Assessment of Coastal Access Proposals Between Cleveleys, Lancashire and Pier Head, Liverpool on sites and features of nature conservation concern



October 2020

# About this document

This document should be read in conjunction with the published Reports for the Cleveleys to Pier Head stretch and the Habitats Regulations Assessment (HRA).

The Coastal Access Reports contain a full description of the access proposals, including any additional mitigation measures that have been included. These Reports can be viewed here: <a href="http://www.gov.uk/government/publications/england-coast-path-cleveleys-to-pier-head-liverpool-comment-on-proposals">www.gov.uk/government/publications/england-coast-path-cleveleys-to-pier-head-liverpool-comment-on-proposals</a>

An HRA is required for European sites (SPA, SAC and Ramsar sites). The HRA is published alongside the Coastal Access Reports.

This document, the Nature Conservation Assessment (NCA), covers all other aspects (including SSSIs, MCZs and undesignated but locally important sites and features) **in so far as any HRA does not already address the issue for the sites and feature(s) in question**.

The NCA is arranged site by site.

See Annex 1 for an index to designated sites and features for this stretch of coast, including features that have been considered within any HRA.

# Contents

About this document1
Contents2
Assessment of coastal access proposals on:
Lytham St Annes Dunes Site of Special Scientific Interest
Lytham Coastal Changes Site of Special Scientific Interest
Ribble Estuary Site of Special Scientific Interest10
Newton Marsh Site of Special Scientific Interest19
Sefton Coast Site of Special Scientific Interest22
Mersey Narrows Site of Special Scientific Interest
Assessment of coastal access proposals on:
Ribble Estuary Marine Conservation Zone33
Assessment of coastal access proposals on:
Ainsdale Sand Dunes National Nature Reserve
Cabin Hill National Nature Reserve
Ribble Estuary National Nature Reserve41
Lytham St Annes Dunes Local Nature Reserve43
Ainsdale and Birkdale Hills Local Nature Reserve44
Ravenmeols Hills Local Nature Reserve46
Local Wildlife Sites
Local Geological Sites
Conclusion
References
Annex 1. Index to designated sites and features

## Assessment of coastal access proposals on:

# Lytham St Annes Dunes Site of Special Scientific Interest

Is this site also part of a European site? No

## Features of the SSSI

- Embryonic shifting dune:
  - o SD4 Elymus farctus ssp. Boreali--atlanticus foredune community
  - Shifting dunes along the shoreline with Ammophila arenaria (white Dunes)
    - SD5 Leymus arenaria mobile dune
    - SD6 Ammophila arenaria mobile dune community
    - o SD6a Ammophila arenaria dune Elymus farctus sub community
    - o SD6d Ammophila arenaria dune Ammophila arenaria sub-community
    - o SD6e Ammophila arenaria dune Festuca rubra sub-community
- Fixed dunes with herbaceous vegetation
  - SD7a Ammophila arenaria- Festuca rubra semi fixed community
  - o SD7c Ammophila arenaria –festuca rubra sub community
  - SD8 Festuca rubra Galium verum fixed dune grassland
- Humid dune slack
  - SD17 Potentilla anserina Carex nigra dune-slack community
- Dunes with Salix arenaria
  - SD15b Salix repens Calliergon cuspidatum dune slack community, Equisetum variegatum sub community
  - SD16 Salix repens Holcus lanatus dune slack community
- Vascular Plant Assemblage
  - Dune helleborine *Epipactis dunensis*
  - Seaside centuary *Centaurium littorale*
  - Variegated horsetail Equisetum variegatum
  - o Round leaved wintergreen Pyrola rotundifolia
  - Sea spurge Euphorbia paralias
  - Isle of man cabbage *Rhynchosinapis monensis*
  - Dune fescue Vulpia fasciculate
  - o Green flowered helleborine Epipactis phyllanthes
- Invertebrate Assemblage F112 short sward assemblages. High quality invertbrates assemblage including scarce species with high habitat fidelity
- Small-fruited Yellow-sedge Carex serotina
- Sea Holly *Eryngium maritimum*
- Common Broomrape Orobanche minor
- Yellow Bartsia Parentucellia viscose
- Knotted Pearlwort Sagina nodosa
- Dune Fescue Vulpia fasciculata

## **Current situation**

Lytham St. Annes Dunes are the only extensive dune system remaining in Lancashire and in the Lancashire Plain and Valleys Natural Area. In spite of past sand extraction, seasonal pressures from holiday makers and the small size of the dune system, it still shows classic features of dune formation and ecological succession including the widest range of foredune slack habitats found anywhere along the Fylde coast. These support a rich and varied dune flora typical of southern and western Britain with over 230 species of higher plants, some of which are scarce nationally or are uncommon locally and occurring on the northern and southern limits of their distribution range. A rich invertebrate fauna is also present, including many dune and coastal species that are rare or uncommon. Over 150 species of butterflies and moths have been recorded.

The site is in unfavourable recovering condition. Works to install posts on the beach have been completed, and embryo dunes, mobile dunes and strand line have started to develop or recover. The dunes are no longer eroding but accreting. This has addressed one of the main reasons for the site being in unfavourable condition. There are still some problems on sections of dune adjacent to the road with small areas of rank vegetation. The site is now under management by Fylde Dunes Project, mowing, slack creation and targeted scrub / invasive weed control is underway to address the problems.

The SSSI is on the edge of Blackpool and Lytham, an area with high numbers of visitors. Access within the SSSI is currently high. There is a network of popular paths throughout the dunes.

## **Coastal Access Proposal**

The Coastal Access proposals for this site are described in full in Coastal Access Report CPH 1: South Promenade (Kingsway), Cleveleys to Brades Lane, Freckleton (maps CPH 1h & 1i).

#### **England Coast Path**

The England Coast Path is aligned through units 1 & 2 of the SSSI on existing popular paths through vegetated dunes near the main road (A584).

There may be a small increase in access on the line of the ECP, as a result of existing paths being promoted as a national trail.

#### **Coastal Margin**

The whole of units 1 & 2, both landward and seaward of the ECP, fall within the coastal margin.

Unit 3 of the SSSI is landward of the main road. The ECP is not aligned through this unit, and the unit is not in the coastal margin. This unit is unaffected by the proposals.

We expect that there will be negligible change in access in the coastal margin. This is because the site has long been used by the public for recreational use and is popular with walkers. This is not expected to change as a result of the proposals.

## **Risk analysis**

Sand dunes and the associated assemblages can be sensitive to changes in access, although the impacts of access can vary according to the specific sand dune habitat.

The following can affect sand dune habitats:

- Trampling, leading to a loss of fragile vegetation
- Habitat loss due to path construction and other associated infrastructure,
- Changes in conservation grazing patterns.

#### Trampling

Coastal sand dunes have experienced the impacts of over-stabilisation and there is potential for trampling to be used as a means of re-invigorating surface movement of sand to restore some of the necessary dynamism of this habitat for some of the more diverse vegetation types. However, foredune habitats (Embryonic shifting dune SD4, shifting dunes along the shoreline with *Ammophila arenaria* SD5 SD6 SD6a SD6d SD6e) are particularly sensitive to increased trampling. The pioneer plants in these habitats are very vulnerable to trampling damage with a loose substrate being all that anchors them [Ref. 1].

#### Habitat loss due to path construction and other associated infrastructure

Vegetation may be lost under path surfacing or infrastructure.

Table 1. Impact of our proposals on the features of Lytham St Annes Dunes SSSI.

Risk	Consideration	Risk of impact
Trampling	<ul> <li>England Coast Path (ECP): The path is not aligned in foredune habitats, which are sensitive to trampling. It is aligned on existing popular paths through vegetated, stable dunes near the road.</li> <li>Coastal Margin: The site is already popular with walkers, and this is not expected to change as a result of the proposals. Therefore there will not be an increase in trampling in the coastal margin.</li> </ul>	Low risk There is a low risk of an increase of trampling in sensitive foredune habitats as a result of the proposals.
Habitat loss due to path construction and other associated infrastructure	The ECP through the dunes will not be surfaced. The only infrastructure required is waymarking of existing unsurfaced paths (8 waymarker posts and 2 fingerposts)	<b>Low risk</b> Habitat loss will be negligible.

This table outlines the risk to features of Lytham St Annes Dunes with information about the impact of our proposals.

## **Establishment works**

Is SSSI assent needed to implement any specific proposals for establishment works? Yes

If yes, describe any special conditions that have been identified concerning how or when the works are to be carried out:

• Vehicle access points and types of vehicles and machinery used to be discussed with NE.

Where necessary, Lancashire County Council will instigate the SSSI assent process by writing to us to confirm the timing of works and how operations to be undertaken in line with these conditions. Natural England will provide further advice as necessary.

# Map showing Lytham St Annes Dunes SSSI and proposed route of the ECP



# Lytham Coastal Changes Site of Special Scientific Interest

Is this site also part of a European site? No

#### Features of the SSSI

• Holocene sea-levels - The site demonstrates the pattern of sea-level change along the western coast of England, and also provides a baseline for side correlation of sea-level changes in Britain.

## **Current situation**

This site includes four areas around Lytham St. Annes that are notified for transgressive and regressive overlap sequences relating to coastal changes in North West England during the Holocene.

The SSSI is in favourable condition.

Units 2, 3, 4, and 5 of the SSSI are unaffected by the proposals as they are some way inland of the ECP / coastal margin, and are separated from the project area by housing and major roads. Unit 6 is unaffected by the proposals as it is underneath the surface of a car park.

Units 1 and 7 may be affected by the proposals.

A public footpath and the Lancashire Coast Way is aligned along a flood embankment through unit 1.

Unit 7 is in an area of sand dunes next to Fairhaven Lake in Lytham St Annes. This is a popular area for recreation, with a network of popular paths through the dunes.

## **Coastal Access Proposal**

The Coastal Access proposals for this site are described in full in Coastal Access Report CPH 1: South Promenade (Kingsway), Cleveleys to Brades Lane, Freckleton (maps CPH 1j, 1k & 1n).

#### **England Coast Path**

The England Coast Path is aligned through unit 1 of the SSSI on an existing public right of way / Lancashire Coastal way on a floodbank. There may be a small increase in access on the line of the ECP, as a result of existing paths being promoted as a national trail.

#### **Coastal Margin**

Part of unit 1 will fall within the coastal margin. This area is the steep sides of a flood embankment and the side of a creek. Access in this area is unlikely to increase, as the steep slope of the embankment means that people are likely to keep to the waymarked route on top of the embankment. Unit 7of the SSSI is landward of the ECP and falls within the landward coastal margin. We expect that there will be negligible change in access in the coastal margin. This is because the site is already popular with walkers, and this is not expected to change as a result of the proposals.

## **Risk analysis**

The geological feature for which the SSSI is notified could be affected by the access proposals in the following ways:

- Loss of extent of the sand dunes.
- Engineering works (Activities/developments which disturb the underlying sediments ie-i.e. below the top 50 centimetres may damage the interest of the site).

Risk	Consideration	Risk of impact
Loss of extent of sand dunes.	The proposals will not lead to loss of extent of sand dune habitats. Most of the units are unaffected by the proposals. The ECP is aligned through unit 1 on an existing public right of way on an embankment. No path surfacing is required, the only infrastructure proposed is a new fingerpost and replacing an existing stile with a kissing gate.	Low risk There is a low risk of loss of extent of sand dune habitat, as minimal infrastructure is proposed on an existing footpath.
Engineering works	The only infrastructure proposed within the SSSI is a new fingerpost and replacing an existing stile with a kissing gate. This will not significantly disturb the underlying sediments.	Low risk Disturbance of underlying sediments will be negligible.

Table 2. Impact of our proposals on the features of Lytham Coastal Changes SSSI.

This table outlines the risk to features of Lytham Coastal Changes sites with information about the impact of our proposals.

## Establishment works

Is SSSI assent needed to implement any specific proposals for establishment works? Yes

If yes, describe any special conditions that have been identified concerning how or when the works are to be carried out:

• Vehicle access points and types of vehicles and machinery used to be discussed with NE.

Where necessary, Lancashire County Council will instigate the SSSI assent process by writing to us to confirm the timing of works and how operations to be undertaken in line with these conditions. Natural England will provide further advice as necessary.

# Map showing Lytham Coastal Changes SSSI and proposed route of the ECP



# **Ribble Estuary Site of Special Scientific Interest**

Is this site also part of a European site? Yes

There may be interactions between the Coastal Access proposals and the designated features listed below. These features of the SSSI are also features of Ribble and Alt Estuary SPA, and / or Ribble and Alt Estuary Ramsar, or supporting habitat for qualifying species of the SPA. An assessment of the impacts of our proposals on these features, and any mitigation required, is undertaken in the HRA published alongside our coastal access proposals.

- Aggregation of nonbreeding birds (Bewick's Swan *Cygnus columbianus*. Golden Plover *Pluvialis squatarola*, Bar-tailed Godwit *Limosa Iapponica*, Sanderling *Calidris alba*, Pinkfooted goose *Anser brachyrhynchus*, Shelduck *Tadorna tadorna*, Wigeon *Anas Penelope*, Oystercatcher *Haemotopus ostralegus*, Grey plover *Pluvialis squatarola*, Knot *Calidris canutus*, Dunlin *Calidris alpine*, Black-tailed godwit *Limosa limosa islandica*)
- >20,000 Non breeding waterbird assemblage
- Aggregation of breeding birds (Black-headed gull, Common tern)

There may be interaction between the Coastal Access proposals and the designated features listed below. These features of the SSSI are NOT features of any of the European sites, and the impact of the coastal access proposals are considered here.

- Aggregation of breeding birds (Redshank).
- Assemblage of breeding birds of Littoral sediment, grazing marsh, marsh and marshy grassland habitats. The assemblage species are directly dependent or use the specific habitat detailed in the SPA/Ramsar citations & criteria for selection.
- Intertidal mud and sand flats
- Saltmarsh SM6, SM9, SM10, SM13, SM14, SM16, SM18, SM24 saltmarsh communities

## **Current situation**

The Ribble Estuary has extensive sand-silt flats with one of the largest areas of grazed saltmarsh in Britain (and the largest in the Dee to Fleetwood natural area) and also includes some areas of recently reclaimed saltmarsh. It is of international importance for the passage and wintering wildfowl and waders that it supports, being a major link in the chain of estuaries down the west coast of Britain used by birds migrating between their breeding grounds in the far north and their wintering grounds further south. The estuary is largely covered by the Ribble Estuary NNR and is a Ramser site and Special Protection Area. The mudflats are rich in invertebrates on which the waders and some wildfowl such as Shelduck feed. The saltmarshes are mostly grazed and consist of a Saltmarsh grass/Red fescue sward with a belt of Cord-grass at the seaward edge. They provide roosting sites for waders at high tide, feeding grounds for wildfowl and support important breeding populations of waders, gulls and terns. The ungrazed Crossens Marsh supports the full range of zoned saltmarsh plant communities. The reclaimed saltmarshes of Marshside support unimproved grazing marsh that provides habitat for a diverse breeding bird community as well as functioning as an extreme high-tide roost.

The SSSI is in favourable condition.

Public access across much of the SSSI is limited due to the nature of the terrain of the mudflats and saltmarsh. Popular public rights of way (including the Ribble Way and the Lancashire Coastal Way) run around much of the edge of the SSSI.

## **Coastal Access Proposal**

# The Coastal Access proposals for this site are described in the following Coastal Access Reports:

CPH Report 1. South Promenade (Kingsway), Cleveleys to Brades Lane, Freckleton (maps CPH 1h to 1p).

CPH Report 2. Brades Lane, Freckleton to Penwortham New Bridge, Preston (maps CPH 2a to 2c).

CPH Report 3. Penwortham New Bridge, Preston to Tarleton Lock (maps CPH 3e to 3g).

CPH Report 4. Tarleton Lock to Southport beach car park (maps CPH 4c to 4m).

#### **England Coast Path**

The England Coast Path is almost entirely aligned on existing public rights of way and pavements around the edge of the SSSI.

Access on the ECP may increase slightly as a result of promoting the existing rights of way as a National Trail.

#### **Coastal Margin**

The SSSI falls within falls within the coastal margin. Access will be excluded from the majority of the coastal margin under s25A (unsuitable for access), or S26 (nature conservation).

Access to the coastal margin is not expected to increase. In many places, there is a fence seaward of the ECP which will prevent people accessing the coastal margin. In areas without a fence, the ECP is mainly aligned on embankments which provide a much easier walking surface than the coastal margin. There is a section near Warton Airfield where the ECP is aligned on an existing public footpath and Lancashire Coastal Way, which runs along the top edge of the saltmarsh. In this area, access to the margin is unlikely to increase as the saltmarsh in the margin is poached by cattle and is difficult to walk on.

## **Risk analysis**

# Aggregation of breeding birds (redshank) and assemblage of breeding birds of littoral sediment, grazing marsh, marsh and marshy grassland habitats

Breeding seabirds, waders and duck breed on the saltmarshes and grazing marshes all around the Ribble Estuary. Ground nesting birds are sensitive to changes in access for the following reasons:

• **Disturbance by people and dogs.** During the breeding season (mid-March to mid-August) ground nesting species are at risk from disturbance by people and dogs. Disturbance can lead to eggs or chicks chilling, trampling of nests, eggs and chicks, desertion, or direct predation of nest or young by dogs. There is also a risk of increased predation of eggs and chicks, due to adults being disturbed from the nest leaving the nest more vulnerable to predation.

- Loss of supporting habitat. Supporting habitat for these species could be lost under path surfacing and infrastructure, or affected by trampling.
- Disturbance during establishment

#### Intertidal mud and sand flats

There are extensive areas of intertidal mud and sand flats in the Ribble Estuary SSSI. They areas can be sensitive to changes in access for the following reasons:

• **Compaction.** Small plants and the burrows of small creatures living in the top layer of sand and mud flats may be compacted if people walk on them. Compaction can cause the burrows to collapse. These communities are resilient to occasional compaction caused by people who venture out at low tide, because the structure of the surrounding substrate is restored by the next tide. However, repeated or widespread compaction may result in localised losses of sensitive species and/or reduce food availability for waterbirds and some fish species.

#### Saltmarsh

The Ribble Estuary SSSI has one of the largest areas of grazed saltmarsh in Britain and also includes some areas of recently reclaimed saltmarsh. Saltmarshes are sensitive to changes in access for the following reasons:

- **Trampling of fragile vegetation.** Vegetation may be lost, damaged and prevented from establishing on soft, wet substrates where people regularly walk.
- Habitat loss due to path construction and other associated infrastructure.

Feature (or group of features)	Sensitivities	Risk analysis
Aggregation of breeding birds (redshank) and assemblage of breeding birds of littoral sediment, grazing marsh, marsh and marshy grassland habitats	<ul> <li>Disturbance by people and dogs.</li> <li>Loss of supporting habitat. (See also intertidal mud and sand flats and saltmarsh below for an assessment of impacts of proposals on supporting habitat.)</li> <li>Disturbance during establishment works</li> </ul>	<ul> <li>Low risk</li> <li>England Coast Path</li> <li>For most of its length around the SSSI, the ECP is not aligned on supporting habitat for the birds. The England Coast Path is almost entirely aligned on existing popular public rights of way and pavements around the edge of the SSSI (just outside the SSSI boundary for much of its length).</li> <li>Access is expected to increase slightly on the route of the ECP as a result of existing paths being promoted as a national trail.</li> <li>A section of the ECP between Warton and Freckleton which is aligned on an existing public right of way and the Lancashire Coastal Way is on saltmarsh (supporting habitat) for a distance of 1.5km. The existing PRoW / ECP crosses a section of saltmarsh which is grazed by cattle, with the result that the saltmarsh surface is heavily poached and difficult to walk on. Therefore the PRoW, which has boardwalk and other infrastructure in most of the wet / poached areas, is the easiest line across the areas of marsh, and this means that it is likely that people will remain on the path rather than walking in the coastal margin. We are also installing a small number of additional sleeper bridges, which will make the route even easier to walk on compared to the surrounding saltmarsh.</li> <li>There is a low risk that a slight increase in access on existing popular routes will cause additional disturbance to breeding ground nesting birds.</li> <li>In order to minimize disturbance to breeding birds during establishment works, measures described in the establishment works section below will be followed.</li> <li>Coastal Margin</li> <li>There will be no new access rights created on the majority of saltmarshes and flats. Access will be excluded under s25A as these areas are unsuitable for access.</li> <li>There is a risk that if there is an increase in numbers of people and dogs in the areas of coastal margin which are not covered by s25A access exclusions, this could lead to an increase in disturbance to</li></ul>

Feature (or group of features)	Sensitivities	Risk analysis	
		<ol> <li>An area to the east of Freckleton Pool.</li> <li>Embankments, grazing land and saltmarsh at Hutton Marsh where there are currently no access rights. Anyone walking along these embankments could cause disturbance to breeding birds through skylining, or dogs off lead running onto the saltmarshes and wet grassland.</li> <li>The outer embankments at Hesketh Outmarsh, where there are currently no access rights. Anyone walking along these embankments could cause disturbance to breeding birds. Anyone walking along these embankments could cause disturbance to breeding birds through skylining, or dogs off lead running onto the marshes.</li> <li>An area at Marshside.</li> </ol>	
		In order to minimise disturbance in these areas, the following measures are proposed:	
		<ol> <li>Coastal access rights will be excluded over the land to the east of Warton Aerodrome at Freckleton. See map CPH 2A in coastal access report CPH2. 9 advisory signs will be installed at access points to the coastal margin along the A584, explaining the sensitivity and showing a map of the access exclusion.</li> </ol>	
		2. The trail at Hutton Marsh is aligned inland on a public right of way, to avoid using the embankments next to areas used by breeding birds. Coastal access rights would be excluded on conservation grounds over the embankments, grazing land and saltmarsh in the coastal margin at Hutton Marsh. See map CPH 3E in coastal access report CPH3. Three advisory signs will be installed at access points to the embankments, explaining the sensitivity and access exclusions.	
		3. Coastal access rights will be excluded over the outer embankment and other land in the coastal margin not covered by the section 25A exclusions at Hesketh Outmarsh. See map CPH 4D in coastal access report CPH4. Five advisory signs will be installed at access points to the outer embankments, explaining the sensitivity and access exclusions.	
		<ol> <li>Coastal access rights would be restricted, with dogs required to be kept on leads on the sand- winning track at Marshside all year round. See map CPH 4E in coastal access report CPH4. Coastal access rights would be excluded over the coastal margin at Marshside. See map CPH 4F in coastal access report CPH4. Existing notices are in place to manage this area. These will be updated with coastal access information, explaining the sensitivity and asking people to observe the requirement to keep dogs on leads and only use the track.</li> </ol>	
		With these measures in place, the risk of disturbance to breeding birds as a result of the proposals is low.	

Feature (or group of features)	Sensitivities	Risk analysis
Intertidal mud and sand flats	Compaction.	<ul> <li>Low risk</li> <li>It is well understood locally that the mudflats are dangerous to walk on because of the soft mud and extreme tidal range.</li> <li>We are proposing a widespread exclusion of access rights to areas of mud and sand that are considered unsuitable for a general right of access.</li> <li>Where exclusions are not proposed, on the beaches around Lytham and St Annes, it is because these areas are already used for beach activities.</li> <li>Therefore there is no credible risk of significant damage to this feature as a result of the proposals.</li> </ul>
Saltmarsh	<ul> <li>Trampling of fragile vegetation.</li> <li>Habitat loss due to path construction and other associated infrastructure.</li> </ul>	Low risk         England Coast Path         For most of its length around the SSSI, the ECP is not aligned on saltmarsh. It is aligned just outside the SSSI boundary on existing rights of way on embankments, through farmland and on pavements.         A section between Warton and Freckleton, which is aligned on an existing public right of way and the Lancashire Coastal Way, is on saltmarsh, for a distance of 1.5 km. Access is expected to increase on this route as a result of it being promoted as a national trail, and therefore there may be an increase in trampling. This route already has some infrastructure on it, such as boardwalks, to allow people to cross wet areas. We plan to replace the boardwalks as the current ones are in poor condition, and add a small number of additional sleeper bridges across creeks. This area of marsh is heavily poached by cattle. The usage of the ECP will not be sufficiently different from existing path usage to alter vegetation or soil characteristics significantly from pre ECP condition.         Habitat loss       Infrastructure totalling an area of 625m <sup>2</sup> will be installed on saltmarsh near Warton airfield. Of this area, 621m <sup>2</sup> is replacement of existing infrastructure (mainly boardwalks) and 4m <sup>2</sup> is new infrastructure (sleeper bridges, signage and gates). Therefore there will be 4m <sup>2</sup> of additional saltmarsh habitat loss within the SSSI as a result of the proposals.         The scale of loss from new infrastructure can be regarded as 'trival' in the context of the conservation objectives for the SSSI features and their supporting habitat. The nature of the works will not adversely

Feature	Sensitivities	Risk analysis
(or group of features)		
		affect the continuity and functioning of the habitat types and the species they support. The infrastructure will be located along existing walked routes rather than the wider habitat. As the signs and other infrastructure are intended to guide people along the coastal path they will also help to minimise any potential impact on the wider habitat.
		Coastal Margin
		The saltmarshes will all fall within the coastal margin. There will be no new access rights created on the majority of saltmarshes. Access will be excluded under either s25A (unsuitable for access) or s26 (nature conservation).
		Therefore there is a low risk of our proposals causing an increase in trampling damage or significant habitat loss to saltmarsh habitat.

This table describes the impact of our proposals on the sensitivities of specified designated features which are not SPA or Ramsar features with information about the impact of our proposals.

## **Establishment works**

Is SSSI assent needed to implement any specific proposals for establishment works? Yes

If yes, describe any special conditions that have been identified concerning how or when the works are to be carried out:

- Any works close to areas where birds breed should take place outside of the breeding season.
- Works close to areas where birds roost should not take place for 2 hours either side of high tide.
- For works on saltmarshes, access routes, storage of materials and types of vehicles used must be agreed with NE, in order to reduce the damage to the habitat.
- Vehicles and machinery will be refuelled off-site.

Where necessary, Lancashire County Council will instigate the SSSI assent process by writing to us to confirm the timing of works and how operations to be undertaken in line with these conditions. Natural England will provide further advice as necessary.

## Map showing Ribble Estuary SSSI and proposed route of the ECP



18 | Nature Conservation Assessment for Coastal Access Proposals between Cleveleys, Lancashire and Pier Head, Liverpool

# **Newton Marsh Site of Special Scientific Interest**

Is this site also part of a European site? No

- Black tailed godwit, winter, spring and autumn passage
- Golden plover, winter, spring and autumn passage

## **Current situation**

Newton Marsh is located near the Ribble Estuary and comprises grazed pasture reclaimed from former saltmarsh but retaining a number of pools and ditches. The site is important for overwintering and migrant birds due to its relative lack of disturbance, its size, its proximity to the Ribble Estuary (with which there is an interchange of birds), and its position along a major migration route down the west coast of Britain between breeding grounds in the far north and wintering grounds further south. Over 100 species of birds have been recorded here, the majority being spring and winter visitors. Large flocks of Golden plover regularly winter in nationally important numbers with equally large numbers of Lapwing and smaller flocks of other waders and wildfowl, including nationally important numbers of Black-tailed godwit. The wet pasture also supports a good population of breeding birds, and the pools and ditches support a range of aquatic and marsh plants including Flowering rush and Spiked sedge, which are both rare in Lancashire.

The SSSI is in unfavourable recovering condition. Site conditions are now very good for the winter period, drainage issues have been resolved with the new sluice carefully managed and stock grazing at an appropriate level both winter, spring and summer. Numbers of black-tailed godwits are favourable 5 year average 1063 2005-2009 (based on maxima in either spring or autumn, baseline number at notification 400). However the site remains in unfavourable recovering condition due to declines in numbers of golden plover 5 year (peak count) 336 2005-2009. (baseline number at notification 4000). As site conditions are suitable for this species over the winter (ratio of wet areas to dry areas plus a tight sward preferred by golden plover) off site factors may be affecting numbers of this very mobile species and further research is required.

There is currently no public access to the SSSI.

## **Coastal Access Proposal**

The Coastal Access proposals for this site are described in full in Coastal Access Report CPH 2: Brades Lane, Freckleton to Penwortham New Bridge, Preston (maps CPH 2b & directions map 2A)

#### **England Coast Path**

The England Coast Path is aligned landward of the SSSI on the pavement next to the dual carriageway (A584).

#### **Coastal Margin**

The SSSI falls within the coastal margin.

#### Directions to exclude access to the coastal margin.

Access will be excluded from the entire coastal margin in this area, including the SSSI, under a s24 (land management) direction. Land to the east of Warton Aerodrome at Freckleton is within the final approach flight path of the main runway. This area is known to be a haven for wild birds, including feral species. Airfield operations monitor bird numbers to ensure they will not impact on the operation of the airfield. An increase in numbers of people and dogs could disturb the birds and pose an air safety risk to the operation of the airfield.

## **Risk analysis**

The birds using the SSSI could be disturbed by an increase in access to the SSSI.

There is a low risk of an increase in disturbance by people and dogs as a result of the proposals. This is because the ECP is aligned on existing pavements landward of the SSSI, with a fence and hedge between the ECP and the SSSI. Access will be excluded from the SSSI under a s24 (land management) direction. Therefore there will be no new access rights within the SSSI.

If the s24 direction is ever removed, an assessment of the impact of the proposal on the features of the SSSI should be carried out. An access restriction under s26 (nature conservation) may be required instead.

## **Establishment works**

Is SSSI assent needed to implement any specific proposals for establishment works? No

## Map showing Newton Marsh SSSI and proposed route of the ECP



21 | Nature Conservation Assessment for Coastal Access Proposals between Cleveleys, Lancashire and Pier Head, Liverpool

# Sefton Coast Site of Special Scientific Interest

Is this site also part of a European site? Yes

There may be interactions between the Coastal Access proposals and the designated features listed below. These features of the SSSI are also features of Sefton Coast SAC, Ribble and Alt Estuary SPA, Ribble and Alt Estuary Ramsar, and / or supporting habitat for qualifying species of the SPA. An assessment of the impacts of our proposals on these features, and any mitigation required, is undertaken in the HRA published alongside our coastal access proposals.

- Mobile foredune & yellow dune
  - SD2 Honkenya peploides-Cakile maritima strandline community
  - SD3 Matricaria maritima-Galium aparine strandline community
- Mobile foredune & yellow dune
  - o SD5 Leymus arenarius mobile dune community
  - o SD6 Ammophila Arenaria mobile dune community
- Acid dry dune grassland, Calcareous dune, Calcifugous grassland
  - o SD7 Ammophila arenaria-Festuca rubra semi-fixed dune community
  - o SD8 Festuca rubra-Galium verum fixed dune grassland
  - o SD9 Ammophila arenaria-Arrhenatherum elatius dune grassland
  - o SD10 Carex arenaria dune grassland
  - SD11 Carex arenaria-Cornicularia aculeate dune community
  - o SD12 Carex arenaria-Festuca ovina-Agrostis capillaris dune grassland
- Dune slack
  - SD13 Sagina nodosa-Bryum pseudotriquetrum dune slack community
  - o SD14 Salix repens-Campylium stellatum dune slack community
  - o SD15 Salix repens-Calliergon dune slack community cuspidatum
  - o SD16 Salix repens-Holcus lanatus dune slack community
  - SD17 Potentilla anserina-Carex nigra dune slack community
- Dune heath
  - H1 Calluna vulgaris-Festuca ovina heath
  - H9 Calluna vulgaris Deschampsia flexuosa heath
  - o H11 Calluna vulgaris Carex arenaria heath
  - o U1 Festuca ovina Agrostis capillaris Rumex acetosella grassland
  - U2 Deschampsia flexuosa grassland
  - U4 Festuca ovina Agrostis capillaris Galium saxatile grassland
  - o U5 Nardus stricta Galium saxatile grassland
- Non-vascular plant: Petalophyllum ralfsii Petalwort
- Triturus cristatus Great-crested newt
- Bufo calamita Natterjack toad
- Aggregations of Non Breeding Birds
  - Oystercatcher Haematopus ostralegus
  - o Ringed plover Charadrius hiaticula
  - o Grey plover Pluvialis squatrarola
  - Knot Calidris canutus
  - Sanderling Calidris alba
  - o Dunlin Calidris alpine
  - o Bar-tailed godwit Limosa lapponica

- Estuary including intertidal mud/sand flats & saltmarsh
  - SM13 *Puccinella maritima* saltmarsh community

There may be interaction between the Coastal Access proposals and the designated features listed below. These features of the SSSI are NOT features of any of the European sites, and the impact of the coastal access proposals are considered here.

- Vascular plant assemblage
  - Grey hair-grass Corynephorus canescens
  - Dune helleborine *Epipactis dunensis*
  - Green-flowered helleborine *Epipactis phyllanthes*
  - Dune fescue *Vulpia fasciculata*
  - Portland spurge Euphorbia portlandica
  - Seaside centuary Centaurium littorale
  - Variegated horsetail Equisetum variegatum
  - o Round-leaved wintergreen Pyrola rotundiflora spp. maritima
  - Baltic rush *Juncus balticus*
- Non-vascular plant: Bryum neodamense Long-leaved threadmoss
- Sand lizard Lacerta agilis
- Invertebrates: Luperina nicerlii gueneei Sandhill rustic moth
- Ainsdale Geological Conservation Review (coastal geomorphology) Coastal Process Geomorphological Extensive beach and Foreshore, backed by a series of active low dunes and inland a large complex of relict high dunes

#### **Current situation**

The Sefton Coast SSSI is of special interest for intertidal mud and sandflats, embryonic shifting dunes, mobile dunes, dunes with Creeping willow (*Salix arenaria*), humid dune slacks, fixed dunes, dune grasslands and dune heat. Small areas of saltmarsh are also present. Its assemblages of vascular and non-vascular plants, in particular the nationally rare Grey hair grass (*Corynephorus canescens*), nationally scarce liverwort *Petalophyllum ralfsii* and nationally rare moss *Bryum neodamense*, are also of special interest.

92% of the site is either in favourable or unfavourable recovering condition. A major reason for unfavourable condition is encroachment by scrub. Scrub control and grazing are now in place in in many of the SSSI units.

The Sefton Coast SSSI is a very popular area for walkers, with areas of CRoW open access land and many public rights of ways and other paths through the SSSI. There are also promoted routes through the SSSI, including the Sefton Coastal Footpath, the Velvet Trail, Dune Path North, the Westfield Trail and National Cycle route 810.

There are several visitor honeypot sites along the coast, including Ainsdale-on-Sea, Ainsdale Sand Dunes National Nature Reserve (NNR) and the National Trust site at Formby.

## **Coastal Access Proposal**

The Coastal Access proposals for this site are described in full in the following Coastal Access Reports: CPH 5: Southport to Cabin Hill (maps CPH 5a – 5h, directions maps CPH 5A & 5B). CPH 6: Cabin Hill to Pier Head (maps CPH 6a – 6f), direction maps CPH 6A to 6C

#### **England Coast Path**

The ECP is aligned on public rights of way or other popular walked routes through the SSSI.

As this section of coast is already very popular with walkers, we do not expect that there will be a significant change in use of the ECP.

#### **Coastal Margin**

Almost all of the SSSI, both landward and seaward of the ECP, falls within the coastal margin. There is a network of popular paths through the dunes and woodland landward and seaward of ECP.

Ainsdale Sand Dunes and Cabin Hill NNRs are currently CRoW open access land, with 'no dogs' restrictions in fenced grazing enclosures landward of the ECP to prevent disturbance to the conservation grazing regime.

Under our proposals the CRoW open access land will be replaced by Coastal Margin. In order to prevent disturbance to the conservation grazing regime in the fenced enclosures, continuation of the current 'no dogs' restrictions is proposed.

We expect that there will be negligible change in access in the coastal margin. This is because the sites have long been open and available to the public for recreational use and are very popular with walkers, this is not expected to change as a result of the proposals, and because the current conservation grazing regime in the coastal margin will not be affected by the proposals.

## **Risk analysis**

#### Sensitivity of the features to changes in access

#### Vascular plant assemblage [REF.2]

• Grey hair-grass Corynephorus canescens

Nationally rare species. A perennial herb growing in open areas on consolidated dunes, on sandy shingle and on open sand. It also occurs on dunes and sandy heathland on acidic soils inland. It requires mobile sand for its survival; mature tufts are reinvigorated by partial burial.

- Dune helleborine *Epipactis dunensis* A rhizomatous perennial herb found the edges of dune-slacks where it grows amongst *Salix repens* and can spread into neighbouring conifer plantations.
- Green-flowered helleborine *Epipactis phyllanthes* A rhizomatous perennial herb typically found in sparsely vegetated, shaded places on dry, acidic, humus-poor substrates. Habitats include *Fagus* woods on flinty clays or sandstones, *Pinus* and *Betula* scrub on the Bagshot sands, *Corylus* coppice on sandy alluvium, and on sand dunes.

• Dune fescue Vulpia fasciculata

An annual of sand dunes, particularly open, disturbed parts of fixed dunes, and sandy shingle

• Portland spurge Euphorbia portlandica

A biennial or short-lived perennial herb, growing in a wide range of coastal habitats. It occurs on cliffs, rocky slopes and steep maritime grasslands overlying many different rock types, and also on shingle and sheltered or semi-fixed sand dunes. It also occurs on shingle, and on sheltered or semi-fixed sand-dunes in vegetation dominated by *Ammophila arenaria, Festuca rubra* or a mixture of the two.

• Seaside centuary Centaurium littorale

This biennial herb is confined to coastal dunes, the uppermost levels of saltmarshes and calcareous, humus-rich turf near the sea where competing vegetation is checked and the habitat kept open by grazing or trampling. This plant is confined to sandy areas near the sea, most usually associated with large areas of relatively undisturbed sand dune. *C. littorale* is threatened by damage to its habitat, especially by eutrophication caused when cattle are over-wintered on sand dunes. It is a very poor competitor, and in the absence of grazing by rabbits or sheep will quickly disappear, or else will become confined to areas kept open by human trampling.

- Variegated horsetail *Equisetum variegatum* An evergreen, prostrate herb found in a wide variety of habitats, including dune-slacks, river shingle, upland flushes and stony loch-shores. It is a calcicole and a poor competitor; its sites are usually open and often winter-flooded.
- Round-leaved wintergreen *Pyrola rotundiflora spp. Maritima* A rhizomatous, mycorrhizal, evergreen perennial herb. In England it usually grows in damp, calcareous sites including fens, disused chalk-pits and dune-slacks. In Scotland it inhabits open *Pinus sylvestris* woodland, river banks and gullies in open moorland, and montane cliff ledges.
- Baltic rush *Juncus balticus*

*J. balticus* is mainly a plant of dune slacks and other damp areas in maritime sand, mud or peat, frequently beside river estuaries, occurring in a range of habitats from completely closed species-rich grass/sedge communities to bare ground. It is a coloniser of damp bare areas; it is resistant to grazing and trampling but succumbs to later stages of dune colonisation by tall herbs or shrubs.

#### Non-vascular plant: Bryum neodamense Long-leaved threadmoss

This rare moss is now found in only two of its former UK sites, the main one being the dune system along the Sefton coast in Lancashire, centred on Ainsdale Sand Dunes NNR.

The long-leaved thread moss is at risk from the lowering of the water table, and the subsequent drying out of the dunes slacks where it grows. The slacks have also been subjected to inundation by windblown sand, which also renders them unsuitable for the moss.

#### Sand Lizard Lacerta agilis

The sand lizard is found at the north western extent of its natural range on the Sefton Coast. It is present on the frontal dunes, on relict dunes in Ainsdale Sand Dunes and along the railway line between Hillside and south Ainsdale. The species here is morphologically and genetically distinct from the nearest colonies in Dorset and other southern counties.

Evidence for the susceptibility of sand lizards to recreational disturbance comes from the south of England, where sand lizards are clustered within sites where mature heather occurs alongside bare sand. Such specific habitat requirements, clustered populations, plus the behaviour of sand lizards (they spend more time basking and are particularly site faithful) means they are vulnerable to disturbance. In addition, the sand lizard is the only British reptile to nest in bare ground, laying between four and twelve eggs in burrows dug by the females in unshaded, bare sand that, on many sites, may only be available along paths and tracks. The nests, 4-10 cm below ground level are believed to withstand light trampling by people, but are vulnerable to heavy trampling. [Ref. 4].

Local observations suggest that on the Sefton Coast, unlike on southern English heaths, sand lizards are not particularly susceptible to recreational disturbance. The hot spots for sand lizards on the Sefton Coast are found in areas which are heavily used by the public. As sand lizards need mobile dry warm sand to lay eggs in, a major issue for sand lizards on the Sefton Coast is habitat scrubbing over, there is a need for more bare sand and more south facing slopes.

#### Sandhill rustic moth Luperina nicerlii gueneei

The sandhill rustic moth *Luperina nickerlii gueneei* is found on the embryo dunes and strandline at Altcar. Its food plants are sand couch (*Agropyron junceiforme*), common saltmarsh grass (*Puccinellia maritima*) and red fescue (*Festuca rubra*).

Recreational use which causes physical damage to habitat can be an issue for this moth, as can beach engineering works designed to prevent the natural development of pioneer dunes, sea level changes and erosion of strandline / dune edge. [Ref. 5].

## Ainsdale GCR SIL - Coastal Geomorphology

The SSSI contains an extensive beach and foreshore, backed by a series of active low dunes and inland a large complex of relict high dunes. Access could have both positive and negative impacts on the geomorphology.

Feature (or group of features)	Sensitivities	Risk analysis
Vascular plant assemblage	The assemblage occurs on sand dunes and some of the species in the assemblage may be affected by trampling, loss of habitat or over stabilization of habitat.	Low risk There is a low risk of the coastal access proposals having an impact on the sand dune habitat which supports the assemblage species. See the associated Habitat Regulations Assessment for details.
Non-vascular plant: Long-leaved threadmoss <i>Bryum</i> <i>neodamense</i>	This moss occurs on sand dunes and might be affected by trampling and loss of habitat.	<b>Low risk</b> There is a low risk of the coastal access proposals having an impact on the habitat which supports this moss. See the associated Habitat Regulations Assessment for details.
Sand lizard <i>Lacerta</i> <i>agilis</i>	Local observations suggests that on the Sefton Coast, sand lizards are not particularly susceptible to recreational disturbance. The hot spots for sand lizards on the Sefton Coast are found in areas which are heavily used by the public. Sand lizards need mobile dry warm sand to lay eggs in. A major issue for sand lizards on the Sefton Coast is habitat scrubbing over, there is a need for more bare sand and more south facing slopes.	Low risk Access is not expected to increase significantly on the line of the ECP or in the coastal margin as a result of our proposals. As the sand lizard hotspots are in areas which are already popular with people, and as recreational disturbance is not thought to be a risk factor, there is a low risk of our proposals impacting the population of sand dunes. The proposals will not impact on the conservation grazing regimes (existing 'no dogs' restrictions in grazed enclosures will be replicated under our proposals) or other habitat measures designed to reduce scrub cover and / or create more bare sand.
Invertebrates: Sandhill rustic moth <i>Luperina</i> <i>nicerlii gueneei</i>	This moth is found on the embryo dunes and strandline at Altcar. The habitat on which the moth relies might be affected by trampling and loss of habitat.	Low risk There is a low risk of the coastal access proposals having an impact on the sand dune and strandline habitat which supports this moss. The ECP is aligned up to 1km inland at Altar, in order to avoid Altcar rifle range, and

Table 4. Impact of our proposals on the designated features which are not SAC, SPA or Ramsar features.

Feature (or group of features)	Sensitivities	Risk analysis
		we do not expect access to the coastal margin to increase as a result of the proposals. See the associated Habitat Regulations Assessment for more information about the impact of the proposals on embryonic dune habitat.
Ainsdale GCR SIL	Access could have both positive	Low risk
(coastal geomorphology) IA – Coastal Process Geomorphological Extensive beach and Foreshore, backed by a series of active low dunes and inland a large complex of relict high dunes	and negative impacts on the geomorphology. Access is one of a variety of factors (such as wind and grazing levels) that influences bare ground creation and erosion within a dune system. Increased trampling can result in increased bare ground and surface sand movement. Therefore there is potential for trampling to be used as a means of re-invigorating surface movement of sand to restore some of the necessary dynamism of the habitat. [Ref. 2]. The formation of permanent surfaced paths and structures to stabilize the dunes to allow access to continue on a fixed route could interfere with natural	We will not be creating permanent surfaced paths through the dunes or structures to stabilize the dunes to allow access to continue on a fixed route. The ECP will be aligned either on existing unsurfaced walked routes or surfaced sections on the National Cycleway Network, or other existing surfaced routes. If the dunes move in such a way that the ECP is obstructed, the ECP will 'roll back' to the next suitable alignment.

This table outlines the risk to features which are not SAC, SPA or Ramsar features with information about the impact of our proposals.

## **Establishment works**

Is SSSI assent needed to implement any specific proposals for establishment works? Yes

If yes, describe any special conditions that have been identified concerning how or when the works are to be carried out:

- Any works close to areas where birds roost should not take place for 2 hours either side of high tide.
- In seeking permissions for the works Sefton Council will need to consider any need for a protected species licence.
- Reasonable avoidance measures will be used to avoid impacts to natterjack toad, great crested newt and sand lizard.
- Access routes, storage of materials and types of vehicles used must be agreed with NE, in order to reduce the damage to the habitat.
- Vehicles and machinery will be refuelled off-site

Where necessary, Sefton Council will instigate the SSSI assent process by writing to us to confirm the timing of works and how operations to be undertaken in line with these conditions. Natural England will provide further advice as necessary.

## Map showing Sefton Coast SSSI and proposed route of the ECP



30 | Nature Conservation Assessment for Coastal Access Proposals between Cleveleys, Lancashire and Pier Head, Liverpool

# **Mersey Narrows Site of Special Scientific Interest**

Is this site also part of a European site? Yes

There may be interactions between the Coastal Access proposals and the designated features listed below. These features of the SSSI are also features of Mersey Narrows and North Wirral Foreshore SPA, and / or Mersey Narrows and North Wirral Foreshore Ramsar, or supporting habitat for qualifying species of the SPA.

SPA feature: waterbird assemblage. The designated features below are not qualifying features of SPA in their own right, but form part of the waterbird assemblage.

- Aggregations of non-breeding birds: Cormorant, *Phalacrocorax carbo*
- o Aggregations of non-breeding birds: Redshank, Tringa totanus
- o Aggregations of non-breeding birds: Turnstone, Arenaria interpres

#### SPA supporting habitat

- Large intertidal sand and mudflat areas
- Lagoons freshwater and saline
- Pioneer saltmarsh SM9 Suaeda maritime salt marsh community

The Coastal Access proposals for this site are described in full in Coastal Access Report CPH 6: Cabin Hill to Pier Head (map CPH 6g).

An assessment of the impacts of our proposals on these features, and any mitigation required, is undertaken in the HRA published alongside our coastal access proposals.

#### **Establishment works**

Is SSSI assent needed to implement any specific proposals for establishment works? No

# Map showing the section of Mersey Narrows SSSI in the project area and proposed route of the ECP



32 | Nature Conservation Assessment for Coastal Access Proposals between Cleveleys, Lancashire and Pier Head, Liverpool

# Assessment of coastal access proposals on:

# **Ribble Estuary Marine Conservation Zone**

Is this site also part of a European site? Yes

This site is designated for smelt (Osmerus eperlanus), which is not a feature of the European site.

Smelt were once widespread in estuaries in the UK but have declined considerably over the past 200 years. They are known to congregate in large shoals in lower estuaries and migrate into freshwater where they spawn in spring. Estuaries such as the Ribble therefore provide critical habitats required to complete smelt lifecycles, including for feeding and post-larval development. Smelt are viewed as an indicator of ecosystem health, being very sensitive to a broad range of environmental degradations, including overfishing, loss of spawning habitat, blockage to migration and water quality impacts.

The Coastal Access proposals for this site are described in the following Coastal Access Reports: CPH – Report 1: South Promenade (Kingsway), Cleveleys to Brades Lane Poolside, Freckleton (maps CPH 1I to 1p).

CPH - Report 2 - Freckleton to Preston (maps CPH 2a to 2g).

CPH - Report 4 - Tarleton Lock to Southport (maps CPH 3a to 3i).

CPH - Report 3 - Preston to Tarleton Lock (maps CPH 4c to 4h).

Smelt could be affected by changes in access. They are sensitive to disturbance by dogs running in shallow water while the smelt are spawning on gravel banks.

In the Ribble Estuary, the proposals are not likely to increase access in any areas with suitable gravel banks for spawning. This is because the ECP around the Ribble Estuary is mainly aligned on existing public rights of way and pavements, and access to the vast majority of the coastal margin, which could include gravel banks, is excluded, mainly because it is unsuitable for access, also for nature conservation and land management reasons. Therefore the proposals will not have an impact on smelt.

#### Conclusion

This feature is unaffected by the proposals.

## Map showing Ribble Estuary MCZ and proposed route of the ECP



34 | Nature Conservation Assessment for Coastal Access Proposals between Cleveleys, Lancashire and Pier Head, Liverpool

# Assessment of coastal access proposals on:

# **Ainsdale Sand Dunes National Nature Reserve**

Is this site or feature also part of a European site? Yes

The NNR is entirely within Sefton Coast SAC and SSSI. The impact of the proposals on the features of the NNR are assessed in the associated Habitat Regulations Assessment and in the Sefton Coast SSSI assessment in this document.

## **Current situation**

Ainsdale Sand Dunes NNR is one of the most important wildlife sites in England. The site was established in 1965 to protect the finest example of lime-rich sand dunes on the North West coast.

Today the NNR allows many rare species to flourish whilst providing a place for visitors to get close to nature and enjoy the magnificent scenery of dunes, pinewoods and golden sands. It occupies the central part of the Sefton Coast Site of Special Scientific Interest (SSSI) a 21km long unspoilt sand dune system which stretches from Liverpool to Southport.

The reserve has a network of around 8 miles of footpaths marked by colour – banded posts. The Woodland and Fisherman's Paths are also accessible by bike, pushchairs and wheelchairs.

Away from these way marked routes visitors can feel free to explore the quieter parts of the site. In order to protect the rare and sensitive wildlife found on the reserve, dogs should be kept under close control at all times, dogs are not allowed in the grazing enclosures under any circumstances.

## **Coastal Access Proposal**

The Coastal Access proposals for this site are described in full in Coastal Access Report CPH 5: Southport to Cabin Hill (maps CPH 5d to 5i, direction map 5A).

#### **England Coast Path**

The England Coast Path is aligned through the NNR on existing paths. These paths are currently popular with walkers. The ECP follows locally promoted routes except for a section (at the southern end of CPH-5-S014), where dune movement has disrupted the original route and the route is realigned onto another existing walked route.

This is a popular route in a popular NNR where access is already encouraged, so we expect that there will be negligible change in access along the line of the ECP.

#### **Coastal Margin**

The whole of the NNR both landward and seaward of the ECP, fall within the coastal margin. The NNR is currently CRoW open access land, with a 'no dogs' restriction in fenced grazing enclosures landward of the ECP to prevent disturbance to the conservation grazing regime. Many existing walked lines have been created through the dunes landward and seaward of ECP.

Under our proposals the CRoW open access land will be replaced by Coastal Margin. In order to prevent disturbance to the conservation grazing regime in the fenced enclosures, a 'no dogs' restriction is proposed.

We expect that there will be negligible change in access in the coastal margin. This is because the site is already popular with walkers, this is not expected to change as a result of the proposals, and because the current conservation grazing regime in the coastal margin will not be affected by the proposals.

#### Site management

The proposals, including the route alignment and access restrictions described above, have been designed so that they will not impact on management of the NNR. The alignment of the ECP will roll back in response to any movement of the dunes, and any new alignment will be discussed with the NNR manager to ensure that it does not impact on the features or the management of the NNR.

## Conclusion

As described in this document and in the associated Habitat Regulations Assessment, the features and management of the NNR will not be adversely affected by our proposals.
## Map showing Ainsdale Sand Dunes NNR and proposed route of the ECP



37 | Nature Conservation Assessment for Coastal Access Proposals between Cleveleys, Lancashire and Pier Head, Liverpool

# **Cabin Hill National Nature Reserve**

Is this site or feature also part of a European site? Yes

The NNR is entirely within Sefton Coast SAC and SSSI and partially within Ribble and Estuaries SPA. The impact of the proposals on the features of the NNR are assessed in the associated Habitat Regulations Assessment and in the Sefton Coast SSSI assessment in this document.

## **Current situation**

Cabin Hill NNR forms part of the Sefton Coast, the finest dune system on the north-west coast of England. This site exhibits classic coastal succession, with intertidal sand flats and embryo dunes grading into mobile yellow dunes. The shore provides feeding and roosting grounds for many migrating and over-wintering birds including knot, grey plover and bar-tailed godwit. Common lizard and the scarce sand lizard are also found on the site. At night in late April the rare and endangered natterjack toad calls from around the fringes of the flooded slacks.

The NNR is currently CRoW open access land, with a 'no dogs' restriction in fenced grazing enclosures landward of the ECP to prevent disturbance to the conservation grazing regime. Existing paths though Cabin Hill are popular with walkers. The NNR is used mainly by locals for recreation and dog walking.

## **Coastal Access Proposal**

The Coastal Access proposals for this site are described in full in Coastal Access Report CPH 5: Southport to Cabin Hill (map CPH 5h, 5j direction map 5B).

#### **England Coast Path**

The England Coast Path is aligned through the NNR on existing paths. These paths are currently popular with walkers, mainly locals using the area for recreation and dog walking.

We expect that there could be a small increase in use of the trail as a result of our proposals, due to the existing route being promoted as a National Trail.

#### **Coastal Margin**

The whole of the NNR both landward and seaward of the ECP, will fall within the coastal margin.

Under our proposals the CRoW open access land will be replaced by Coastal Margin. In order to prevent disturbance to the conservation grazing regime in the fenced enclosures, a 'no dogs' restriction is proposed.

We expect that there will be negligible change in access in the coastal margin. This is because the site is already popular with walkers, this is not expected to change as a result of the proposals, and because the current conservation grazing regime in the coastal margin will not be affected by the proposals.

## Site management

The proposals, including the route alignment and access restrictions described above, have been designed so that they will not impact on management of the NNR. The alignment of the ECP will roll back in response to any movement of the dunes, and any new alignment will be discussed with the NNR manager to ensure that it does not impact on the features or the management of the NNR.

## Conclusion

As described in this document and in the associated Habitat Regulations Assessment, the features and management of the NNR will not be adversely affected by our proposals.

## Map showing Cabin Hill NNR and proposed route of the ECP



40 | Nature Conservation Assessment for Coastal Access Proposals between Cleveleys, Lancashire and Pier Head, Liverpool

## **Ribble Estuary National Nature Reserve**

Is this site or feature also part of a European site? Yes

The NNR is entirely within Ribble and Alt Estuary SPA, Ribble and Alt Estuary Ramsar and Ribble Estuary SSSI. The impact of the proposals on the features of the NNR are assessed in the associated Habitat Regulations Assessment and in the Ribble Estaury SSSI assessment in this document.

## **Current situation**

The estuary is one of the most important sites in the UK for over-wintering wildfowl. The NNR occupies over half of the total area of the Ribble Estuary (4520 Ha), including extensive areas of mud and sand flats and one of the largest single areas of saltmarsh in England.

There are public footpaths around the edge of some parts of the NNR, and parking and a viewing point is available at the Hesketh Out Marsh RSPB reserve.

## **Coastal Access Proposal**

The Coastal Access proposals for this site are described in the following Coastal Access Reports: CPH – Report 1: South Promenade (Kingsway), Cleveleys to Brades Lane <del>Poolside</del>, Freckleton (maps CPH 1j to 1p). CPH - Report 3 - Preston to Tarleton Lock (maps CPH 3e to 3h). CPH - Report 4 - Tarleton Lock to Southport (maps CPH 4c to 4j).

#### **England Coast Path**

The England Coast Path is aligned on existing public rights of ways on embankments and pavements around the edges of the NNR, including part co-aligning with National Cycle Route 62.

Access on the ECP may increase as a result of promoting the existing rights of way as a National Trail.

#### **Coastal Margin**

Most of the NNR falls within the coastal margin. Access will be excluded from the majority of the coastal margin under s25A (unsuitable for access), or S26 (nature conservation).

Access to the coastal margin is not expected to increase. In most places, there is a fence seaward of the ECP which will prevent people accessing the coastal margin. There will be no new coastal access rights in the coastal margin.

### Site management

The proposals, including the route alignment and access restrictions described above, have been designed so that they will not impact on management of the NNR.

## Conclusion

As described in this document and in the associated Habitat Regulations Assessment, the features and management of the NNR will not be adversely affected by our proposals.

## Map showing Ribble Estuary NNR and proposed route of the ECP



42 | Nature Conservation Assessment for Coastal Access Proposals between Cleveleys, Lancashire and Pier Head, Liverpool

# Lytham St Annes Dunes Local Nature Reserve

Is this site or feature also part of a European site? No

This site is unit 3 of St Anne's Sand Dunes SSSI. It is landward of the England Coast Path, and landward of the main road (A584). It does not fall within the coastal margin, and is unaffected by the proposals.

# Map showing Lytham St Annes Dunes LNR and proposed route of the ECP



## Ainsdale and Birkdale Hills Local Nature Reserve

Is this site or feature also part of a European site? Yes

The LNR is entirely within Sefton Coast SAC and SSSI.

# The Coastal Access proposals for this site are described in full in Coastal Access Report CPH 5: Southport to Cabin Hill (maps CPH 5a to 5e).

Ainsdale & Birkdale Sandhills LNR is one of the largest areas of wild dunes left in Britain. It has high dune ridges and dune valleys containing slacks, some with pools which provide breeding habitat for Natterjack toads. The reserve is rich in plant life. In winter part of the site is grazed by Hebridean sheep.

The damp dune slacks are carpeted with flowers in summer including early marsh orchid, marsh helleborine orchids and grass of Parnassus. The drier slacks have round leaved wintergreen and the nationally rare dune helleborine orchid.

An assessment of the impacts of our proposals on the features of the LNR, and any mitigation required, is undertaken in the HRA published alongside our coastal access proposals, and in the Sefton Coast SSSI section of this document.

# Map showing Ainsdale and Birkdale Hills LNR and proposed route of the ECP



45 | Nature Conservation Assessment for Coastal Access Proposals between Cleveleys, Lancashire and Pier Head, Liverpool

## **Ravenmeols Hills Local Nature Reserve**

Is this site or feature also part of a European site? Yes

The LNR is entirely within Sefton Coast SAC and SSSI.

# The Coastal Access proposals for this site are described in full in Coastal Access Report CPH 5: Southport to Cabin Hill (maps CPH 5h).

The LNR comprises a wide sandy beach, high dunes, furrowed grassland that was once asparagus fields, scrubby areas of deciduous trees and a belt of pinewoods. This is an important site for Natterjack Toads which inhabit the dunes.

An assessment of the impacts of our proposals on the features of the LNR, and any mitigation required, is undertaken in the HRA published alongside our coastal access proposals, and in the Sefton Coast SSSI section of this document.

## Map showing Ravenmeols Hills LNR and proposed route of the ECP



47 | Nature Conservation Assessment for Coastal Access Proposals between Cleveleys, Lancashire and Pier Head, Liverpool

# Local Wildlife Sites

In this part of the assessment we consider Local Wildlife Sites (known as Biological Heritage Sites in Lancashire) that could be affected by our proposals for coastal access between Cleveleys and Pier Head, Liverpool. There are 14 such sites in Lancashire and a further 17 along the Sefton coast.

The need for improvements to the path and/or associated signage and other infrastructure, has been taken into account in this assessment. Where necessary, further consideration will be given to how specific works are carried out on site by the relevant access authority during establishment stage.

## Local Wildlife Sites along the Sefton coast

The Sefton Coast Local Wildlife Sites listed below have the potential to be affected by our coastal access proposal. They all fall within the boundaries of Sites of Special Scientific Interest and/or sites designated at European level; please refer to the sections of this document and the accompanying Habitats Regulations Assessment for the stretch for more details on our assessment of potential impacts on those sites.

- Ribble Estuary (including Marshside 1, Marshside 2 and Crossens) to Southport Pier
- Foreshore, Weld Road to Southport Pier
- Birkdale Hills Local Nature Reserve, Weld Road to Shore Road including green beach
- Ainsdale Hills Local Nature Reserve
- Ainsdale National Nature Reserve
- Formby Golf Club
- National Trust and associated fields
- Lifeboat Road to St Joseph's Hospital
- Range Lane to Albert Road
- Albert Road to Lifeboat Road
- Cabin Hill National Nature Reserve
- Altcar Firing Ranges
- Hightown Dunes, Meadow and Saltmarsh
- West Lancashire Golf Club
- Coastguard station, Hall Road to Sniggery Farm track, and shore
- Crosby Marine Lake and Park
- Seaforth Nature Reserve

## **Biological Heritage Sites in Lancashire**

Below is an assessment of the impacts of our proposals on those Biological Heritage Sites in Lancashire which have the potential to be affected by our coastal access proposals for the stretch of coast between Cleveleys and Pier Head, Liverpool:

# Queen's Promenade Coastal Grassland - Blackpool North Shore Boating Pool to Little Bispham

This site is an almost continuous 3 km strip of coastal grassland on the steep clay cliff and the flatter ground between the cliff top and the tramway.

This is a very popular area with a multi-level promenade and a beach. There are a variety of surfaced paths through the site. The proposed ECP is aligned on the uppermost (landward) surfaced path / promenade. The only infrastructure required is directional signage. Access is not expected to increase significantly in this area as a result of the proposals, as it is already such a popular area. Therefore the proposals are not expected to lead to an increase in access and trampling of vegetation within the biological heritage site.

### Lytham Foreshore Dunes and Saltmarsh

This is a very popular area in the seaside resort of Lytham St Annes. There is a network of surfaced and unsurfaced paths and promenade and a beach. There are several large car parks, a pier, cafes and a boating lake along this section of foreshore, as well as areas of dune. On this section of coast the proposed ECP is aligned on the beach, on the promenade and through some sections of sand dune on existing popular paths. The only infrastructure required in areas of sand dune is directional signage. Access is not expected to increase significantly in this area as a result of the proposals, as it is already such a popular area. Therefore the proposals are not expected to increase access and trampling within the biological heritage site.

#### Warton Brows, Bryning with Warton

This site is an area of grassland to the southwest of Warton airfield. A public footpath and the Lancashire Coastal Way runs through this area along the landward edge of saltmarsh, however it appears that instead of walking on the marsh, people walk through the seaward edge of fields. There is a well walked path through the fields, with kissing gates and stiles allowing people to access the path. In places the path is wet, muddy and poached by cattle. The path is very wide in these locations as people walk around the wet areas. The proposed ECP is aligned on this path through the fields. Promoting this route as a national trail may lead to an increase in access along the line of the path, however footpath improvement works in the wet areas will make the path narrower and reduce the impact of trampling on the site. Therefore, despite a possible increase in access, the impact of access and trampling on the vegetation of the biological heritage site is likely to stay the same or reduce.

#### Freckleton Naze, Freckleton

This site is an area of scrub, broadleaved woodland and grassland on steep coastal banks above the north side of the Ribble Estuary. It also includes the northern tidal section of Freckleton Pool creek together with associated saltmarsh to the east. Public footpaths and the Lancashire Coastal Way run through this area. The proposed ECP is aligned on a public footpath which is also the Lancashire Coastal Way. Promoting this route as a national trail may lead to an increase in access along the line of the trail, however access to the steep coastal banks is unlikely to increase due to the inaccessible nature of these areas. The proposed ECP is aligned on the upper (inland) footpath between Naze Point and Freckleton, and therefore is separated from the banks of Freckleton Pool and associated saltmarsh by fences and a steep wooded slope. Therefore access is not expected to increase in these areas as a result of the proposals.

#### Pippy Lane Banks, Newton with Clifton

This site is to the east of Clifton Marsh Farm. The ECP between Freckleton and Savick Brook is aligned on the pavement of the A584, inland of the Biological Heritage Site, and therefore the site falls within the coastal margin. There is a hedge and fence between the proposed ECP and what would then become coastal margin. Access would be excluded from the entire coastal margin in this area, including the Biological Heritage Site, under a s24 (land management) direction. This is because the land to the east of Warton Aerodrome at Freckleton is within the final approach flight path of the main runway and an increase in numbers of people and dogs could disturb the birds and pose an air safety risk to the operation of the airfield.

#### Lea Marsh, Lea, Preston

The site is grazing marsh and includes a tidal section of Savick Brook as well as a number of creeks that drain into the brook. The site is the most upstream saltmarsh on the Ribble and is therefore only subject to infrequent tidal inundation. The site is selected for flowering plants.

There is currently no legal right of access to this area, although in the past there was a public right of way running along the embankment. The PRoW was extinguished.

The proposed ECP is aligned on a new route across the Biological Heritage Site, from the garage near Savick Bridge to the racing track. From the garage the ECP follows a vehicle track, then crosses saltmarsh for 500m, then it is aligned on an embankment. The reason for the alignment across the saltmarsh is that this is actually a higher, drier line than aligning at the landward edge of the marsh. The landward edge of the marsh is lower and holds water in places. Because the proposed route is on a higher, drier line, minimal infrastructure is needed to create the path and the vegetation in this area is likely to be more robust and less susceptible to trampling damage than the vegetation at the landward edge of the marsh.

The trail across the saltmarsh is aligned at the edge of a creek, which is difficult to cross. This will help to keep walkers on the line of the trail. Access would be excluded from all the saltmarsh seaward of the trail under s25A (unsuitable for access).

There will be an increase in access to this site because we are creating new access. The alignment has been chosen to minimise trampling damage to saltmarsh vegetation and the wider site will be unaffected by an increase in trampling damage. Any impacts will be localised and are unlikely to have a significant impact on the vegetation of the site.

# River Ribble, Lower Tidal Section, Lea, Newton with Clifton, Freckleton, Penwortham, Hutton (Preston / South Ribble)

The site comprises the tidal length of the River Ribble and associated habitats situated between the mouth of Preston Dock and Freckleton Tidal Pond, not included in the adjoining Ribble Estuary Site of Special Scientific Interest (SSSI). It contains a variety of habitats including tidal mud flats, saltmarsh, grasslands, tall herb and scrub as well as a number of habitats on dredged river sands and silts.

There is a low risk of an increase in access or the associated impacts of access (trampling of habitats, disturbance to birds by people and / or dogs) as a result of the proposals, for the following reasons:

On the north bank of the Ribble Estuary the proposed ECP is aligned some distance inland of the estuary. Between Freckleton and Savick Bridge the ECP is aligned on the pavement of the A584, at least 1km inland of the estuary, and access to the entire coastal margin in this area would be excluded under a S24 (land management) direction. The proposed ECP then crosses Lea Marsh and the landward edge of a motor racing track, before entering Preston on a popular surfaced cycle and walking track. Access to the entire coastal margin on the northern side of the Ribble Estuary would be excluded under a combination of s25A (unsuitable for access) and s24 (land management). Therefore there is a very low risk of an increase in access and associated trampling and disturbance to the northern side of the Biological Heritage Site.

On the south bank of the Ribble Estuary the proposed ECP is aligned on popular public rights of way and the Lancashire Coastal Way that run along the riverbank. Access to the coastal margin would be excluded under s25A (unsuitable for access). Access may increase slightly as a result of the existing rights of way being promoted as a national trail. However this increase in access is unlikely to be significant in terms of increasing trampling damage or disturbance of habitats and species within the BHS.

### River Douglas Estuary, Hesketh-with-Becconsall / Tarleton

This site is on the east side of the River Douglas. The proposed ECP in this area is aligned on the landward edge of the BHS, mainly on popular public footpaths on embankments, with a 500m section on an existing walked route on an embankment. Access to the coastal margin would be excluded under s25A (unsuitable for access). Access may increase slightly on the line of the ECP as a result of the existing rights of way being promoted as a national trail. However this increase in access is unlikely to be significant in terms of increasing trampling damage or disturbance of habitats and species within the BHS.

Hesketh Bank Brickworks South and Hesketh Bank Brickworks North (Alty's), Hesketh-with-Becconsall/Tarleton

These two Biological Heritage Sites are on the west side of the Rover Douglas. In this area the proposed ECP follows a public footpath along the bank of the river. Access to the coastal margin would be excluded under s25A (unsuitable for access). Access may increase slightly on the line of the ECP as a result of the existing rights of way being promoted as a national trail. However this increase in access is unlikely to be significant in terms of increasing trampling damage or disturbance of habitats and species within the BHS.

#### **River Douglas Embankment, Hesketh-with-Becconsall**

This site is on the west side of the River Douglas. The proposed ECP is aligned on the public footpath on the embankment. Access to the coastal margin would be excluded under s25A (unsuitable for access). Access may increase slightly on the line of the ECP as a result of the existing public footpath being promoted as a national trail. However this increase in access is unlikely to be significant in terms of increasing trampling damage or disturbance of habitats and species within the BHS.

### Hesketh Old and New Marsh Fields Hesketh-with-Becconsall

This site is designated for important wildfowl populations, particularly Bewick's and whooper swans. The proposed ECP is aligned on a public footpath on an embankment, within a fenced corridor. Access may increase slightly on the line of the ECP as a result of the existing public footpath being promoted as a national trail. People using the trail are unlikely to cause disturbance to birds using the BHS, as people and dogs cannot access the site due to fencing along the embankment. The area seaward of the ECP (Hesketh Out Marsh) is a managed realignment scheme. Access to the managed realignment area and saltmarshes / flats within the coastal margin would be excluded under s25A (unsuitable for access). Access to the embankments within the coastal margin would be excluded under s26 (nature conservation). Hesketh New Marsh fields are inland of the ECP and unaffected by our proposals. Therefore there is a low risk of our proposals causing an increase in disturbance to species using the BHS.

### Marsh Farm Fields, North Meols

This site is designated for its value as supporting habitat to the SPA for overwintering birds. This site is landward of the proposed ECP, which is aligned on a public footpath on an embankment. Access may increase slightly on the line of the ECP as a result of the existing public footpath being promoted as a national trail. There is a fence on both sides of the embankment, which prevents people and / or dogs from accessing the fields. Therefore there is a low risk that there will be an increase in disturbance to the species using the BHS as a result of our proposals.

### Banks Marsh Embankments, North Meols

The proposed ECP is aligned on an existing public right of way along Banks Marsh Embankment. Access may increase slightly on the line of the ECP as a result of the existing public footpath being promoted as a national trail. However this increase in access is unlikely to be significant in terms of increasing disturbance of birds on the marsh.

# Local Geological Sites

Below is an assessment of the impacts of our proposals on those Local Geological Sites which have the potential to be affected by our coastal access proposals for the stretch of coast between Cleveleys and Pier Head, Liverpool:

### Lytham St Anne's Dunes

The proposed ECP follows existing popular paths through this area, with minimal infrastructure proposed. Access may increase slightly on the line of the ECP as a result of the existing paths being promoted as a national trail. Access to the coastal margin is unlikely to increase as the dunes and beach in this area are already very popular. There is a very low risk that an increase in access in this area would have an adverse impact on the geological features.

### **Crossens Erratic, Banks Road**

The proposed ECP follows an existing walked route to the seaward of the erratic boulder. Access may increase slightly on the line of the ECP as a result of the existing paths being promoted as a national trail. This is already a popular area and any increase in access as a result of our proposals is unlikely to have an impact on the geological features of this site.

#### **Crossens Pumping Station**

The proposed ECP follows an existing walked route just landward of this site. Access may increase slightly on the line of the ECP as a result of the existing paths being promoted as a national trail. This is already a popular area and any increase in access as a result of our proposals is unlikely to have an impact on the geological features of this site.

#### Southport & Crossens Foreshore

The proposed ECP follows existing popular paths through this area, with minimal infrastructure proposed. Access may increase slightly on the line of the ECP as a result of the existing paths being promoted as a national trail. Access to the coastal margin is unlikely to increase as the dunes and beach in this area are already very popular. There is a very low risk that an increase in access in this area would have an adverse impact on the geological features.

## Conclusion

We, Natural England, are satisfied that our proposals to improve access to the English coast between Cleveleys and Pier Head are fully compatible with our duty to further the conservation and enhancement of the notified features of Lytham St Annes Dunes SSSI, Lytham Coastal Changes SSSI, Ribble Estuary SSSI, Newton Marsh SSSI, Sefton Coast SSSI and Mersey Narrows SSSI, consistent with the proper exercise of our functions<sup>1</sup>.

In respect of any duties that may arise under section 125 of the Marine and Coastal Access Act 2009, Natural England has concluded for Ribble Estuary MCZ that the access proposal (including any mitigation measures specified) is the one that, consistently with the proper exercise of its functions under section 296 of the same Act, is least likely to hinder the achievement of the conservation objectives for the Marine Conservation Zone - and accordingly may proceed.

In respect of Ainsdale Sand Dunes NNR, Cabin Hill NNR, Ribble Estuary NNR, Lytham St Annes Dunes LNR, Ainsdale and Birkdale Hills LNR and Ravenmeols Hills LNR we are satisfied that in developing the new access proposals the appropriate balance has been struck between Natural England's conservation and access objectives, duties and purposes.

See also, where relevant, the conclusions of the separate HRA relating to common features.

The conclusions of this assessment have been checked by:

Name: Sarah Wiseman

On behalf of the Coastal Access Programme Team

Name: Ginny Hinton

Date: 28<sup>th</sup> September 2020

Date: 6<sup>th</sup> August 2020

Senior Officer with responsibility for protected sites

<sup>&</sup>lt;sup>1</sup> Natural England's functions includes its balanced general purposes for access, nature conservation and landscape under the NERC Act 2006, any specific statutory duties it may have to deliver specific improvements to public access, and the access-related policies and priorities it periodically agrees with Defra.

<sup>54 |</sup> Nature Conservation Assessment for Coastal Access Proposals between Cleveleys, Lancashire and Pier Head, Liverpool

## References

- NATURAL ENGLAND. 2009. Scientific research into the effects of access on nature conservation: Part 1: access on foot (NECR012) <u>http://publications.naturalengland.org.uk/publication/41007</u>
- 2. BOTANICAL SOCIETY OF BRITAIN & IRELAND AND THE BIOLOGICAL RECORDS CENTRE. Online Atlas of the British and Irish flora <u>https://www.brc.ac.uk/plantatlas/</u>
- 3. NATIONAL BIODIVERSITY NETWORK ATLAS. https://species.nbnatlas.org/species/NHMSYS0000309507
- NATURAL ENGLAND. 2009. Scientific research into the effects of access on nature conservation: Part 2: access on bicycle and horseback (NECR013) <u>http://publications.naturalengland.org.uk/publication/44006</u>
- 5. CHESHIRE WILDLIFE TRUST https://www.cheshirewildlifetrust.org.uk/sites/default/files/2018-06/Sandhill%20rustic.pdf

# Annex 1. Index to designated sites and features

Feature	Liverpool Bay SPA	Ribble & Alt Estuaries SPA	Mersey Narrows & North Wirral Foreshore	Ribble & Alt Estuaries Ramsar	Mersey Narrows & North Wirral Foreshore Ramsar	Newton Marsh SSSI	Ribble Estuary SSSI	Sefton Coast SSSI	Mersey Narrows SSSI
Bar-tailed Godwit <i>Limosa</i> <i>lapponica</i> (non-breeding)		Х	Х	Х	Х		X*	X*	
Black-tailed godwit <i>Limosa limosa</i> (non-breeding)						х	X*		
Bewick's swan <i>Cygnus</i> <i>columbianus bewickii</i> (non- breeding)		Х		Х			X*		
Black-tailed godwit, <i>Limosa limosa islandica</i> (non-breeding)		Х		Х					
Common scoter <i>Melanitta nigra</i> (Non-breeding)	Х								
Common tern <i>Sterna hirundo</i> (Breeding)	Х	Х	х						
Common tern <i>Sterna hirundo</i> (non-breeding)			х		Х				
Cormorant Phalacrocorax carbo (non-breeding)									X*
Dunlin <i>Calidris alpina alpina</i> (non-breeding)		Х		Х			X*	X*	
European golden plover <i>Pluvialis apricaria</i> (non- breeding)		Х							
Golden Plover <i>Pluvialis apricaria</i> (non-breeding)						х	X*		
Grey Plover <i>Pluvialis</i> squatarola, (non-breeding)		Х		Х			X*	X*	
Knot Calidris canutus islandica (non-breeding)		Х	х	Х	х		X*	X*	
Lesser black-backed gull <i>Larus fuscus</i> (breeding)		Х		Х					

Feature	Liverpool Bay SPA	Ribble & Alt Estuaries SPA	Mersey Narrows & North Wirral Foreshore	Ribble & Alt Estuaries Ramsar	Mersey Narrows & North Wirral Foreshore Ramsar	Newton Marsh SSSI	Ribble Estuary SSSI	Sefton Coast SSSI	Mersey Narrows SSSI
Little gull <i>Hydrocoloeus minutus</i> (Non-breeding)	Х		х		х				
Little tern <i>Sternula albifrons</i> (Breeding)	Х								
Eurasian oystercatcher <i>Haematopus ostralegus</i> (non- breeding)		Х		Х			X*	X*	
Pink-footed goose <i>Anser</i> brachyrhynchus (non-breeding)		Х		х			X*		
Northern pintail <i>Anas acuta</i> (non-breeding)		Х		Х					
Common redshank <i>Tringa</i> <i>totanus</i> (non-breeding)		Х		Х					Х*
Red-throated diver <i>Gavia stellata</i> (Non-breeding)	Х								
Ringed plover <i>Charadrius hiaticula</i> (non-breeding)		Х		Х				X*	
Ruff <i>Philomachus pugnax</i> (breeding)		Х							
Sanderling <i>Calidris alba</i> (non- breeding)		х		Х			X*	X*	
Common shelduck, <i>Tadorna tadorna</i> (non-breeding)		Х		Х			X*		
Eurasian teal, <i>Anas crecca</i> (non-breeding)		Х		Х					
Whooper swan <i>Cygnus cygnus</i> (non-breeding)		Х		Х					
Turnstone Arenaria interpres (non-breeding)									X*
Eurasian wigeon <i>Anas penelope</i> (non-breeding)		Х		Х			X*		
Waterbird assemblage (non- breeding)	Х	Х	Х	Х	Х		x		
Breeding seabird assemblage		Х		Х					
Aggregation of breeding birds							Х		

Feature	Liverpool Bay SPA	Ribble & Alt Estuaries SPA	Mersey Narrows & North Wirral Foreshore	Ribble & Alt Estuaries Ramsar	Mersey Narrows & North Wirral Foreshore Ramsar	Newton Marsh SSSI	Ribble Estuary SSSI	Sefton Coast SSSI	Mersey Narrows SSSI
Assemblage of breeding birds of Littoral sediment, grazing marsh, marsh and marshy grassland habitats							Х		

This table lists bird species and identifies which of the sites of international importance for wildlife they are qualifying features of.

#### Notes:

\*SSSI aggregations of non-breeding birds

#### Table 6. Non-avian features within the designated sites

Feature	Sefton Coast SAC	Ribble & Alt Estuaries Ramsar	Ribble Estuary SSSI	Sefton Coast SSSI	Mersey Narrows SSSI	Lytham St Annes Dunes SSSI	Lytham Coastal Changes SSSI
Atlantic decalcified fixed dunes ( <i>Calluno-Ulicetea</i> )*	Х			Х			
Dunes with <i>Salix repens</i> ssp. <i>Argentea</i> ( <i>salicion arenariae</i> ).	Х			Х			
Embryonic shifting dunes	Х			Х			
Fixed dunes with herbaceous vegetation (`grey dunes`)*	Х			Х			
Humid dune slacks	Х			Х			
Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (`white dunes`)	Х			Х			
Great crested newt Triturus cristatus	Х						
Petalwort Petalophyllum ralfsii	Х			Х			
Natterjack toad Epidalea calamita		Х		Х			
Intertidal mud and sand flats			Х		Х		
Pioneer saltmarsh SM9 <i>Suaeda maritime</i> salt marsh community					Х		
Saltmarsh SM13 saltmarsh community				Х			
Saltmarsh SM 6, SM9, SM10, SM13, SM14, SM16, SM18, SM24 saltmarsh communities			Х				
Great-crested newt Triturus cristatus				Х			
Vascular plant assemblage (Grey hair-grass <i>Corynephorus canescens</i> ), Dune helleborine <i>Epipactis dunensis</i> , Green-flowered helleborine <i>Epipactis phyllanthes</i> , Dune fescue <i>Vulpia fasciculate</i> , Portland spurge <i>Euphorbia portlandica</i> , Seaside centuary <i>Centaurium littorale</i> , Variegated horsetail <i>Equisetum variegatum</i> , Round-leaved wintergreen <i>Pyrola rotundiflora spp</i> . <i>Maritima</i> , Baltic rush <i>Juncus balticus</i> ).				x			
Non-vascular plant: Long-leaved threadmoss Bryum neodamense				Х			
Sand lizard Lacerta agilis				Х			
Sandhill rustic moth <i>Luperina nicerlii</i> gueneei				Х			

Feature	Sefton Coast SAC	Ribble & Alt Estuaries Ramsar	Ribble Estuary SSSI	Sefton Coast SSSI	Mersey Narrows SSSI	Lytham St Annes Dunes SSSI	Lytham Coastal Changes SSSI
Ainsdale GCR SIL (coastal geomorphology) IA				Х			
Lagoons freshwater and saline					Х		
Vascular Plant Assemblage (Dune helleborine <i>Epipactis dunensis</i> , Seaside centuary <i>Centaurium littorale</i> , Variegated horsetail <i>Equisetum variegatum</i> , Round leaved wintergreen <i>Pyrola rotundifolia</i> , Sea spurge <i>Euphorbia paralias</i> , Isle of man cabbage <i>Rhynchosinapis monensis</i> , Dune fescue <i>Vulpia fasciculate</i> , Green flowered helleborine <i>Epipactis phyllanthes</i> )						x	
Invertebrate Assemblage F112 short sward assemblage.						Х	
Small-fruited Yellow-sedge Carex serotina						Х	
Sea Holly Eryngium maritimum						Х	
Common Broomrape Orobanche minor						Х	
Yellow Bartsia Parentucellia viscose						Х	
Knotted Pearlwort Sagina nodosa						Х	
Dune Fescue Vulpia fasciculata						Х	
Holocene sea-levels							Х

This table lists other species and habitats and identifies which of the sites of international importance for wildlife they are qualifying features of.