus islandica</i> , W & Southern Africa (wintering)	42,692 individuals, representing an average of 9.4% of the population (5 year peak mean 1998/9-2002/3)
Ringed plover , <i>Charadrius hiaticula</i> , Europe/Northwest Africa	3761 individuals, representing an average of 5.1% of the population (5 year peak mean 1998/9-2002/3 - spring peak)
Sanderling , <i>Calidris alba</i> , Eastern Atlantic	7401 individuals, representing an average of 6% of the population (5 year peak mean 1998/9- 2002/3 - spring peak)

Species with peak counts in winter:

Bar-tailed godwit , <i>Limosa lapponica lapponica</i> , W Palearctic	13,935 individuals, representing an average of 11.6% of the population (5 year peak mean 1998/9-2002/3)
Eurasian oystercatcher , <i>Haematopus ostralegus</i> <i>ostralegus</i> , Europe & NW Africa -wintering	18,926 individuals, representing an average of 1.8% of the population (5 year peak mean 1998/9-2002/3)
Eurasian teal , <i>Anas crecca</i> , NW Europe	5107 individuals, representing an average of 1% of the population (5 year peak mean 1998/9- 2002/3)

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Eurasian wigeon , <i>Anas penelope</i> , NW Europe	69,841 individuals, representing an average of 4.6% of the population (5 year peak mean 1998/9-2002/3)
Northern pintail , <i>Anas acuta</i> , NW Europe	1,497 individuals, representing an average of 2.5% of the population (5 year peak mean 1998/9-2002/3)
Pink-footed goose , <i>Anser brachyrhynchus</i> , Greenland, Iceland/UK	6,552 individuals, representing an average of 2.42% of the population (5 year peak mean 1998/9-2002/3)
Tundra swan , <i>Cygnus columbianus bewickii</i> , NW Europe	230 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1998/9-2002/3)
Whooper swan , <i>Cygnus cygnus</i> , Iceland/UK/Ireland	211 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3)

More contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey Alerts report, which is updated annually. See <http://www.bto.org/survey/webs/webs-alerts-index.htm>.

13. Biogeography:

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

14. Physical features of the site:

Soil & geology	basic, neutral, sand, alluvium, sedimentary
Geomorphology and landscape	lowland, coastal, intertidal sediments (including sandflat/mudflat), open coast (including bay), estuary
Nutrient status	mesotrophic
pH	alkaline, circumneutral
Salinity	brackish / mixosaline, saline / euhaline
Soil	mainly mineral
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Blackpool, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/blackpool.html) Max. daily temperature: 12.9° C Min. daily temperature: 6.4° C Days of air frost: 40.3 Rainfall: 871.3 mm Hrs. of sunshine: 1540.3

General description of the Physical Features:

No information available

15. Physical features of the catchment area:

No information available

16. Hydrological values:

Shoreline stabilisation and dissipation of erosive forces, Sediment trapping

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17. Wetland types

Marine/coastal wetland

Code	Name	% Area
E	Sand / shingle shores (including dune systems)	8
G	Tidal flats	75
H	Salt marshes	16
Ts	Freshwater marshes / pools: seasonal / intermittent	1

18. General ecological features:

The Ribble and Alt Estuaries contain extensive areas of intertidal sand and mudflats. These are backed by, on the Ribble, one of the most extensive areas of grazed saltmarsh in Britain and, along the Sefton Coast, the largest calcareous dune complex in north-western England.

The intertidal flats support internationally important populations of waterfowl which feed on a rich invertebrate fauna and *Enteromorpha* beds.

The saltmarsh supports a range of vegetation communities typical of north-west England maintained by stable grazing regimes. However, the estuary is accreting in response to large-scale land-claim, with *Spartina anglica* dominant in the pioneer stages with *Festuca rubra* and *Puccinellia maritima* dominating the grazed sward. Natural transitions are prevented by coastal defence structures. Small areas of saltmarsh also occur in discrete locations along the Sefton Coast.

The sand dunes display a full range of plant communities and habitat types from embryo to grey dunes with transitions to dune grassland and heath. Numerous species-rich slacks can be found throughout the dune transition but generally the extent of vegetation cover and species diversity increases with distance from the sea. *Elytrigia juncea* and *Elymus arenarius* dominate the embryo dunes (NVC SD5&7), being replaced by *Ammophila arenaria* in the mobile yellow dunes (SD6); large areas of bare sand are still present. Two distinct types of vegetation dominate the extensive grey dunes, the first a *Festuca rubra*/*Rubus caesius* dune pasture and a *Salix repens*/*R. caesius* dwarf shrub (SD9 variants). These dunes also support two large coniferous plantations which support a distinctive flora. Elsewhere, and in the absence of management, smaller areas of secondary deciduous scrub/woodland remain including *Hippophae rhamnoides* and various *Populus* spp. Dune slacks are regularly found throughout the dune complex. Normally dominated by creeping willow, they also support a diverse flora including the nationally rare liverwort, *Petalophyllum ralfsii* and dune helleborine *Epipactis dunensis* (SD15&16). Dune grassland and heath occupy fragmented locations on the extreme eastern edge of the system with *Calluna vulgaris* and *Carex arenaria* both strong characteristics.

The dune system is a candidate Special Area of Conservation for the following Annex I habitats: dunes with creeping willow; shifting dunes; humid dune slacks; shifting dunes with marram; petalwort *Petalophyllum ralfsii*; great crested newt *Triturus cristatus*; coastal dune heathland; and dune grassland ('grey dunes'). The last two are priority habitat types under the EC Habitats Directive.

19. Noteworthy flora:

International importance

Lower plants

Petalophyllum ralfsii (Conservation status: European Red List: Vulnerable; EC Habitats Directive: Annex II)

20. Noteworthy fauna:

Birds

Species currently occurring at levels of national importance:

Species regularly supported during the breeding season:

Black-headed gull, *Larus ridibundus*, N & C
Europe

14888 apparently occupied nests, representing an average of 11.6% of the GB population (Seabird 2000 Census)

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Common tern , <i>Sterna hirundo hirundo</i> , N & E Europe	182 pairs, representing an average of 1.7% of the GB population (1996)
Species with peak counts in spring/autumn:	
Common greenshank , <i>Tringa nebularia</i> , Europe/W Africa	9 individuals, representing an average of 1.5% of the GB population (5 year peak mean 1998/9-2002/3)
Eurasian curlew , <i>Numenius arquata arquata</i> , N. a. arquata Europe (breeding)	2502 individuals, representing an average of 1.7% of the GB population (5 year peak mean 1998/9-2002/3)
Ruff , <i>Philomachus pugnax</i> , Europe/W Africa	60 individuals, representing an average of 8.5% of the GB population (5 year peak mean 1998/9-2002/3)
Species with peak counts in winter:	
Black (common) scoter , <i>Melanitta nigra nigra</i> ,	691 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3)
Black-headed gull , <i>Larus ridibundus</i> , N & C Europe	16849 individuals, representing an average of 1% of the GB population (5 year peak mean 1998/9-2002/3)
European golden plover, <i>Pluvialis apricaria apricaria</i> , Iceland & Faroes/E Atlantic	3588 individuals, representing an average of 1.4% of the GB population (5 year peak mean 1998/9-2002/3)
Great cormorant , <i>Phalacrocorax carbo carbo</i> , NW Europe	463 individuals, representing an average of 2% of the GB population (5 year peak mean 1998/9-2002/3)
Northern shoveler , <i>Anas chyeata</i> , NW & C Europe	200 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3)
Red-throated diver , <i>Gavia stellata</i> , NW Europe	56 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1998/9-2002/3)
Spotted redshank , <i>Tringa erythropus</i> , Europe/W Africa	2 individuals, representing an average of 1.4% of the GB population (5 year peak mean 1998/9-2002/3)
Species Information	
Species occurring at levels of national importance:	
Natterjack toad <i>Bufo calamita</i> (c. 40% GB population)	

21. Social and cultural values:

Aesthetic
 Archaeological/historical site
 Conservation education
 Current scientific research
 Fisheries production
 Livestock grazing
 Non-consumptive recreation
 Sport fishing
 Sport hunting
 Tourism
 Transportation/navigation

22. Land tenure/ownership:

Ownership category	On-site	Off-site
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Non-governmental organisation	+	+
Local authority, municipality etc.	+	+
National/Crown estate	+	+
Private	+	+
Public/communal	+	+

23. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism	+	+
Recreation	+	+
Research	+	
Fishing: commercial	+	+
Fishing: recreational/sport	+	+
Gathering of shellfish	+	
Bait collection	+	
Permanent arable agriculture		+
Grazing (unspecified)	+	
Hunting: recreational/sport	+	
Industry	+	
Sewage treatment/disposal	+	+
Harbour/port		+
Flood control	+	+
Irrigation (inc agricultural water supply)		+
Mineral exploration	+	
Oil/gas exploration		+
Oil/gas production		+
Transport route	+	+
Urban development		+
Military activities		+

24. Factors adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.
2. Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?

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Erosion	2	Coastal erosion is a factor at Formby Point with an estimated loss of 4 metres per year. It is a concern because pine woodland on the sand dunes is causing coastal squeeze and therefore preventing sand dune habitats from rolling back; as such dune slack habitats for natterjack toads are declining/being lost.	+		+
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For category 2 factors only. What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors? Erosion - At Ainsdale Sand Dunes National Nature Reserve English Nature have made efforts to restore dune habitat; an Environmental Impact Assessment has been carried out with a view to submitting a tree-felling application in February 2005.
Is the site subject to adverse ecological change? NO

25. Conservation measures taken:

Conservation measure	On-site	Off-site
SSSI / ASSI	+	+
NNR	+	
SPA	+	
Land owned by a NGO for nature conservation	+	
Management agreement	+	
SAC	+	
Management plan in preparation	+	

26. Conservation measures proposed but not yet implemented:

No information available

27. Current scientific research and facilities:

Contemporary.

Fauna.

Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl & Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.

Annual natterjack toad monitoring programme: Leisure Services, Metropolitan Borough of Sefton and English Nature Ainsdale NNR.

Completed.

Flora.

National sand dune survey. Sefton coast NCC Report (Edmondson *et al.* 1989)

Bryophyte surveys (various) of Sefton Coast (M Newton).

Ribble and Alt NVC saltmarsh survey 2002 (The Environment Partnership 2003)

Fauna.

Invertebrate surveys (numerous)

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Documents held by various authorities on the coast including English Nature & Metropolitan Borough of Sefton.

For a full account of reports, papers etc, reference should be made to:

The sand dunes of the Sefton Coast (Atkinson & Houston 1993).

28. Current conservation education:

The Metropolitan Borough of Sefton, English Nature, National Trust and RSPB all lead guided walks onto suitable areas of the coast at all times of the year.

The entire site is reasonably well provided with fixed interpretation panels at many of the main public access points around the site.

The RSPB is developing educational/visitor facilities at its Reserve.

Southport Pier is developing into a major wildlife interpretation centre. English Nature, RSPB and Sefton Council are working on the project.

29. Current recreation and tourism:

Activities, Facilities provided and Seasonality.

Infrastructure developments

There are caravan parks adjacent to the site at Formby and moorings in the Alt. No major expansion anticipated.

Land-based recreation

There is intensive recreational use of the northern beaches (Southport & Ainsdale) where traditional activities are concentrated. These include beach car parking, and, during the summer months several large-scale events. Elsewhere, recreation is more informal and less intensive - but all beach activities on the Sefton Coast are managed by the Beach Management Plan. The golf courses are heavily used; Royal Birkdale hosted the British Open Golf Championship in 1998.

Water-based recreation

Mainly a summer activity based on the beach at Southport. Becoming more common but has, in the past, included pleasure trips on hovercraft.

Airborne recreation

Some disturbance in winter months by micro-lights, particularly to pink-footed goose populations.

Wildfowling

Occurs on extensive areas of the Ribble including the NNR. Usually controlled by agreement.

30. Jurisdiction:

Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs,
European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay, Bristol,
BS1 6EB

31. Management authority:

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House,
Northminster Road, Peterborough, PE1 1UA, UK

32. Bibliographical references:

Site-relevant references

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Liverpool Bay/ Bae Lerpwl SPA

European Site Conservation Objectives for Liverpool Bay / Bae Lerpwl Special Protection Area Site Code: UK9020294



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.

This document should be read in conjunction with the accompanying Conservation Advice document (where available), which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

A001 *Gavia stellata*; Red-throated diver (Non-breeding)
A065 *Melanitta nigra*; Common scoter (Non-breeding)
A177 *Hydrocoloeus minutus*; Little gull (Non-breeding)
A193 *Sterna hirundo*; Common tern (Breeding)
A195 *Sternula albifrons*; Little tern (Breeding)
Waterbird assemblage

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Explanatory Notes: European Site Conservation Objectives

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2017 (as amended) ('the Habitats Regulations'). They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives, and the accompanying Supplementary Advice (where this is available), will also provide a framework to inform the management of the European Site and the prevention of deterioration of habitats and significant disturbance of its qualifying features

These Conservation Objectives are set for each bird feature for a [Special Protection Area \(SPA\)](#).

Where these objectives are being met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

This is a cross border site


This site crosses the border between England and Wales. The advice of [Natural Resources Wales](#) should therefore be sought separately.

This is a European Marine Site

This SPA is a part of the Liverpool Bay / Bae Lerpwl European Marine Site (EMS). These Conservation Objectives should be used in conjunction with the Conservation Advice document for the EMS.

Natural England's formal Conservation Advice for European Marine Sites can be found via [GOV.UK](#).

Publication date: 21 February 2019 (version 5). This document updates and replaces an earlier version dated 20 December 2017 to reflect the consolidation of the Habitats Regulations in 2017.



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