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Assessment of England Coast Path proposals between Birkenhead and Welsh Border on: Liverpool Bay SPA; Mersey Narrows and North Wirral Foreshore SPA / Ramsar; Dee Estuary SPA/Ramsar; and Dee Estuary SAC

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I) Introduction

This is a record of the Habitats Regulations Assessment ('HRA') undertaken by Natural England (in its role of competent authority) in accordance with the assessment and review provisions of the Conservation of Habitats and Species Regulations 2017 (as amended) ('the Habitats Regulations').

Natural England has a statutory duty under the Marine and Coastal Access Act 2009 to improve access to the English coast. This assessment considers the potential impacts of our detailed proposals for coastal access from Birkenhead and Welsh Border on the following sites of international importance for wildlife: Liverpool Bay SPA; Mersey Narrows and North Wirral Foreshore SPA/Ramsar; Dee Estuary SPA/Ramsar; & Dee Estuary SAC.

This assessment should be read alongside Natural England's related Coastal Access Reports which between them fully describe and explain its access proposals for the stretch as a whole. The Overview explains common principles and background and the reports explain how we propose to implement coastal access along each of the constituent lengths within the stretch.

www.gov.uk/government/publications/england-coast-path-birkenhead-to-the-welsh-border-comment-on-proposals

II) Background

The main wildlife interests for this stretch of coast are summarised in Table 1 (see Table 3 for a full list of qualifying features)

Table 1: Main wildlife interests

Interest	Description
Non-breeding waterbirds	North Wirral Foreshore and The Dee Estuary support large numbers of feeding waders at low tide and also include important high tide roost sites. The site is also of major importance during migration periods, especially for wader populations moving along the west coast of Britain.
Wintering and breeding seabirds	Liverpool Bay is located in the south-eastern region of the northern part of the Irish Sea, bordering north-west England and north Wales. The SPA covers a broad arc from approximately Morecambe Bay to the east coast of Anglesey. It supports nationally and internationally important numbers of wintering birds (common scoter, red-throated diver and little gull and a broader assemblage) and nationally important numbers of breeding terns (common tern and little tern).
Saltmarsh and other intertidal habitats	The Dee Estuary is a large, funnel-shaped, sheltered estuary, which supports extensive areas of intertidal sand and mudflats and saltmarsh. Where agricultural reclamation has not occurred, the saltmarsh grades into transitional brackish and swamp vegetation on the upper shore. The flats and saltmarsh of the estuary are of considerable importance in their own right and also as essential supporting habitat for SPA and Ramsar site species and other wildlife.
Other coastal habitats and species	The Dee Estuary also includes the three sandstone islands of Hilbre, which support cliff vegetation and maritime heathland and grassland. Sand dune habitats and species, including natterjack toad, occur at Red Rock and are also a feature of the designated site. Drift line vegetation is also present.

III) Our approach

Natural England's approach to ensuring the protection of sensitive nature conservation features under the Coastal Access Programme is set out in the Coastal Access Scheme [1]. Note that, following a ruling by the Court of Justice of the European Union (Case C-323/17 – usually cited as People over Wind), we have issued a technical memorandum concerning the application of this methodology where assessment under the Habitats Regulations is required.

Our final published proposal for a stretch of England Coast Path is preceded by detailed local consideration of options for route alignment, the extent of the coastal margin and any requirement for restrictions, exclusions or seasonal alternative routes. The proposal is thoroughly considered before being finalised and initial ideas may be modified or rejected during the iterative design process, drawing on the range of relevant expertise available within Natural England.

Evidence is also gathered as appropriate from a range of other sources which can include information and data held locally by external partners or from the experience of local land owners, environmental consultants and occupiers. The approach includes looking at any current visitor management practices, either informal or formal. It also involves discussing our emerging conclusions as appropriate with key local interests such as land owners or occupiers, conservation organisations or the local access authority. In these ways, any nature conservation concerns are discussed early and constructive solutions identified as necessary.

The conclusions of this assessment are approved by a member of Natural England staff who is not a member of coastal access programme team and who has responsibility for protected sites. This ensures appropriate separation of duties within Natural England.

IV) Aim and objectives for the design of our proposals

The new national arrangements for coastal access will establish a continuous well-maintained walking route around the coast and clarify where people can access the foreshore and other parts of the coastal margin. These changes will influence how people use the coast for recreation and our aim in designing our detailed proposals has been to secure and enhance opportunities for people to enjoy their visit whilst ensuring appropriate protection for affected European sites.

A key consideration in developing coastal access proposals for this stretch has been the possible impact of disturbance on non-breeding water birds as a result of recreational activities, particularly visitors with dogs.

Objectives for design of our detailed local proposals have been to:

- Avoid exacerbating issues at sensitive locations by making use of established coastal paths
- Work with local partners to design detailed proposals that take account of and complement efforts to manage access in sensitive locations
- Where practical, incorporate opportunities to raise awareness of the importance of this stretch of coast for wildlife and how people can help efforts to protect it.

V) Conclusion

We have considered whether our detailed proposals for coastal access between Birkenhead and the Welsh Border might have an impact on Liverpool Bay SPA; Mersey Narrows and North Wirral Foreshore SPA/Ramsar; Dee Estuary SPA/Ramsar; & Dee Estuary SAC. In Part C of this assessment we identify some possible risks to the relevant qualifying features and conclude that proposals for coastal access, without incorporated mitigation, may have a significant effect on some of these sites. In Part D we consider these risks in more detail, taking account of avoidance and mitigation measures incorporated into our access proposal, and conclude that there will not be an adverse effect on the integrity any of these sites. These measures are summarised in Table 2.

Table 2: Summary of risks and consequent mitigation built in to our proposals

Risk to conservation objectives	**Relevant design features of the access proposals**
Repeated disturbance to foraging or resting non-breeding waterbirds, under existing and increasing recreational activities, that is promoted by the ECP proposal leads to reduced fitness and reduction in population and/or contraction in the distribution of Qualifying Features within the site.	<u>Mersey Narrows and North Wirral Foreshore SPA/Ramsar</u> The proposed route for the Coast Path along the north coast of the Wirral is an existing well-known and promoted, surfaced, multi-user trail. This route is outside of the SPA and encouraging walkers to use the promenade at sensitive times as an alternative to the foreshore is a recommended action to help manage the existing disturbance pressure. Existing limitations on access over the foreshore will continue to apply and informal access management by Wirral MBC, Cheshire Wildlife Trust and Dee Estuary Voluntary Wardens are supported by the proposals. To help address and manage wider issues concerning disturbance from recreational activities, new information panels will be installed at a number of locations and Natural England will incorporate conservation messages in relevant promotional material and online stories when the trail is opened. <u>The Dee Estuary SPA/Ramsar</u> The proposed route for the Coast Path along the English coast of the Dee Estuary follows existing coastal paths and pavements. The route is largely outside of the SPA/Ramsar site and so removed from the areas used by non-breeding waterbirds for both feeding and roosting. Between Banks Road and Cottage Lane, Gayton an inland route for the Coast Path is proposed so as to avoid increasing disturbance to birds using the tidal creek. Signage and information will be installed directing walkers inland for this section. The margin in this section consists of large areas of sand and mudflats, the majority of which is unsuitable for access and over which coastal access rights will be

Risk to conservation objectives	Relevant design features of the access proposals
	excluded year round for safety reasons. Closer to the Welsh border, no new coastal access rights will be created over MoD land, including the Sealand Firing Range. In the Denhall Quay area coastal access rights will be excluded from an area of the salt marsh that might otherwise be suitable for access on nature conservation grounds. Signage and information will be installed at key access points between Moorside Lane and Burton Point to inform the public about these exclusions.
Disturbance to feeding or roosting waterbirds, during path establishment work, leads to reduced fitness and reduction in population and/or contraction in the distribution of Qualifying Features within the site.	Risks of bird disturbance during the installation of access management infrastructure on this stretch are low because of the limited amount proposed. No infrastructure is proposed to be installed within Mersey Narrows and North Wirral Foreshore SPA/Ramsar. Some path surface improvements and additional signage is proposed to be installed in the Dee Estuary SAC/SPA/Ramsar. All locations are on established paths close to the boundary of the site. Appropriate measures concerning access routes, timing of work and methods will be followed to minimise any risk of disturbance.
The access proposals modify how the site is used for recreation, causing disturbance to breeding redshank/ shelduck that make a significant contribution to the non-breeding population of these species.	Redshank nest in areas of suitable saltmarsh of the inner Dee Estuary. The Coast Path follows existing paths mainly on drier ground just inland of the saltmarsh and the marsh itself is unsuitable for access. The vegetation and creeks of the marsh provide good cover and breeding redshank are unlikely to be disturbed by people using the Coast Path. Coastal access rights will be restricted over an area of marsh near Denhall Quay that is important for several non-breeding waterbird and is also used by breeding redshank. Shelduck nest in burrows over a wide area mostly in land surrounding the estuary and unaffected the access proposals. Post-breeding shelduck increase in numbers and feed over the flats and at the water's edge where they are unlikely to be disturbed by people using the Coast Path.
Repeated trampling, following changes in recreational activities as a result of the access proposal, may damage sensitive habitats, plant communities or species, leading to long-term declines in their quality, distribution or numbers within the site. Types of possible effect include physical changes to habitats (for example	<u>Drift line vegetation</u> Annual vegetation of drift lines is an extremely ephemeral plant assemblage that occurs at the top of the foreshore between Cubbins Green and Heswall Fields.

Risk to conservation objectives	Relevant design features of the access proposals
through compaction or erosion of the substrate), shifts in the species composition of plant communities, and reductions in species' population size or distribution.	The proposed route for the Coast Path along this section is set back from the foreshore through urban areas, on a disused railway line and on clifftop paths. Some improvements to the continuity of the clifftop path are proposed, that will tend to encourage walkers to follow this route, rather than walk along the foreshore. <u>Salt marsh</u> Salt marsh is an extensive habitat over the inner Dee Estuary. The vegetation and creeks of much of the marsh mean that it is difficult terrain to walk over. The vast majority of the salt marsh is unsuitable for public access and no new coastal access rights will be created over it. In places where it is proposed to follow existing paths over the marsh and there are signs of vegetation being trampled, new sleeper bridges and short lengths of stone flags/ board walk or aggregate are proposed to be installed that will reduce the extent of current impacts and create a more sustainable path surface. <u>Sand dunes and areas used by natterjack</u> The proposed ECP is aligned on an existing popular path through the sand dunes and avoiding areas of embryonic dunes that might be more sensitive to trampling.
The installation of access management infrastructure may lead to a permanent loss of extent of habitats that are qualifying features or that support bird or amphibian species that are qualifying features.	The proposed alignment of the Coast Path on the west side of the Wirral follows the edge of the Dee estuary. In places, the surface of the established paths along which it is proposed to align the Coast Path have become waterlogged, degraded and difficult to walk on. As part of establishing the Coast Path, targeted works are proposed to improve the path surface at affected locations, comprising installation of sleeper bridges and short lengths of boardwalks, stone flags, and aggregate. All of the proposed surface improvements will be installed within the footprint of the established path and will not lead to a permanent loss in extent of saltmarsh or dune habitat. By improving the surface of the path, the risk of trampling impacts spreading around affected area, as walkers seek to avoid muddy or damaged sections of path, is reduced.
An increase in incidences of dogs accessing breeding ponds, following changes in recreational activities as a result of the access	The parts of the site used by natterjack are in areas with established access routes where patterns of recreational use are unlikely to be significantly affected

Risk to conservation objectives	Relevant design features of the access proposals
proposal, may cause disturbance, injury or death of amphibian eggs, tadpoles or adults. This could lead to a reduction in population abundance. Potential for chytrid fungus *Batrachochytrium dendrobatidis* and other diseases to be spread between natterjack colonies by people and dogs. This could lead to a reduction in population abundance. Works to construct the England Coast Path or ongoing path maintenance tasks cause disturbance, injury or death of toads, leading to reduction in population abundance.	by the proposals and where management measures are already in place, including temporary fencing of the main pools used by natterjack. Where works associated with establishing or maintaining the Coast Path might cause injury, disturbance or death of natterjack toads reasonable avoidance measures will be used.

VI) Implementation

Once a route for the trail has been confirmed by the Secretary of State, we will work with Wirral Metropolitan Borough Council (Wirral MBC) and Cheshire West and Chester (CWC) to ensure any works on the ground are carried out with due regard to the conclusions of this appraisal and relevant statutory requirements.

VII) Thanks

The development of our proposals has been informed by input from people with relevant expertise within Natural England and other key organisations. The proposals have been thoroughly considered before being finalised and our initial ideas were modified during an iterative design process. We are particularly grateful to officers at Wirral MBC; Cheshire Wildlife Trust, Dee Estuary Conservation Group, RSPB, Dee Estuary Volunteer Wardens and to other organisations and local experts whose contributions and advice have helped inform the development of our proposals.

PART A: Introduction and information about the England Coast Path

A1. Introduction

Natural England has a statutory duty under the Marine and Coastal Access Act 2009 to improve access to the English coast. The duty is in two parts: one relating to securing a long-distance walking route around the whole coast: we call this the England Coast Path; the other relating to a margin of coastal land associated with the route where in appropriate places people will be able to spread out and explore, rest or picnic.

To secure these objectives, we must submit reports to the Secretary of State for Environment, Food and Rural Affairs recommending where the route should be and identifying the associated coastal margin. The reports must follow the approach set out in our methodology (the Coastal Access Scheme), which – as the legislation requires – has been approved by the Secretary of State for this purpose.

Where implementation of a Coastal Access Report could impact on a site designated for its international importance for wildlife, called a 'European site[1]', a Habitats Regulations Assessment must be carried out.

The conclusions of this assessment are approved by a member of Natural England staff who is not a member of coastal access programme team and who has responsibility for protected sites. This ensures appropriate separation of duties within Natural England.

Natural England's approach to ensuring the protection of sensitive nature conservation features under the Coastal Access Programme is set out in the Coastal Access Scheme [1]. Note that, following a ruling by the Court of Justice of the European Union (Case C-323/17 – usually cited as People over Wind), we have issued a technical memorandum concerning the application of this methodology where assessment under the Habitats Regulations is required.

A2. Details of the plan or project

This assessment considers Natural England's proposals for coastal access along the stretch of coast between Birkenhead and the Welsh Border. Our proposals to the Secretary of State for this stretch of coast are presented in a series of reports that explain how we propose to implement coastal access along each of the constituent lengths within the stretch. Within this assessment we consider each of the relevant reports, both separately and as an overall access proposal for the part of the stretch in question.

Our proposals for coastal access have two main components:

- alignment of the England Coast Path; and,
- Designation of coastal margin.

England Coast Path

A continuous walking route around the coast – the England Coast Path National Trail - will be established by joining up existing coastal paths and creating new sections of path where necessary. The route will be established and maintained to National Trail quality standards.

[1] Ramsar sites and proposed Ramsar sites; potential Special Protection Areas (pSPA); candidate Special Areas of Conservation (cSAC); and sites identified, or required, as compensatory measures for adverse effects on European sites are treated in the same way by UK government policy

The coastal path will be able to 'roll back' as the coast erodes or where there is significant encroachment by the sea such as occurs in the case of a deliberate breach of sea defences.

Coastal Margin

An area of land associated with the proposed trail will become coastal margin, including all land seawards of the trail down to mean low water.

Coastal margin is typically subject to new coastal access rights, unless land within it is excepted or locally excluded from them. The nature and limitations of the new rights, and the key types of land excepted from them, are explained in more detail in Chapter 2 of our Coastal Access Scheme [1].

Where the public have an existing right of access by statute or by express or implied permission (for example where there already are public-facing signs or messaging) coastal access rights exist in parallel with those existing rights. Coastal access arrangements do not change the position for people using the land under other rights - for example to shoot or to exercise rights of common there.

The position in relation to pre-existing statutory open access rights varies according to their type:

- Any that already apply within the margin under Part 1 of the Countryside and Rights of Way Act 2000 (CROW) are replaced by the new coastal access, because the detailed CROW rules are somewhat different on the coast.
- But most other pre-existing open access rights - for example over urban commons or those with their own Act of Parliament - continue to apply instead of coastal access rights coming into force. This is in part because they often include higher rights, for example to ride horses on the land, as well as open-air recreation on foot.

Where public access on foot already takes place on land within the margin because people are 'helping themselves' to it without any right to be there (as happens for example on many beaches), the new coastal access rights secure this existing use legally, subject to the normal national restrictions on coastal access rights, and to any additional local restrictions or exclusions that may prove necessary.

Of particular relevance to this assessment is that most areas of saltmarsh and mudflat within the Dee Estuary are considered unsuitable for public access and will be excluded from the new coastal access rights at all times, regardless of any other considerations. As above, this will not affect other forms of established legal use of such areas.

Promotion of the England Coast Path

The Coast Path will be promoted as part of the family of National Trails. On the ground, the path will be easy to follow, with distinctive signposting at key intersections and places people can join the route. Directional way markers incorporating the National Trail acorn symbol will be used to guide people along the route. The coastal margin will not normally be marked on the ground, except where signage is necessary to highlight dangers that might not be obvious to visitors, or clarify to the scope and/or extent of coastal access rights.

Information about the Coast Path will be available on-line, including via the established National Trails website that has a range of useful information, including things for users to be aware of, such as temporary closures and diversions. The effect and limitations of coastal access rights are, and will continue to be, explained in awareness raising and publicity of

coastal access. Natural England works with partners nationally and locally in the design of such materials. The route is depicted on Ordnance Survey maps using the acorn symbol. The extent of the coastal margin is also depicted, together with an explanation of coastal access rights, where they do and don't apply and how to find out about local restrictions or exclusions.

Maintenance of the England Coast Path

The access proposals provide for the permanent establishment of a path and associated infrastructure, including additional mitigation measures referred to in this assessment and described in the access proposals. The England Coast Path will be part of the National Trails family of routes, for which there are national quality standards. Delivery is by local partnerships and there is regular reporting and scrutiny of key performance indicators, including the condition of the trail.

A number of information boards will be installed along this section of coast as part of implementing coastal access. The purpose of these boards is to tell people about local wildlife and how they can help to protect it. The boards between New Brighton and Hoylake and along the Dee Estuary will be installed and maintained by either Wirral MBC or Cheshire West and Chester. Between Parkgate and the Welsh Border, Natural England will work with RSPB on designing and installing some boards, which will then be maintained by RSPB.

Responding to future change

The legal framework that underpins coastal access allows for adaptation in light of future change. In such circumstances Natural England has powers to change the route of the trail and limit access rights over the coastal margin in ways that were not originally envisaged. These new powers can be used, as necessary, alongside informal management techniques and other measures to ensure that the integrity of the site is maintained in light of unforeseen future change.

Establishment of the trail

Establishment works to make the trail fit for use and prepare for opening, including any special measures that have been identified as necessary to protect the environment will be carried out before the new public rights come into force on this stretch. Details of the works to be carried out and the estimated cost are provided in the access proposals. The cost of establishment works will be met by Natural England. Works on the ground to implement the proposals will be carried out by Wirral Metropolitan Borough Council (Wirral MBC) and Cheshire West and Chester (CWC), subject to any further necessary consents being obtained, including to undertake operations on a SSSI. Natural England will provide further advice to the local authority carrying out the work as necessary.

PART B: Information about the European Site(s) which could be affected

B1. Brief description of the European Sites(s) and their Qualifying Features

Dee Estuary SPA, SAC and Ramsar

The Dee Estuary lies on the border between England and Wales on the north-west coast of Britain. It is a large, funnel-shaped, sheltered estuary, which supports extensive areas of intertidal sand and mudflats and saltmarsh. Where agricultural reclamation has not occurred, the saltmarsh grades into transitional brackish and swamp vegetation on the upper shore. The site also includes the three sandstone islands of Hilbre, which support cliff vegetation and maritime heathland and grassland. The two shorelines of the estuary show a marked contrast between the industrialised usage of the coastal belt in Wales and residential and recreational usage in England. The site is of major importance for waterbirds; during the winter the intertidal flats, saltmarshes and fringing habitats including coastal grazing marsh/fields, provide feeding and roosting sites for internationally important numbers of ducks and waders; in summer the Welsh part of the site supports nationally important breeding colonies of two species of tern. The site is also important during migration periods, particularly for wader populations moving along the west coast of Britain and for Sandwich terns post-breeding. The Ramsar citation emphasises the estuary's important role in shoreline stabilisation; the dissipation of erosive forces; sediment trapping and water supply.

The site was subject of Ramsar Advisory Missions in 1993 and 1994 due to several adverse factors affecting its ecological character: pollution, overfishing, introduction of invasive species and general disturbance from transport and industrial activities. Since then, management plans have been developed and implemented. However, some of the threats remain. The Dee Estuary Ramsar is one of only two UK sites on the Montreux Record of wetlands at risk (in which measures to reduce disturbance from recreational activities are cited) [2].

The Dee Estuary has been selected as a SAC, primarily because of its extensive mudflats, sandflats and areas of early successional *Salicornia* saltmarsh. It also qualifies for selection on accounts of its drift-line vegetation, sea-cliff habitats; sand dune habitats and species; and anadromous fish-species (river and sea lamprey). The Dee Estuary SAC covers a wider area than the SPA – i.e. the Dee Estuary SPA and the North Wirral Foreshore part of the Mersey Narrows and North Wirral Foreshore SPA.

Mersey Narrows & North Wirral Foreshore SPA and Ramsar

Mersey Narrows and North Wirral Foreshore SPA and Ramsar site is located on the northwest coast of England at the mouths of the Mersey and Dee estuaries.

The site comprises man-made lagoons at Seaforth (which are outside the bounds of the stretch), intertidal habitats at Egremont foreshore and the extensive intertidal flats at North Wirral Foreshore, along a rural and industrial stretch of coast. In addition there are limited areas of brackish marsh, rocky shoreline and boulder clay cliffs.

Egremont is most important as a feeding habitat for waders at low tide whilst Seaforth (which lies outside of the Birkenhead to Welsh Border stretch) is primarily a high tide roost site, as well as a nesting site for terns. North Wirral Foreshore supports large numbers of feeding waders at low tide and also includes important high tide roost sites.

The Ramsar designation highlights i) the site's ecosystem services including shoreline stabilisation and dissipation of erosive forces, sediment trapping and water supply; ii) the potential threats to its ecological character, that derive from a) increasing recreational activities; b) social and economic pressures to return the foreshore back to sandy beaches; c) sedimentation of the foreshore which reduces the available low-tide feeding habitat and causes vegetation succession; and d) current land-use – that includes agriculture, urban development and recreational activities include bird watching, walking, fishing, sailing, canoeing, cycling and kite surfing, all carried out at intensive levels.

Liverpool Bay SPA

Liverpool Bay is located in the south-eastern region of the northern part of the Irish Sea, bordering north-west England and north Wales. The SPA covers a broad arc from approximately Morecambe Bay to the east coast of Anglesey. It supports nationally and internationally important numbers of wintering birds (common scoter, red-throated diver and little gull and a broader assemblage) and nationally important numbers of breeding terns (common tern and little tern). The seabed of the SPA consists of a wide range of mobile sediments. Large areas of muddy sand stretch from Rossall Point to the Ribble Estuary, and sand predominates in the remaining areas, with a concentrated area of gravelly sand off the Mersey Estuary and a number of prominent sandbanks off the English and Welsh coasts. The tidal currents throughout the SPA are generally weak, which combined with a relatively large tidal range facilitates the deposition of sediments.

Maps of the European sites potentially affected by the access proposals are provided in Annex 1.

The following table provides a complete list of the qualifying features of the European Sites which could be affected by the access proposals.

Table 3: Qualifying features

Qualifying Feature	Liverpool Bay SPA	Mersey Narrows & North Wirral Foreshore SPA	Mersey Narrows & North Wirral Foreshore Ramsar	Dee Estuary SPA	Dee Estuary Ramsar	Dee Estuary SAC
Bar-tailed Godwit *Limosa lapponica* (nb)		✓	✓	✓	✓	
Black-tailed godwit *Limosa limosa islandica* (nb)				✓	✓	
Common scoter *Melanitta nigra* (nb)	✓					
Common tern *Sterna hirundo* (b)	✓	✓	✓	✓		
Common tern *Sterna hirundo* (nb)		✓				
Curlew *Numenius arquata* (nb)				✓	✓	
Dunlin *Calidris alpina alpina* (nb)				✓	✓	
Grey plover *Pluvialis squatarola* (nb)				✓	✓	
Knot *Calidris canutus islandica* (nb)		✓	✓	✓	✓	
Red-throated diver *Gavia stellata* (nb)	✓					

Qualifying Feature	Liverpool Bay SPA	Mersey Narrows & North Wirral Foreshore SPA	Mersey Narrows & North Wirral Foreshore Ramsar	Dee Estuary SPA	Dee Estuary Ramsar	Dee Estuary SAC
Little gull *Hydrocoloeus minutus* (nb)	✓	✓	✓			
Little tern *Sternula albifrons* (b)	✓			✓		
Oystercatcher *Haematopus ostralegus* (nb)				✓	✓	
Pintail *Anas acuta* (nb)				✓	✓	
Redshank *Tringa tetanus* (nb & passage)				✓	✓	
Sandwich tern *Sterna sandvicensis* (nb)				✓		
Shelduck *Tadorna tadorna* (nb)				✓	✓	
Teal *Anas crecca* (nb)				✓	✓	
Waterbird assemblage (nb)[1]	✓	✓	✓	✓	✓	
Natterjack toad *Bufo calamita*					✓	
Estuary[2]					✓	✓
Annual vegetation of drift lines						✓
Atlantic salt meadows						✓
Embryonic shifting dunes						✓
Fixed dunes with herbaceous vegetation (`grey dunes`)						✓
Humid dune slacks						✓
Mudflats and sandflats not covered by seawater at low tide						✓
Salicornia and other annuals colonising mud and sand						✓
Shifting dunes along the shoreline with *Ammophila arenaria* (`white dunes`)						✓
Vegetated sea cliffs of the Atlantic and Baltic coasts						✓
Petalwort *Petalophyllum ralfsii*						✓
River lamprey *Lampetra fluviatilis*						✓
Sea lamprey *Petromyzon marinus*						✓

Notes:

[1] Current abundance and composition of the assemblage feature is taken into account in our assessment. 'Main component species' of an assemblage are those which regularly occur on the site in internationally or nationally important numbers or regularly exceed 2,000 individuals. WeBS 5 year mean peak counts have been used for the period ending 2018/19 and the percentage of the relevant threshold level in operation during 2018/19 [3]. When classifying a waterbird assemblage as an SPA qualifying feature, the Ramsar Conventions

Strategic Framework definition of 'waterbird' is used and as such we consider the two qualifying features synonymous. The main component species for each assemblage are:

i. Mersey Narrows and North Wirral Foreshore SPA/Ramsar: Brent goose (light-bellied of Nearctic origin); barnacle goose; pink-footed goose; whooper swan; shelduck; wigeon; pintail; teal; eider; common scoter; red-breasted merganser; little egret; cormorant; oystercatcher; lapwing; golden plover; grey plover; ringed plover; whimbrel; curlew; bar-tailed godwit; **black-tailed godwit**; turnstone; **knot**; sanderling; dunlin; redshank; greenshank; black-headed gull; **little gull**; herring gull; lesser black-backed gull, sandwich tern; **common tern**. (spp. in bold are qualifying features in their own right)

ii. Dee Estuary SPA/Ramsar: Brent goose (light-bellied of Nearctic origin); pink-footed goose; **shelduck**; wigeon; **pintail**; **teal**; common scoter; little egret; cormorant; **oystercatcher**; avocet; lapwing; **grey plover**; ringed plover; whimbrel; **curlew**; **bar-tailed godwit**; **black-tailed godwit**; **knot**; sanderling; **dunlin**; **redshank**; black-headed gull; herring gull; **Sandwich tern**; little tern; common tern (spp. in bold are qualifying features in their own right)

iii. Liverpool Bay SPA: **common scoter**; **common tern**; **red-throated diver**; **little gull**; **little tern**; cormorant, red-breasted merganser (spp. in bold are qualifying features in their own right)

[2]The following are cited as contributing to the SAC estuaries feature, each of which are considered in the assessment that follows: subtidal sediment communities and intertidal hard substrate communities. In addition, the following sub features are also qualifying features in their own right: mudflats and sandflats not covered by seawater at low tide; *Salicornia* and other annuals colonising mud and sand; Atlantic salt meadows; annual vegetation of drift lines. The same sub features are listed as components of the Ramsar estuaries feature, with the exception of intertidal coarse sediment, which are located beyond the boundary of the Ramsar site [4].

B2. European Site Conservation Objectives (including supplementary advice)

Natural England provides advice about the Conservation Objectives for European Sites in England in its role as the statutory nature conservation body. These Objectives (including any Supplementary Advice which may be available) are the necessary context for all HRAs.

The overarching Conservation Objectives for every European Site in England are to ensure that the integrity of each site is maintained or restored as appropriate, and that each site contributes to achieving the aims of the Habitats Regulations, by either maintaining or restoring (as appropriate):

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

Where Conservation Objectives Supplementary Advice is available, which provides further detail about the features' structure, function and supporting processes mentioned above, the implications of the plan or project on the specific attributes and targets listed in the advice will be taken into account in this assessment.

Conservation Objectives Supplementary Advice is available for Mersey Narrows and North Wirral Foreshore SPA [5].

For Ramsar sites, a decision has been made by Defra and Natural England not to produce Conservation Advice packages, instead focussing on the production of Conservation Objectives. As the provisions on the Habitats Regulations relating to Habitat Regulations Assessments extend to Ramsar sites, Natural England considers the Conservation Advice packages for the overlapping European Marine Site designations to be, in most cases, sufficient to support the management of the Ramsar interests.

For Dee Estuary SPA/SAC and Liverpool Bay SPA, conservation advice has been issued by Natural England and the Countryside Council for Wales [4] [6].

PART C: Screening of the plan or project for appropriate assessment

C1. Is the plan or project either directly connected with or necessary to the (conservation) management (of the European Site's qualifying features)?

The Coastal Access Plan is not directly connected with or necessary to the management of the European sites for nature conservation listed in B1 above.

Conclusion:

As the plan or project is not either directly connected or necessary to the management of all of the European site(s)'s qualifying features, and/or contains non-conservation elements, further Habitats Regulations assessment is required.

C2. Is there a likelihood [or risk] of significant [adverse] effects ('LSE')?

This section details whether those constituent elements of the plan or project which are (a) not directly connected with or necessary to the management of the European Site(s) features and (b) could conceivably adversely affect a European site, would have a **likely significant effect,** either alone or in combination with other plans and projects, upon the European sites and which could undermine the achievement of the site's conservation objectives referred to in section B2.

In accordance with case law, this HRA has considered an effect to be 'likely' if it '*cannot be excluded on the basis of objective information'* and is 'significant' if it *'undermines the conservation objectives'*. In accordance with Defra guidance on the approach to be taken to this decision, in plain English, the test asks whether the plan or project '*may'* have a significant effect (i.e. there is a risk or a possibility of such an effect).

This assessment of risk therefore takes into account the precautionary principle (where there is scientific doubt) and **excludes**, at this stage, any measures proposed in the submitted details of the plan/project that are specifically intended to avoid or reduce harmful effects on the European site(s).

Each of the project elements has been tested in view of the European Site Conservation Objectives and against each of the relevant European site qualifying features. An assessment of potential effects using best available evidence and information has been made.

C2.1 Risk of Significant Effects Alone

The first step is to consider whether any elements of the project are likely to have a significant effect upon a European site 'alone' (that is when considered in the context of the prevailing environmental conditions at the site but in isolation of the combined effects of any other 'plans and projects'). Such effects do not include those deemed to be so insignificant as to be trivial or inconsequential.

In this section, we assess risks to qualifying features, taking account of their sensitivity to coastal walking and other recreational activities associated with coastal access proposals, and in view of each site's Conservation Objectives.

Some of the qualifying features considered in this assessment occupy similar ecological niches and share ways in which they might be sensitive to the access proposals. To avoid repetition and improve the clarity of this assessment we have grouped the qualifying features as shown in the following table.

Table 4: Feature Groups

Feature group	**Qualifying feature(s)**
Offshore birds	Liverpool Bay Common scoter; red-throated diver; common tern (when foraging offshore); little tern (when foraging offshore); little gull (when offshore); waterbird assemblage
Non–breeding waterbirds	Mersey Narrows & North Wirral Foreshore Bar-tailed godwit; common tern; knot; little gull; waterbird assemblage Dee Estuary Bar-tailed godwit; black-tailed godwit; curlew; dunlin; grey plover; knot; oystercatcher; pintail; redshank (nb & passage), Sandwich tern; shelduck; teal; waterbird assemblage
Breeding terns	Mersey Narrows & North Wirral Foreshore Common tern Dee Estuary Common tern & little tern
Subtidal sediments	Dee Estuary Estuaries (subtidal sediment communities sub-feature)
Mud and sand flats	Dee Estuary Mudflats and sandflats not covered by seawater at low tide; estuaries (mudflats and sandflats not covered by seawater at low tide sub-feature)
Intertidal rocks	Dee Estuary Estuaries (intertidal hard substrate communities sub-feature)
Drift line vegetation	Dee Estuary Annual vegetation of drift lines; estuaries (annual vegetation of drift lines sub-feature)
Salt marsh	Dee Estuary Salicornia and other annuals colonising mud and sand; Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*);

Feature group	Qualifying feature(s)
	estuaries (*Salicornia* and other annuals colonising mud and sand & Atlantic salt meadows sub-features)
Sand dunes	Dee Estuary Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram; fixed dunes with herbaceous vegetation ("grey dunes"); dune grassland; humid dune slacks; embryonic shifting dunes
Vegetated sea cliffs	Dee Estuary Vegetated sea cliffs of the Atlantic and Baltic coasts
Petalwort	Dee Estuary Petalwort
Lampreys	Dee Estuary River lamprey, sea lamprey
Natterjack toad	Dee Estuary Natterjack toad

The risk of significant effects alone is considered in Table 5.

Table 5: Assessment of likely significant effects alone

Feature group	Relevant pressure	Sensitivity to coastal access proposals	Assessment of risk to site conservation objectives	LSE alone?
Offshore birds	Disturbance of feeding or resting birds	This part of the HRA is concerned with the coastal waters that form Liverpool Bay SPA. Common scoter and red-throated diver feed and rest on water. Because they spend most of the time on the water they are not sensitive to changes in access on or near the foreshore. Cormorant and red-breasted merganser are component species of the Liverpool Bay SPA waterbird assemblage. They are unlikely to be sensitive to the access proposals whilst they are feeding and resting offshore. Both are also component species of the MN&NWF waterbird assemblage considered further below. Terns and gulls foraging offshore are unlikely to be sensitive to the access proposals. The sensitivity of breeding terns at nesting sites is considered further below. Little gull (nb) is a qualifying feature of MN&NWF and is considered further below.	No appreciable risk. Birds in this feature group using the coastal waters along the stretch are highly unlikely to be significantly disturbed by usage or installation of the coast path. Liverpool Bay SPA is a marine SPA and no new access infrastructure will be installed within it. The proposed route along the north coast of the Wirral is set back from the foreshore along the majority of the stretch which rules out any interaction. Furthermore the distances between the foreshore and open coastal waters across the intertidal sandflats / mudflats are generally considerable except at very high tides.	No
Non–breeding waterbirds	Disturbance of feeding or resting birds	Most of these species feed on intertidal flats and saltmarshes. At high tide several of these species aggregate to roost at locations along the foreshore or on saltmarshes. While roosting and feeding, these species are at risk of disturbance and displacement by people and their dogs.	The level of risk is higher where access proposals would be likely to bring people close to places on which large numbers of birds depend including undisturbed high tide roost sites and important feeding areas. These species may be sensitive to disturbance from recreational activities that interrupt them whilst feeding on	**Yes**

Feature group	Relevant pressure	Sensitivity to coastal access proposals	Assessment of risk to site conservation objectives	LSE alone?
			the exposed tidal mudflats, saltmarshes or coastal fields or when at roost along the foreshore or on saltmarshes. Disturbance at main roost sites is likely to be especially significant because the birds' energy expenditure may be increased both directly (particularly if they are repeatedly flushed) and indirectly (if disturbance forces birds to roost further from their preferred feeding areas).	
Non–breeding waterbirds	Disturbance from recreational activities during the breeding season	The breeding population of a species may contribute to the non-breeding population of a site by being wholly or largely resident. Breeding birds are potentially at risk from disturbance by recreational activities including walking and walking with a dog.	The level of risk is higher at places where a breeding population of a species significantly contributes to the non-breeding population. Most adult waterbirds leave Mersey Narrow & North Wirral Foreshore and The Dee Estuary to breed. Those that stay are not considered to contribute significantly to the non-breeding population. However; significant numbers of redshank and shelduck breed on saltmarsh in The Dee Estuary and may be at risk from disturbance.	**Yes**
Non–breeding waterbirds	Loss of supporting habitat through installation of access management infrastructure	The supporting habitats of the features may be permanently lost due to installation of new access management infrastructure.	Localised risk. The level of risk is higher where there is a permanent and irreversible loss of the extent of supporting habitat which waterbirds depend on.	**Yes**

Feature group	Relevant pressure	Sensitivity to coastal access proposals	Assessment of risk to site conservation objectives	LSE alone?
Non–breeding waterbirds	Establishment works	Roosting or feeding birds could be disturbed during establishment works.	The level of risk is higher where establishment works are required close to areas where these birds roost, feed or breed.	**Yes**
Breeding terns	Disturbance of nesting birds	Nesting sites for breeding common and little tern are outside the area affected by the access proposals.	No appreciable risk. The breeding sites are outside the project area, and therefore these features will not be affected by the coastal access proposals. The Common and little terns of the Dee Estuary breed on the Welsh side of the SPA and the common terns of the Mersey Narrows and North Wirral Foreshore SPA breed on the Liverpool side of the SPA.	No
Subtidal sediments	None identified	Not considered sensitive due to the lack of interaction between coast path users and the features.	There is no interaction between users of the Coast Path and these features.	No
Mud and sand flats	Damage by abrasion	Abrasion of muddy soft sediment communities can alter the habitat structure and may lead to a change in species composition, though clean sand communities have only low sensitivity. Excessive damage may ultimately result in the destabilisation of the sediment and lead to rapid erosion.	No appreciable risks. The Coast Path will not be aligned over flats regularly inundated by the tide. Flats may become part of the coastal margin. Muddy flats may be sensitive to abrasion but this is unlikely to result from the access proposals, since they are difficult and dangerous to walk over. No new coastal access rights will be created over mudflats that are unsuitable for public access. Sandy flats are more resilient to abrasion. The extensive sandy flats along the north coast of the Wirral are already used for a range of recreational activities and are not considered to be vulnerable to access on foot.	No

Feature group	Relevant pressure	Sensitivity to coastal access proposals	Assessment of risk to site conservation objectives	LSE alone?
Intertidal rocks	Damage by abrasion	On the English side of the Dee Estuary, there are notable hard substrate communities at Hilbre Island. Hard substrate communities are considered to have a low sensitivity to the effects of abrasion [4].	No appreciable risks. The proposed Coast Path will not impact on this feature as it will not be routed around Hilbre Island. The public already enjoy the right to access on foot over Hilbre Island and the surrounding foreshore, and therefore the creation of coast access rights is not expected to alter patterns and levels of access in this area.	No
Drift line vegetation	Trampling	An ephemeral habitat composed of annual or short-lived succulent species growing in accumulated detritus at the drift line, usually on a substrate of small shingle-sand. Plants are often fragile and hence may be sensitive to trampling.	There may be localised risks from the access proposals where drift line vegetation occurs at the high water mark around parts of The Dee Estuary, including along the shore north-west of Heswall.	**Yes**
Salt marsh	Trampling	Vegetation may be lost, damaged and prevented from establishing on soft, wet substrates where people regularly walk.	The level of risk is higher in areas where the coast path is aligned on or very close to saltmarsh.	**Yes**
Salt marsh	Loss of habitat through installation of access management infrastructure	As qualifying features in their own right or as support to the qualifying features, habitats may be permanently lost due to the installation of new access management infrastructure.	The level of risk is higher where there is a permanent and irreversible loss of habitat.	**Yes**
Sand dunes	Trampling	If the Coast Path crosses dune habitats, or the feature becomes subject to new coastal access rights, then trampling by walkers could damage the features, changing their structure and species composition.	Dune habitat has a limited distribution on the English side of The Dee Estuary, occurring mainly at Red Rocks near West Kirby.	**Yes**

Feature group	Relevant pressure	Sensitivity to coastal access proposals	Assessment of risk to site conservation objectives	LSE alone?
		Dune communities vary considerably in their sensitivity to trampling. White dunes and embryonic shifting dunes tend to be more sensitive to trampling than more stable dune types.	Significant effects cannot be ruled out at this stage of the assessment.	
Sand dunes	Loss of habitat through installation of access management infrastructure	As qualifying features in their own right or as support to the qualifying features, habitats may be permanently lost due to the installation of new access management infrastructure.	The level of risk is higher where there is a permanent and irreversible loss of habitat.	**Yes**
Salt marsh; sand dunes; natterjack toad	Nutrient enrichment by canine urine and faeces	Changes in vegetation composition may result from nutrient enrichment caused by deposition of canine urine and faeces.	No appreciable risk. Impacts are usually seen at the edge of paths close to the main arrival points to a site where deposition is concentrated (car parks particularly) [7]. Beyond these locations nutrients are more widely dispersed and unlikely to have a significant impact. No significant new access points will be created as a result of the access proposals in the vicinity of saltmarsh, dune or areas used by natterjack toads.	No
Vegetated sea cliffs of the Atlantic and Baltic coasts	Trampling	This vegetation is found on the sandstone of Hilbre Island.	No appreciable risk. It is not proposed to align the Coast Path around Hilbre Island where this habitat occurs. The public already enjoy the right to access on foot over Hilbre Island and therefore the creation of coast access	No

Feature group	Relevant pressure	Sensitivity to coastal access proposals	Assessment of risk to site conservation objectives	LSE alone?
			rights is not expected to alter patterns and levels of access in this area. In addition, damage to this habitat is unlikely since it mainly grows on cliffs in places that are physically inaccessible.	
Petalwort	No risks identified	Petalwort *Petalophyllum ralfsii* is a liverwort of calcareous dune slacks. It appears to have low vulnerability to trampling and at some sites, it appears to be increasing as a result of trampling and soil compaction.	Petalwort has only been recorded and is only seen as a feature within the Welsh part of the Dee Estuary SAC and Ramsar site (on the dunes at Gronant and Talacre Warren). It has not been recorded from the Red Rocks part of the Dee Estuary Ramsar site.	No
Lampreys	No risks identified	River and sea lampreys migrate upstream from the sea to spawn. River and sea lampreys are present in the River Dee and therefore the Dee Estuary forms an essential part of their migratory route.	These species live in the water below MLWS and are not affected by the coastal access proposals.	No
Natterjack toad	Disturbance to amphibians and their breeding pool	If the Coast Path crosses dune habitats / slacks that support natterjack, or the features are included in spreading room, then disturbance caused primarily by dogs running into breeding pools - as well as trampling by walkers - could impact the features by causing harm to spawn, tadpoles or adult toads.	Moderate localised risk. The proposed route is aligned through an area of dunes at Red Rocks where natterjack are present.	**Yes**
Natterjack toad	Spread of disease by people and dogs	Potential for chytrid fungus *Batrachochytrium dendrobatidis* and other diseases to be spread by people and dogs.	The level of risk is higher in areas where the ECP connects sites where natterjacks are known to occur, particularly if this is new access.	**Yes**

Feature group	Relevant pressure	Sensitivity to coastal access proposals	Assessment of risk to site conservation objectives	LSE alone?
Natterjack toad	Loss of feature extent through installation of access management infrastructure	Areas of suitable supporting habitat may be permanently lost due to the installation of new access management infrastructure (eg signage, bridges, gates, surfacing).	Low localised risk. The proposed route is aligned through an area of dunes at Red Rocks where natterjack are present.	**Yes**
Natterjack toad	Establishment works and ongoing maintenance	Installation of new or replacement infrastructure or ongoing activities such as vegetation cutting may pose a risk in areas where toads are present.	The level of risk is high in areas where natterjacks are known to occur.	**Yes**

Conclusion:

The plan or project alone is likely to have a significant effect on the following qualifying features:

- **Non–breeding waterbirds (of Mersey Narrows and North Wirral Foreshore SPA/Ramsar)** - bar-tailed godwit; common tern; knot; little gull & waterbird assemblage
- **Non–breeding waterbirds (of The Dee Estuary SPA/Ramsar)** - bar-tailed godwit; black-tailed godwit; curlew; dunlin; grey plover; knot; oystercatcher; pintail; redshank (nb & passage), Sandwich tern; shelduck; teal & waterbird assemblage
- **Drift line vegetation** - annual vegetation of drift lines; estuaries (annual vegetation of drift lines sub-feature)
- **Salt marsh** - *Salicornia* and other annuals colonising mud and sand; Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); estuaries (*Salicornia* and other annuals colonising mud and sand & Atlantic salt meadows sub-features)
- **Sand dunes** - shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); shifting dunes with marram; fixed dunes with herbaceous vegetation ("grey dunes"); dune grassland; humid dune slacks; embryonic shifting dunes
- **Natterjack toad**

The plan or project alone is unlikely to have a significant effect on the following qualifying features:

- **Offshore birds (of Liverpool Bay SPA)** - common scoter (nb); red-throated diver (nb); common tern (b); little tern (b); little gull (nb) & waterbird assemblage (nb)
- **Breeding terns** - common & little tern (at nesting sites or when foraging offshore)
- **Subtidal sediment** - estuaries (subtidal sediment communities sub-feature)
- **Mud & sand flats** - mudflats and sandflats not covered by seawater at low tide; estuaries (mudflats and sandflats not covered by seawater at low tide sub-feature)
- **Intertidal rocks** - estuaries (intertidal hard substrate communities sub-feature)
- **Vegetated sea cliffs** - vegetated sea cliffs of the Atlantic and Baltic coasts
- **Petalwort**
- **Lampreys** - river & sea lamprey

(Any appreciable risks identified that are not significant alone are further considered in section C2.2)

C2.2 Risk of Significant Effects in-combination with the effects from other plans and projects

The need for further assessment of the risk of in-combination effects is considered here.

Natural England considers that it is the appreciable risks of effects (from a proposed plan or project) that are not themselves considered to be significant alone which must be further assessed to determine whether they could have a combined effect significant enough to require an appropriate assessment.

In C2.1 the qualifying features on which the access proposals might have an effect alone are identified – these are considered further in Part D of this assessment. For all other features, no other appreciable risks arising from the access proposals were identified that have the potential to act in combination with similar risks from other proposed plans or projects to also become significant. It has therefore been excluded, on the basis of objective information, that the project is likely to have a significant effect in-combination with other proposed plans or projects.

C3. Overall Screening Decision for the Plan/Project

On the basis of the details submitted, Natural England has considered the plan or project under Regulation 63(1)(a) of the Habitats Regulations and made an assessment of whether it will have a likely significant effect on a European site, either alone or in combination with other plans and projects.

In light of sections C1 and C2 of this assessment above, Natural England has concluded:

As the plan or project is likely to have significant effects (or *may* have significant effects) on some or all of the Qualifying Features of the European Site(s) 'alone', further appropriate assessment of the project 'alone' is required.

PART D: Appropriate Assessment and Conclusions on Site Integrity

D1. Scope of Appropriate Assessment

In light of the screening decision above in section C3, this section contains the Appropriate Assessment of the implications of the plan or project in view of the Conservation Objectives for the European Site(s) at risk.

The Sites and the Qualifying Feature for which significant effects (whether 'alone' or 'in combination') are likely or cannot be ruled out and which are initially relevant to this appropriate assessment are:

Table 6: Scope of Appropriate Assessment

Environmental pressure	Qualifying Feature(s) affected	Risk to Conservation Objectives
Disturbance of feeding or roosting non-breeding waterbirds birds from recreational activities	Mersey Narrows and North Wirral Foreshore Bar-tailed godwit; common tern; knot; little gull & waterbird assemblage The Dee Estuary Bar-tailed godwit; black-tailed godwit; curlew; dunlin; grey plover; knot; oystercatcher; pintail; redshank (nb & passage), Sandwich tern; shelduck; teal & waterbird assemblage	Repeated disturbance to foraging or resting non-breeding waterbirds, under existing and increasing recreational activities, that is promoted by the ECP proposal leads to reduced fitness and reduction in population and/or contraction in the distribution of Qualifying Features within the site.
Disturbance of feeding or roosting non-breeding waterbirds birds from works	Mersey Narrows and North Wirral Foreshore Bar-tailed godwit; common tern; knot; little gull & waterbird assemblage The Dee Estuary Bar-tailed godwit; black-tailed godwit; curlew; dunlin; grey plover; knot; oystercatcher; pintail; redshank (nb & passage), Sandwich tern; shelduck; teal & waterbird assemblage	Disturbance to feeding or roosting waterbirds, during path establishment work, leads to reduced fitness and reduction in population and/or contraction in the distribution of Qualifying Features within the site.
Disturbance of redshank/shelduck in the breeding season	The Dee Estuary Non breeding redshank & shelduck	The access proposals modify how the site is used for recreation, causing disturbance to breeding redshank/ shelduck that make a significant contribution to the non-breeding population of these species.
Trampling of habitats	The Dee Estuary	Repeated trampling, following changes in recreational activities as a result of the access proposal, may damage sensitive habitats, plant communities or species, leading to long-term declines in their

	Drift line vegetation - annual vegetation of drift lines; estuaries (annual vegetation of drift lines sub-feature) Salt marsh - *Salicornia* and other annuals colonising mud and sand; Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); estuaries (*Salicornia* and other annuals colonising mud and sand & Atlantic salt meadows sub-features) Sand dunes - shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); shifting dunes with marram; fixed dunes with herbaceous vegetation ("grey dunes"); dune grassland; humid dune slacks; embryonic shifting dunes Natterjack toad (via impacts on supporting habitat)	quality, distribution or numbers within the site. Types of possible effect include physical changes to habitats (for example through compaction or erosion of the substrate), shifts in the species composition of plant communities, and reductions in species' population size or distribution.
Loss of habitat as a result of installing new access management infrastructure	<u>The Dee Estuary</u> Salt marsh - *Salicornia* and other annuals colonising mud and sand; Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); estuaries (*Salicornia* and other annuals colonising mud and sand & Atlantic salt meadows sub-features) Sand dunes - shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); shifting dunes with marram; fixed dunes with herbaceous vegetation ("grey dunes"); dune grassland; humid dune slacks; embryonic shifting dunes Non-breeding waterbird features (via impacts on supporting habitat) Natterjack toad (via impacts on supporting habitat)	The installation of access management infrastructure may lead to a permanent loss of extent of habitats that are qualifying features or that support bird or amphibian species that are qualifying features.
Impacts on toads, including disturbance, spread of disease and injury as a result of works	<u>The Dee Estuary</u> Natterjack toad	An increase in incidences of dogs accessing breeding ponds, following changes in recreational activities as a result of the access proposal, may cause disturbance, injury or death of amphibian eggs, tadpoles or adults. This could lead to a reduction in population abundance. Potential for chytrid fungus *Batrachochytrium dendrobatidis* and other

		diseases to be spread between natterjack colonies by people and dogs. This could lead to a reduction in population abundance. Works to construct the England Coast Path or ongoing path maintenance tasks cause disturbance, injury or death of toads, leading to reduction in population abundance.

D2. Contextual statement on the current status, influences, management and condition of the European Site and those qualifying features affected by the plan or project

Non breeding waterbirds

One of the factors we take into account when developing proposals for the alignment of the England Coast Path is the potential for disturbance to waterbirds, particularly when the birds are qualifying features of coastal SPAs and Ramsar sites. This is clearly an important consideration on this stretch of the Coast Path, which runs close to the boundaries of the Mersey Narrows & North Wirral Foreshore and The Dee Estuary SPAs and Ramsar sites. Natural England has published Supplementary Advice on Conservation Objectives for Mersey Narrows & North Wirral Foreshore [5]. The condition of The Dee Estuary for non-breeding waterbirds is described in conservation advice for the Dee Estuary European Marine Site (last updated in 2010) [4]. Functional links have been demonstrated between the Dee Estuary, North Wirral Foreshore and other estuaries in the northwest. Several recent reports contain information relevant to the condition of both sites, including a review of waterbird use of estuaries in the region (2014) [8], a waterbird trend analysis (2015) [9] and a desk based analysis of changes in non-breeding bird populations in NW estuaries (2016) [10]. Recent Wetland Bird Survey (WeBS) including annual counts and estuary low tide counts (low tide counts are less regularly undertaken) [3].

Mersey Narrows & North Wirral Foreshore SPA/Ramsar

The intertidal mudflats of the north Wirral foreshore, have been identified as an important low-tide feeding area for several waders. Birds using the north Wirral foreshore also make use of parts of the Dee estuary and Ribble and Alt Estuaries. Two wader species - bar-tailed godwit and knot – and a waterbird assemblage are qualifying features for the SPA. Bar-tailed godwit and knot are present in the area in significant numbers from October to March inclusive. Natural England has set targets in supplementary advice on conservation objectives for Mersey Narrows and North Wirral Foreshore to reduce disturbance to all three of these qualifying features.

Reducing disturbance at major high tide roosts is important because these locations are used by large numbers of birds ‘commuting’ to and from much larger foraging areas. Waders are considered more vulnerable to disturbance at high tide, when available habitat is greatly reduced and many birds roost on or just above the waterline. No significant high tide roosts have been recorded on the North Wirral Foreshore for bar-tailed godwit and birds using the intertidal feeding areas of the Mersey Narrows and North Wirral Foreshore roost at locations on the Ribble and Alt Estuaries. Knot and other wader species do make use of roost sites within or close to the boundary of the SPA along the North Wirral Foreshore, including a key

roost at the top of the shore at Hoylake. Other roost sites along this section of the coast are at Red Rocks and on the breakwaters at Mockbegger Wharf.

Non-breeding common tern and little gull are also qualifying features of Mersey Narrows & North Wirral Foreshore SPA. These species forage offshore, where they are unlikely to be sensitive to the access proposals. There are no significant roost sites for either common tern or little gull along this section of coast: the main roost for these species is the Seaforth Nature Reserve within the Liverpool Port area.

The Dee Estuary SPA/Ramsar

The flats in the outer parts of the Dee Estuary are used by feeding waders and saltmarshes throughout the estuary provide important communal roosting areas. The inner estuary is important for several species of waterfowl.

Bar-tailed godwit

Bar-tailed godwit make occasional use of the Dee Estuary but feed mainly off the North Wirral Foreshore at Mockbeggar Wharf. The main high-tide roosts for bar-tailed godwit are in the Ribble and Alt Estuaries.

Black-tailed godwit

At low water feeding black-tailed godwit concentrate in areas just of Heswall and Caldy in the mid estuary, and off Flint and Bagillt in the upper estuary. In the Dee Estuary, the main high-tide roost for black-tailed godwit is on the foreshore at West Kirby. Peak over wintering numbers can occur in any month throughout the October to March period and numbers tend to remain high throughout the winter.

Curlew

Curlew feed across the inner and middle estuary, densities are very low in the outer estuary with the exception of Mostyn Bank. In the Dee Estuary, the main high-tide roost locations used by curlew are on mid to upper saltmarsh in the inner estuary and on the foreshore at West Kirby. Curlew occur in the estuary throughout the year, their numbers increase rapidly in July post-breeding when adult birds return to the coast to moult, reaching a peak in the autumn, frequently in October. From January onwards populations tend to become smaller as birds disperse to return to their breeding grounds.

Dunlin

The very highest densities of dunlin are to be found along North Wirral Foreshore, though large numbers also feed at the mouth of the estuary, and on Dawpool Bank and in the mid estuary. In the Dee Estuary, the main high-tide roost locations used by dunlin are on mid to upper saltmarsh in the inner estuary and on the foreshore at West Kirby and off Hilbre Island. Dunlin show a similar pattern to knot and grey plover increasing gradually from September to a mid-winter peak in December and January and a gradual decline through to April.

Grey plover

At low water the largest concentrations of grey plover occur on North Wirral Foreshore with smaller numbers occurring to the west of Hilbre Island. In the Dee Estuary, the main high-tide roost for grey plover is on the foreshore at West Kirby. Numbers of grey plover on the estuary begin to increase in the autumn reaching a peak over the winter period. Numbers

usually peak in November to January, after which numbers decline as birds move from the estuary to breed.

Knot

Within The Dee Estuary knot feed on the intertidal flats of Dawpool Bank and Caldy Blacks. In the Dee Estuary, the main high-tide roost locations used by knot are on mid to upper saltmarsh in the inner estuary and on the foreshore off Hilbre Island. Numbers of knot normally peak very late in the year or early in the next.

Oystercatcher

At low water the most important area for oystercatchers is the area of Caldy Blacks between Caldy and Thurstaston. Large numbers of oystercatchers are also recorded at low water on the intertidal flats of Salisbury Bank and Mostyn Bank in the outer estuary, Holywell Bank and Dawpool Bank in the mid estuary, and in the inner estuary along the Welsh shore. The intertidal sediments of North Wirral Foreshore are also an important feeding area for the oystercatchers of the Dee Estuary. In the Dee Estuary, the main high-tide roost locations used by oystercatcher are on mid to upper saltmarsh in the inner estuary, at Red Rocks, and on the foreshore at West Kirby and off Hilbre Island. Oystercatcher numbers increase substantially in August following the breeding season; peak numbers usually appear in October, there is then a gradual decline through till April.

Redshank (nb & passage)

At low water redshank feed right across the estuary, though the shores at Heswall, Flint, Dawpool Bank and Mockbeggar Wharf are of most importance. In the Dee Estuary, the main high-tide roost locations used by redshank are on mid to upper saltmarsh in the inner estuary and on the foreshore at West Kirby and off Hilbre Island. Redshank numbers peak on the estuary between August and October, though substantial numbers also stay throughout the winter.

Redshank are partially resident in the Dee Estuary – see next section for a description of breeding redshank.

Pintail

Pintail generally use the mid to upper salt marsh, feeding in shallow water close to the waters edge and moving up the marsh as the tide comes in. Pintail make use of the upper estuary channel as a key low water loafing area when they are not feeding on the adjacent saltmarsh or intertidal flats. The main low water loafing area for Pintail is in the main estuary channel between Oakenholt and Bagillt and at certain times nearly the entire Dee Estuary pintail population may utilise this area. Pintail start to arrive in the estuary in September, with numbers peaking in October and remaining high through to December decreasing in January and February.

Shelduck

Shelduck feed in groups, on the flats of the mid to outer estuary. The main area for Shelduck on the English side of the Dee is between Heswall to Thurstaston. At low water the greatest numbers of duck are found feeding on the intertidal flats of Dawpool Bank and Gayton Sands. Shelduck tend to congregate at the same locations over high water, continuing to feed at the waters edge or loafing on the water. While birds prefer to feed on the mudflats beyond the saltmarsh, they do also like to roost on the saltmarsh at high tide. Shelduck are

present on the estuary throughout the year but numbers increase rapidly in the autumn with peak counts occurring in October, numbers then decline gradually through the winter until February.

Shelduck are partially resident in the Dee Estuary – see next section for a description of breeding shelduck.

Teal

Teal mainly use the upper estuary, including the saltmarsh off Neston and Parkgate, as well as off Oakenholt and Flint. Large flocks of teal are attracted to flashes in the grazed upper marsh. Numbers of teal wintering on the estuary increase gradually between August and December, then declining from January to March.

Sandwich tern

The estuary also provides a staging post for large numbers of Sandwich terns beginning their autumn migration. The beaches at Point of Ayr and Gronant are used as a roosting area by little terns, common terns and Sandwich terns, especially at high water. At low tide, terns may also roost on the outer flats of the estuary.

Waterbird assemblage

The Dee Estuary supports large populations of birds, including over 120,000 wintering waterbirds. The majority of the wintering waterbird assemblage is composed of wading birds that depend on the invertebrate communities of the intertidal mudflats and sandflats. However a variety of other waterbirds regularly winter on the Dee Estuary in variable numbers and like the internationally important migratory species these birds are also generally dependent upon the intertidal invertebrate communities.

Main component species of an assemblage are those which regularly occur on the site in internationally or nationally important numbers or regularly exceed 2,000 individuals. WeBS 5 year mean peak counts have been used for the period ending 2018/19 and the percentage of the relevant threshold level in operation during 2018/19.

- Brent goose (light-bellied of Nearctic origin) - feed on green alga in the area of Hilbre Island.
- Pink-footed goose – make use of the upper estuary channel and surrounding fields.
- Wigeon - like pintail, wigeon also make use of the upper estuary channel between Oakenholt and Bagillt as a key low water loafing area. Wigeon particularly favour the saltmarsh of the inner estuary off Parkgate, Neston, Oakenholt and Flint.
- Common scoter – feed and rest on open water in the Liverpool Bay area.
- Little egret – are present throughout the estuary.
- Cormorant - use estuary channels and occur throughout the year with peaks in June and September. At low water cormorants roost on the intertidal flats with the main aggregations occurring at Gronant.
- Lapwing - make use of a variety of habitats across the estuary including the intertidal flats, saltmarsh and coastal fields.
- Ringed plover – winter on the estuary and occur during the autumn passage period in August. They favour the intertidal flats at the mouth of the estuary on Mostyn Bank,

and to west of Hilbre Island. Ringed plover roost on banks of shingle on the upper shore at Gronant and at Point of Ayr.

- Sanderling - favour the outer estuary and especially the foreshore between Gronant and Talacre. Sanderling roost on banks of shingle on the upper shore at Gronant and at Point of Ayr.
- Avocet and Whimbrel – are also present and feed and roost with other waders.
- Black-headed gull and herring gull – large numbers of birds are present in the estuary over winter.
- Little and common tern – feed offshore and roost mainly on shingle beaches at Point of Ayr and Gronant.

Breeding redshank/shelduck

Redshank and shelduck are qualifying features of Dee Estuary with are partially resident, with some birds staying on through the summer to nest. So for these species, increased disturbance to the breeding population as a result of changes in recreational access could have a knock-on effect on the size of the non-breeding population, through reduced recruitment of young birds or increased adult mortality during the nesting season.

Breeding redshank may occur throughout the extensive saltmarsh and grazing marsh. Redshank prefer areas with a varied sward height and surface water or very damp soil. In areas where the marsh is suitable, such as at Parkgate, RSPB[2] estimate the number of breeding pairs to be approximately 60 per km^2. In less productive areas, were the marsh is heavily grazed for instance, the number of breeding pairs is typically around 8 per km^2.

Shelduck breed in holes (such as old rabbit burrows) and while they prefer to breed near water they will nest up 1-2 km inland. They will breed anywhere around the estuary, wherever there are old holes for them to utilise, although this is always at low density. RSPB estimate there is a breeding population of around 80 - 100 pairs on the English side of the estuary – though because birds are widely dispersed around the Dee it is difficult to estimate the size of the breeding population. From June onwards the numbers of shelduck in the Dee Estuary rise as the resident population is joined by birds that breed elsewhere in the region. Later in the year shelduck move to the Mersey to moult and then numbers will reach around 3,000.

Drift line vegetation

Annual vegetation of drift lines comprise annuals or annuals and perennials, occupying accumulations of drift material and gravel, rich in nitrogenous organic matter. It occurs on level, gently sloping, high-level shingle or sand/shingle beaches, which are mobile, but not so dynamic as to prevent short-lived plants to establish.

On the English side of the Dee Estuary, drift line vegetation has been known to occur on the shore between Thurstaston and Heswall, though being annual vegetation it may exist in one location in one year but not another. Annual vegetation of drift lines is highly sensitive to abrasion due to the potential for damage to succulent plants and their root systems.

[2] Pers comm Graham Jones (Site Manager at Burton Mere RSPB Reserve)

Salt marsh

The Dee estuary contains extensive areas of intertidal sand and mudflats with large areas of saltmarsh at its head and along part of its north-eastern shore. In this HRA, the two SAC saltmarsh features are considered together as one feature group (see Table 4).

The Dee Estuary is representative of pioneer glasswort *Salicornia* spp. saltmarsh in the north-west of the UK. H1310 *Salicornia* spp. saltmarsh forms extensive stands in the Dee, especially on the more sandy muds where there is reduced tidal scour. It mainly occurs on the seaward fringes as a pioneer community, and moving landwards usually forms a transition to common saltmarsh-grass *Puccinellia maritima* saltmarsh (SM10). There is also a low frequency of *Salicornia* spp. extending well inland. Associated species often include annual sea-blite *Suaeda maritima* and hybrid scurvy grass *Cochlearia x hollandica*.

The Dee Estuary is representative of H1330 Atlantic salt meadows in the north-west of the UK. This feature forms the most extensive type of saltmarsh in the Dee. The high accretion rates found in the estuary are likely to favour further development of this type of vegetation. The saltmarsh is regularly inundated by the sea; characteristic salt-tolerant perennial flowering plant species include common saltmarsh-grass *Puccinellia maritima*, sea aster *Aster tripolium*, and sea arrowgrass *Triglochin maritima*.

The saltmarsh vegetation of the Dee Estuary shows complete succession from early pioneer vegetation colonising intertidal flats through lower, middle and upper saltmarsh types to brackish and freshwater transitions at the top of the shore. Transitional communities are found at several locations around the English side of the estuary, including transitions to reed beds where fresh water streams enter the marsh between Heswall and Shotton and areas of brackish swamp vegetation on Burton Marsh and further northwards along the English shore.

Saltmarsh vegetation is more sensitive to trampling than many terrestrial vegetation communities. The effects include changes in vegetation structure and species composition, often resulting in a shorter, less diverse sward with more bare ground and greater susceptibility to erosion or colonisation by invasive S.anglica. The relative susceptibilities to trampling damage of the different saltmarsh communities depend as much on where they grow as on the intrinsic sensitivity of their constituent species. On the English side of the Dee Estuary stands between Heswall Fields and Cottage Lane, Gayton show some trampling damage in the upper and transitional vegetation at the edge of the marsh. The areas affected are highly localised, often where coastal footpaths become very muddy after frequent use, so walkers skirt round them onto adjacent upper saltmarsh.

Sand dune

Dune features are present in the Red Rocks area including shifting dunes along the shoreline with Ammophila arenaria ("white dunes"); Shifting dunes with marram; fixed dunes with herbaceous vegetation ("grey dunes"); dune grassland; humid dune slacks and embryonic shifting dunes. There are two main dune ridges at Red Rocks and a reedbed. Accretion is occurring and a large new saltmarsh and green beach are developing to seaward of the established dunes.

Natterjack toad

Natterjack are present in the Red Rocks area following re-introduction. Adult natterjack have been found over a wide area, from the slipway at Hoylake and right at the other end of the

reserve in West Kirby. They have also been found on the golf course and in the saltmarsh. The area is managed by Cheshire Wildlife Trust, who have taken a number of actions to improve the conditions of the site for natterjack: creation of new pools and ongoing maintenance of them, dune and reedbed scrub control, reedbed cutting, dune grassland cutting and sand dune restoration. Temporary fencing is used to protect the main breeding sites in small brackish pools in the slacks behind the embryo dunes.

Current patterns and levels of use

Current patterns and levels of public use can have an important influence on the potential effects of Coast Path alignment options on qualifying features, particularly in relation to bird disturbance. Where there are paths, levels of use vary considerably and depend on a variety of factors, in particular the proximity of towns, villages and holiday/caravan parks, as well as car parks, public beaches and other attractors and access points, and the scope for short circular walks. During the course of developing detailed proposals about how to implement coastal access around the Wirral coast we have built up a detailed picture of current patterns and levels of use. This has been informed by evidence from a number of sources including site visits, on-line information for visitors and visitor surveys. Our access assessment has been informed by local knowledge and advice from local access managers including Wirral MBC Parks and Countryside Team, Rangers and the Public Rights of Way Officers at both Wirral MBC and CWAC, DIO (i.e. MoD) about the route near Burton, as well as local organisations and groups and local landowners.

In 2017 NE commissioned a study to assess levels of recreational disturbance to overwintering birds across a range of estuary sites in North-west England, including the Dee Estuary and North Wirral Foreshore [11]. This study provides some helpful overall findings about visitors to coastal sites:

- 97% of interviewees were visiting on a short trip and had travelled directly from home (i.e. local residents).
- Dog walking was the most frequently recorded main activity, cited by 64% of interviewees.
- Interviewees were typically frequent visitors to the survey locations, e.g. 33% of interviewees visited at least daily, 17% most days and 23% 1-3 times per week. West Kirby was found to be one of the locations with a particularly high frequency of daily visitors.
- Interviewees visiting directly from home typically lived within a short radius of the survey point - half of those interviewed lived within 1.9 km (median value).
- Very few visitors interviewed had used information to plan their visit and awareness of designations and nature conservation was found to be low.

The remainder of this section of the HRA provides a more detailed account of current access around the Wirral coast from the Seacombe ferry terminal around the north coast and then alongside the Dee estuary to the Welsh border.

Seacombe Ferry Terminal to Red Rocks, Hilbre Point, Hoylake (approx. 17km)

The existing promenade between Birkenhead to Hoylake already offers excellent linear access close to the coast.

There is already an existing promenade / pavement / sea defence embankment along this section of coast that extends from the ferry terminal at Seacombe through to The Kings Gap,

Hoylake. This is well used by walkers and cyclists particularly close to New Brighton and by the North Wirral Country Park – the focus for many activities There is already an existing locally promoted route called the Wirral Circular Trail which uses this promenade route and extends as far as The Kings Gap.

The promenade is used by a variety of short and mid distance walkers, runners, cyclists and horseriders.

From The Kings Gap to Hilbre Point, the Wirral Circular Way moves inland and follows residential roads but an alternative route(that runs on the top of the foreshore around to Red Rocks is also signed and promoted in local literature. This foreshore route is routinely used albeit it is affected by high tides at certain times. Access onto the foreshore can also be made via several access points at the end of cul-de-sac roads in the residential area.

The likely area of coastal margin from Seacombe to New Brighton is relatively narrow and is affected by tides. The foreshore is well used with several points where access off the promenade is provided.

Just south of Perch Rock, the extent and type of margin changes. A larger sand bank area, located next to the car park at New Brighton is more popular and used by a mixture of people (fisherman, families etc). The sandy foreshore continues and extends all the way through to Hilbre Point. There is already direct and easy access onto the foreshore from the promenade with several car parks and access points provided at regular intervals from New Brighton to Kings Gap as part of the North Wirral Coastal Park and Leasowe Common.

Some sections of the coastal margin (foreshore) are more popular than others (often a direct correlation with the location of car parks) but people do access the foreshore all the way from New Brighton to Red Rocks when it is available.

A network of existing paths through the Red Rocks SSSI (near Hoylake) provides good access to West Kirby where another promenade and path around the boating lake offers further access opportunities close to the coast.

Red Rocks, Hilbre Point, Hoylake to The Boat House, Parkgate (approx. 13 km)

There are several walked lines on the ground through the dunes on the seaward side of the Royal Liverpool Golf Course. This area, known as the Red Rocks nature reserve, is quite popular with walkers who access the area direct from the end of Stanley Road or walk out from West Kirby along the foreshore. There is a higher path that runs at the back of the dunes on a boardwalk and then on a raised path close to the edge of the golf course, but most people favour one of the lower routes that run through the dunes and across the foreshore.

The foreshore can be affected by particularly high tides.

There is a wide range of facilities, services and shops at West Kirby that make this area very busy all year round. Walkers can continue south along the coast by using either the existing promenade or by following the path that runs on top of the embankment which forms the seaward boundary of the sailing lake. This surfaced route is affected by high tides but is very popular with walkers, joggers, families and those with limited mobility.

At the southern end of the promenade (Tell's Tower), existing access along the coast is interrupted by the local sailing club which means walkers currently have to move inland through a small housing estate before re-joining the coastal cliffs at 'Cubbins Green'.

Current access south from this point is provided by the Wirral Way (the very popular walking, cycling and horse riding route that runs along a disused railway line). This is slightly inland from the coast due to residential development and doesn't provide any views of the sea. A car park at the former Caldy railway station provides an obvious starting point for many people walking in either direction along the Wirral Way at this point.

At Croft Drive, the Wirral Way continues south to the country park at Thursaston passing to the landward side of Caldy Golf Club and two large caravan parks. The Wirral Way linear route continues south, but even further away from the coast, although there are several routes and paths that run through the country park close to the coastal cliffs through the country park. This is a popular location for visitors with car parking, toilets, visitor centre and café.

At the southern boundary of the Country Park, wide gullies and agricultural land prevent onward access immediately along the top of the cliffs, but the Wirral Way continues to provide onward access. Most users tend to walk on the foreshore or stay on the Wirral Way itself but a path leading off the Wirral Way, provides existing access back out to the coast at Heswall Fields.

At the southern end of Heswall Fields, access continues along the coast via the top of the foreshore through an area of dune type habitat, then on the top of the foreshore (sand, mud) in front of the sewage works and onwards to Bank Road. This part of the coast is also part of a locally promoted route (Wirral Coastal Walk) but it is affected by high tides. An existing byway does provide an alternative route for walkers away from the foreshore via Target Road and Banks Road (at the bottom of which is a public car park and a restaurant). It is likely that circular walks using a combination of all these paths are created and there is evidence that there is pretty regular existing use on the ground.

Access via existing desire lines through the saltmarsh, from Banks Road through to Cottage Lane at Gayton across the saltmarsh, is lower than along other parts of this section. Access on and off this informal 'back of marsh' marsh route is provided at various intervals where access along roads lead to the marsh (Park West, Manners Lane, Seabank Road and Riverbank Road). Alternatively, access is available by the ever present Wirral Way (albeit this is slightly further inland at this point).

At Cottage Lane, Gayton, another well used existing PROW continues on the top of a stone defence embankment all the way through to the public car park at the Old Baths near Boathouse Lane and to the Boathouse Pub. The section from Cottage Lane through to Boathouse Lane is very popular with walkers – because of the proximity of the route to the car park, the flat and hard surface of the route, the views it gives over the Dee estuary and the opportunity it gives people to create short circular walks by linking up with the Wirral Way.

In terms of likely area of coastal margin, from Red Rocks to West Kirby, there is a mixture of rocky, dune, sand and mud habitats. Aside from the area in front of the golf course, the foreshore from Red Rocks to West Kirby is quite popular – especially closer to West Kirby where parking and other facilities are conveniently located. The sandy beach and flats to the north of the boating lake at West Kirby are well used and popular with families. Those also wishing to follow the popular walk out to Hilbre Islands also start from this point.

The foreshore to the south of West Kirby through to Cubbins Green is less well used with most people preferring to stay on the raised and surfaced route that extends around the edge of the marina.

At Cubbins Green, access onto the foreshore is provided by slipways and ramps onto the top of the sandy beach. Access along the top of the beach is provided in all but the highest tides and is very popular with users of all ages. Most people tend to stay at the top of the foreshore rather than venturing out onto the mudflats a little further out. This strip of foreshore extends all the way through to Wirral Country Park at Thursaston and beyond. The foreshore is also accessible from the country park all the way through to Banks Road and provides great views of the geologically important cliffs.

South of Heswall Fields / Banks Road, the foreshore is dominated by large expanses of saltmarsh and mudflats that make up much of the Dee estuary. Existing levels of access in these areas are pretty limited mainly due to the habitat – saltmarsh with large and wide creeks and ditches. A wide channel that runs parallel to the coast provides a 'natural' barrier that prevents people from walking further out onto the marsh.

This ditch/ channel is further out as it passes Heswall Golf Club and there is some evidence that people do walk along the top edge of the marsh (at the bottom of the stone defence embankment). This includes people walking on the PROW whilst letting their dogs off the lead onto the marsh.

Access to the saltmarsh margin close to the Old Baths car park and around the Boat House Inn appears to be very limited again due to the habitat with most seemingly preferring to stay off the saltmarsh and on existing paths, roads and pavements.

The Boat House, Parkgate to the welsh border (approx. 7 km)

An existing pavement on the seaward side of the road at Parkgate is very well used and extends from The Boathouse PH all the way to the southern end of the Parkgate 'parade'. Parkgate is a popular tourist attraction with car parks, pubs, café's and shops. There is some evidence that some people do walk along the top of the marsh (parallel to the pavement). Interpretation boards are already in situ part way along the pavement along with benches and resting areas.

At the southern end of The Parade, there is limited evidence of people continuing to walk south on the marsh to the seaward side of the housing near Manorial Road. Parts of this route can be very wet and is interrupted by tall reedbeds. Most people prefer to follow the existing PROW which leads walkers slightly inland along roads through the existing residential area.

Walkers currently regain contact with the coast by using the existing PROW (near Moorside) that follows the back edge of the marsh through to Little Neston. This is a popular route although part of the path is often waterlogged. The path from Parkgate to Little Neston is part of a locally promoted route.

Continuing south from Quayside, a well used surfaced cycleway continues all the way through to Denhall Lane. This route is popular with walkers and cyclists and is fenced off from the marsh.

At Denhall Lane, informal parking spaces and benches provide people with an opportunity to start / end their walk or sit and look out over the marsh to Wales. A dual use path leaves Denhall Lane and follows a surfaced track all the way through to the welsh border near Burton Point. This is across land owned by MoD and is a very popular and well used route particularly for walkers, cyclists and bird watchers and the route is also used to gain access through to Chester and Wales.

Housing growth

Wirral is one of six local authorities that form part of the Liverpool City Region (LCR). LCR has a population of approximately 1.5 million. The region's population has grown slowly in recent years (between 1997 and 2017 LCR's population grew at the slowest rate of any LEP [12]) but is projected to increase by around 6% over the next two decades. In response, LCR local authorities' current and emerging Local Plans propose to deliver over 20,000 homes over the next five years across the City Region [13].

Most visitors to the Wirral coast come from within the Liverpool City Region. There is acknowledgement among LCR authorities of issues arising from recreational disturbance may increase due to further housing growth in the Liverpool City Region. Recognising that population increase has the potential to adversely affect the county's internationally designated coastal sites (SPA, SAC and Ramsar sites) Natural England are working with local authorities within the Liverpool City Region to address recreational disturbance at a strategic level.

D3. Assessment of potential adverse effects considering the plan or project 'alone'

This section considers the risks identified at the screening stage in section C and assesses whether adverse effects arising from these risks can be ruled out, having regard to the detailed design of proposals for coastal access.

In reviewing the ability of any incorporated measures to avoid harmful effects, Natural England has considered their likely effectiveness, reliability, timeliness, certainty and duration over the full lifetime of the plan or project. A precautionary view has been taken where there is doubt or uncertainty regarding these measures.

D3.1 Design of the access proposal to address possible risks – at a stretch level

In this section of the assessment we describe our overall approach to address the potential impacts and risks from the access proposals.

Disturbance of feeding or roosting non-breeding waterbirds birds from recreational activities

A key nature conservation issue for this stretch of the Coast Path is the protection of non-breeding birds that are SPA or Ramsar site qualifying features. These occur all along the stretch over the winter and during spring and autumn migration periods. When considering the potential for the detailed design of the access proposals to increase disturbance to birds we have taken into account that recreational activities are already impacting on achievement of site conservation objectives. We have focussed attention on the access management interventions proposed in places where: (i) we predict appreciable changes in levels of public use as a result of our proposals; and (ii) sensitive locations likely to hold concentrations of birds, such as high tide roost sites and important feeding areas, either within or outside SPA boundaries.

To assess sensitive locations for bird disturbance, we used maps of key roost sites [4], BTO WeBS data [3], observations during site visits, and information provided to us by site managers and local naturalists. To identify parts of the stretch where at least a moderate increase in levels of use appears to be likely we used our own observations, on-line mapping

and aerial photography and information provided by the local access authority and site managers. From this information, we predict there will be few increases in use above current baseline levels. There are some local exceptions to this, and these are considered in more detail below (see D3.2A to D3.2F).

Increased recreational visits to locations near where birds are feeding or resting may produce some increase in bird disturbance. But that can vary from occasional, short-term, 'low cost' events affecting a few birds (for example increased alertness and a small reduction in feeding rates lasting a few minutes) to major disruption on a regular basis (such as large flocks abandoning a key roost site or feeding area and flying several kilometres to the nearest alternative site).

When assessing whether increases in bird disturbance at a particular location require changes to route alignment or other mitigation measures to ensure there is no adverse effect on site integrity, we have followed the principle that 'significant' disturbance - as defined by the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) and used in Natural England's supplementary advice on the conservation objectives for marine SPAs - must be avoided. The definition is: "Disturbance should be judged as significant if an action (alone or in combination with other effects) impacts on (water)birds in such a way as to be likely to cause impacts on populations of a species through either: (i) changed local distribution on a continuing basis; and/or (ii) changed local abundance on a sustained basis; and/or (iii) the reduction of ability of any significant group of birds to survive, breed, or rear their young."

The potential for the access proposals to cause a significant increase in disturbance to non-breeding birds is low on this stretch because the proposed route for the trail follows well-known existing recreational routes and where improvements are proposed these will tend to strengthen and enhance existing access management. When in a few places the proposals will significantly improve coastal paths, we have taken into account the general point that demand for access is likely to increase on present levels, with projected population growth in the region. In section D4 of this HRA we consider any specific in-combination effects local plans and substantial development proposals.

Use of the area that will become coastal margin, though extensive, is unlikely to change as a result of the proposals. Broadly speaking, the reason for this is that the public already have the right to use the beaches and sandy flats of the north coast of the Wirral, whereas the salt marshes and flats of the Dee Estuary are largely unsuitable for public access on foot or are within the Sealand Firing Range, where public access is restricted under MoD byelaws.

Disturbance of feeding or roosting non-breeding waterbirds birds from works

Risks of bird disturbance during the installation of access management infrastructure on this stretch are low because of the limited amount proposed, the great majority of which will be several 100m from important roost sites or feeding or nesting areas. Nevertheless, the mitigation measures summarised in Table 7 are proposed as standard to reduce bird disturbance during path establishment works.

Table 7: Measures to mitigate the risk of disturbance when installing new access management infrastructure

Item	Mitigation measures
Site design	Operator to design access routes, storage areas and site facilities to minimise disturbance impacts. Operator to conduct operations out of sight of roosting, feeding or nesting areas as far as possible.
Timing of works	Access authority to plan schedule with Natural England to limit disturbance risk. Natural England to specify a period of low sensitivity at each construction site, based on likely departure and arrival dates of waterbird species that use it. At all other times, operators working within 200 m of, and visible to, a roost site will stop during the 2 hours before and after high tide. Operator to limit construction activities to daylight hours at all times of year.
Method	Operator to use hand tools where practicable. Operator to avoid use of percussive machinery outside period of low sensitivity, or avoid use of machinery during the 2 hours before and after high tide.

Disturbance of redshank/shelduck in the breeding season

Non–breeding redshank and shelduck are qualifying features of Dee Estuary which are partially resident, with some birds staying on through the summer to nest. Redshank nest in appreciable numbers on saltmarsh in the inner estuary. Shelduck tend to use land surrounding the estuary but from June begin to gather in appreciable numbers in the Dee estuary. The risk of the access proposals having a significant impact on either species during the breeding season is low since the proposed route for the Coast Path is around the perimeter of the estuary. The possibility that creation of coastal access rights might influence patterns of access over areas of saltmarsh used by breeding redshank or in places where shelduck gather post-breeding is considered further in sections D3.2D, D3.2E, D3.2F.

Trampling of habitats

In places the proposed route between Birkenhead and the Welsh border runs just within the boundary of the Dee Estuary SPA/SAC/Ramsar sites. Largely the proposed route follows existing paths but there are a few locations where it is proposed to vary the alignment. Away from the trail, there are very few locations where coastal access rights would be created and there is not already a right of access. Possible impacts of trampling at places where the path crosses or passes close to locations where saltmarsh, dune or drift line vegetation occur, or there is a possibility that creation of coastal access rights might influence patterns of access, are considered in detail below (see D3.2B, D3.2C, D3.2D, D3.2E & D3.2F).

Loss of habitat as a result of installing new access management infrastructure

Around the north coast of the Wirral, the proposed route for the Coast Path follows existing paths, trails and pavements, all of which are landwards of the Mersey Narrows and North Wirral Foreshore SPA/Ramsar sites. None of the new infrastructure proposed along this section of the coast will be installed within the European sites.

On the west coast of the Wirral, where the route is alongside the Dee Estuary, some improvements to the surfaces of existing paths are proposed where these are liable to waterlogging and there are signs that surrounding vegetation is becoming trampled. Works planned include regrading and replacement of damaged surfaces and installation of new sleeper bridges, boardwalks and stone flag sections. In addition, a small number of new waymark posts and interpretation panels are proposed to be installed to help guide walkers and raise awareness of wildlife. Details of the access management infrastructure to be installed are further considered in sections D3.2B, D3.2D, D3.2E & D3.2F of this assessment.

Impacts on toads, including disturbance, spread of disease and injury as a result of works

Along this stretch of coast natterjack occur in an area of dunes at Red Rocks. Possible impacts of the access proposals at this location are further considered in section D3.2B.

D3.2 Design of the access proposal to address possible risks – at a local level

In this part of the assessment we consider key locations along the coast between Birkenhead and the Welsh border where establishing the England Coast Path and associated coastal access rights might impact on qualifying features of a European site. We assess the possible risks at each location and explain how the detailed design of our proposals takes account of them.

The relationship between the key locations referred to in this assessment and the corresponding Coastal Access Reports (in which the access proposal is described in detail) is shown in Table 8 and the environmental pressures at each location are listed. These pressures have the potential to affect different qualifying features at each location, which are listed in sections D3.2A to D3.2E below.

Note that one of the six possible impacts identified in Table 6 considered in Part D of this assessment – that of disturbance to non-breeding birds when Coast Path establishment works are undertaken - is fully considered in the previous section (D3.1).

Table 8: Summary of key locations

Location	Cross reference to the access proposal	Disturbance of non-breeding waterbirds	Disturbance of birds in the breeding season	Trampling of habitats	Loss of extent of habitats	Impacts on natterjack toads
A. North Wirral Foreshore	Report 1	✓				
B. Red Rocks, Hilbre Point to Tell's Tower, West Kirby	Report 2	✓		✓	✓	✓
C. Tell's Tower, West Kirby to Heswall fields	Report 2	✓		✓		
D. Heswall shore (between Heswall Fields and Cottage Lane, Gayton)	Report 2	✓	✓	✓	✓	
E. Cottage Lane, Gayton to Denhall Quay	Report 2 and 3	✓	✓	✓	✓	
F. Denhall Quay to Welsh Border	Report 3	✓	✓	✓	✓	

Our assessment of the impact of the access proposals at each of these location is set out in sections D3.2A to D3.2F below.

A. North Wirral Foreshore

Current situation

Access baseline

From New Brighton to Hoylake the north Wirral coast is approximately 12km in length. There is an extensive network of paths and trails all along the coast, including a sea front promenade and surfaced multi user trail. The foreshore is easy to access with numerous public slipways and steps. There are several large car parks close to the shore and many streets where roadside parking is possible. There are also visitor facilities close to the main beaches with toilets and refreshment areas. The extensive sandy flats are used for a wide range of recreational activities including picnicking, walking, dog walking, ball games, fishing, bathing, sand yachting, jogging, kite surfing, bird watching and horse riding. Some activities tend to be focussed in different areas along the coast due to a variety of factors – proximity to facilities, ease of access onto the foreshore, ground conditions etc.

The north Wirral coast is within easy travelling distance of several seaside towns and urban centres in the Liverpool City Region. Wirral Council have found that around two thirds of the Wirral population use parks, beaches and open spaces for walking and exercise [14] and that a further six million visitors annually are attracted to Wirral's parks, beaches and countryside from further afield [15].

Natural England has commissioned visitor surveys to investigate recreational activities taking place in or near MN&NWF (and other coastal SPAs in the northwest) and birds

responses [16] [11]. These studies confirm that the north Wirral coast is a popular visitor destination. They highlight that a lot of visits are made by local dog walkers, making short (30 to 60 minute) regular (daily or several times a week) visits. Dog owners value places where they can exercise their dog off lead.

The foreshore is owned and managed by Wirral Council. There are summer dog control orders in place over popular bathing beaches. Sand yachting & para-karting (kite buggying) take place on the beach under agreement between the Council and Wirral Sand Yacht Club. A foreshore permit is required to take a vehicle onto the foreshore or to launch a boat. There are numerous public notices all along the promenade about using the foreshore and safety.

Environmental baseline

MN&NWF SPA was designated in 2013. The site comprises large areas of intertidal sand and mudflats that are exposed at low tide and provide an important feeding habitat for waders. Waders need undisturbed locations where they can roost at high tide. Along this section of coast birds roost on the foreshore at Hoylake and on artificial offshore breakwaters installed to reduce shoreline erosion [16].

The site is not meeting its site conservation objectives. Populations of migratory birds are in long-term decline. Natural England has commissioned several studies in the northwest to show that disturbance from recreational activities is a contributing factor. On the north Wirral foreshore, sand yachting and people exercising dogs were found to be particularly disturbing activities. [9] [8] [16]

Detailed design and assessment of possible risks to qualifying features

A possible impact of the proposals on Mersey Narrows and North Wirral Foreshore SPA/Ramsar is:

- Additional disturbance of feeding or resting non-breeding waterbirds

This risk is further considered below:

<u>Additional disturbance of feeding or resting non-breeding waterbirds</u>

Alignment and creation of the England Coast Path

The alignment, installation and promotion of the trail needs to be considered. Along the north coast of the Wirral, for 16.7km, between Seacombe Ferry Terminal and the end of Stanley Road in Hoylake, the proposed route for the England Coast Path follows existing constructed paths (promenade/ sea walls/ pavements). Between Kings Gap (Hoylake) and Red Rocks the option of a beach route (already promoted as part of the Wirral Circular Trail) was rejected for the England Coast Path. At Kings Gap, walkers following the England Coast Path will directed inland and away from the beach along streets behind the foreshore where there is a better surface for walking that is not subject to tidal inundation. This is unlikely to make a significant difference to current use – but if anything will tend to be beneficial for reducing disturbance.

The proposed route is surfaced, well-maintained and for the most part, follows a multi-user trail. No improvements to the path surface or infrastructure are needed. Some new signage or waymarking (on existing structures) is proposed to confirm the route on the ground and to distinguish it from other existing promoted routes.

The route will become part of the ECP National Trail. The route will be named on OS maps depicted on OS maps as a National Trail (green diamonds). The route is currently shown on the map as a traffic free cycle route. There is a website for the family of National Trails with details of the route and links to relevant tourism information.

Local partners will be able to apply for grants to help with the ongoing maintenance of the route to a high standard.

Along this section of coast, the supply of good quality walking routes will not be improved and we do not anticipate a significant impact on demand. Anyway, the promenade is outside of the SPA and encouraging walkers to use the promenade at sensitive times as an alternative to the foreshore is a recommended action to help manage the existing disturbance pressure. A survey was carried out at Hoylake which found that birds show relatively little response to people on the prom [16].

For these reasons, creation of the trail is not considered to pose a risk to the site conservation objectives.

Coastal access rights

There is an established right by long-standing permission to use the north Wirral foreshore for a variety of beach leisure activities, including walking and walking with a dog. The creation of coastal access rights does not change the position that is already widely advertised through signage, literature and digital media. Existing limitations on access made by Wirral MBC will continue to apply since the access proposals will not affect summer dog restrictions (dog control orders of the type made by Wirral MBC remove coastal access rights) or consenting of sand yachting (sand yachting is not permitted by coastal access rights). Therefore patterns and levels of access over the foreshore will not be affected by introduction of the new national arrangements for coastal access. For these reasons, identification of Coastal Margin and creation of coastal access rights does not pose a risk to the site conservation objectives.

Management of existing pressures

Access management is needed to address and manage wider issues affecting achievement of MN&NWF conservation objectives, and particularly the target to reduce disturbance from recreational activities. The supplementary advice on conservation objectives includes targets to restore numbers of bar-tailed godwit using the site and reduce disturbance from recreational activities to bar-tailed godwit, knot and the waterbird assemblage features [5].

Wirral MBC own and manage access over the foreshore and have taken a number of actions to manage recreational activities. Further actions have been suggested in the Site Improvement Plan for MN&NWF & Dee Estuary SPAs [17] and recent reports by Watola & Heard [16] and Liley et al [11]. These include:

- Improved signage and the provision of advice to the public
- Path design and management
- Measures to focus access along the promenade

Such measures are not precluded by coastal access arrangements and there is an opportunity to deliver some of the actions identified as part of Coast Path establishment works. The following specific measures are incorporated in the access proposals:

- At Hoylake-Leasowe waders congregate to roost in large numbers over an area of the foreshore. At high tide, the birds are pushed up close to the seafront promenade (within 20-50m). At these times people walking on the narrow band of exposed sand with and without dogs prevent the birds from settling. Four information panels have recently been installed by Wirral Council with information about the different types of birds (see Map 4). The panels are attractive and informative about the birds that use the foreshore: however; they are not obviously directed at beach users and nor do they make a clear request that people stay on the prom when the tide is up and large numbers of birds are present. We propose to install up to five new panels on the promenade at the main access points to the beach between the lifeboat station and Kings Gap.
- At Mockbegger Wharf several breakwaters have been installed that become islands at high tide. These structures are used by large numbers of birds to roost high tide. Although protected from disturbance when surrounded by the tide, birds may be flushed from these roost sites as the tide recedes and before foraging areas are exposed. The information currently available on site does not explain this clearly to beach users. We propose to install an information panel on the seafront adjacent to each breakwater (at 4 locations) to explain why these are important for resting birds and ask people to stay away whilst they are being used.
- At the time the Coast Path is opened, Natural England will incorporate conservation messages in relevant promotional material and online stories.

These additional measures to further the site conservation objectives and help address and manage wider disturbance issues will be discussed with local partners and refined during the establishment stage as appropriate.

B. Red Rocks, Hilbre Point to Tell's Tower, West Kirby

Current situation

Access baseline

West Kirby foreshore

At West Kirby there is a promenade/ pavement landward of Marine Lake and a path on top of the embankment seaward of the sailing lake. This surfaced route is affected by high tides but is very popular with walkers, joggers, families and those with limited mobility.

There is a wide range of facilities, services and shops at West Kirby. Car parks, toilets, shops and other key attractions (such as the starting point for walks out to Hilbre Island and the boating lake) make this area very busy all year round.

This area is within easy travelling distance of several seaside towns and urban centres in the Liverpool City Region. Wirral Council have found that around two thirds of the Wirral population use parks, beaches and open spaces for walking and exercise [14] and that a further six million visitors annually are attracted to Wirral's parks, beaches and countryside from further afield [15].

The area of the foreshore close to Red Rocks is popular with walkers (with and without dogs) as is the linear route through the site to West Kirkby. The sandy beach and flats to the north of Marine Lake at West Kirby are well used and popular with families.

Hilbre Island

Those wishing to follow the popular walk out to Hilbre Islands also start from the beach to the north of Marine Lake and whilst accessible only at certain states of the tide, a linear route to the island(s) is indicated by 'marker buoys' to keep people away from more dangerous areas (sinking sand etc).

Hilbre Islands are owned by Wirral Council and managed by the Council and the Friends of Hilbre. It is possible to walk to Hilbre Islands across the sands from West Kirkby and walking to the now-uninhabited Hilbre Islands at low tide has been a popular leisure activity for decades. Bylaws were introduced in 1983 to protect the wildlife of the islands. The bylaws include provisions to limit the size of groups visiting the island and that dogs must be kept on a short lead at all times.

Dunes

There are several walked lines on the ground through the dunes on the seaward side of the Royal Liverpool Golf Course. This area, known as the Red Rocks nature reserve, is managed by Cheshire Wildlife Trust and is popular with walkers who access the area direct from the end of Stanley Road or walk out from West Kirby along the foreshore. There is a higher path that runs at the back of the dunes including short flights of steps and boardwalk(s) close to the edge of the golf course, but most people favour one of the lower routes that run through the dunes and across the saltmarsh and foreshore.

Environmental baseline

West Kirby foreshore

There is a high-tide roost on the saltmarsh / embryonic sand dune habitat near West Kirby which is used by Dee Estuary SPA features (dunlin, curlew, redshank, oystercatcher, bar-tailed godwit and grey plover). The risk of disturbance from recreational activities at this roost site is high due to its proximity to West Kirby Marine Lake and beach. A volunteer wardening scheme has been in place for almost 30 years. The scheme operates from October to March when wintering waterbirds are present to guide walkers away from a high tide roosting area. On tides of over 8.9m there are wardens present for 2-3 hours with relevant equipment (radios) and fixed and moveable signs. There are also buoys in place to keep wind/kite surfers away from the tideline – these are put in place with GPS and harbour master directions.

Hilbre Island

Hilbre Islands Nature Reserve falls within the coastal margin for this section. Waders roost at Little Eye, Middle Eye and Hilbre Island [18]. Non-breeding waterbirds use the whole intertidal area, including the area around Hilbre Islands Nature Reserve, for feeding.

Dunes

Sand-dunes occur south-east of Red Rocks alongside Royal Liverpool Golf Course. Although the sand-dunes did not occur within the SAC in this area at notification, they have since migrated westwards into the SAC. Their migration westwards suggests the current access arrangements are not preventing the formation of embryonic dunes. Embryonic dunes are thought to be the most sensitive to recreational pressure so their formation supports the idea that the current access arrangements are not problematic. The embryonic dunes transition into a narrow strip of saltmarsh.

Natterjack are present in the Red Rocks area following re-introduction. Adult natterjack have been found over a wide area, from the slipway at Hoylake and right at the other end of the reserve in West Kirby. They have also been found on the golf course and in the saltmarsh. The area is managed by Cheshire Wildlife Trust, who have taken a number of actions to improve the conditions of the site for natterjack: creation of new pools and ongoing maintenance of them; dune and reedbed scrub control; reedbed cutting; dune grassland cutting and sand dune restoration. Temporary fencing is used to protect the main breeding sites in small brackish pools in the slacks behind the embryo dunes[3].

Detailed design and assessment of possible risks to qualifying features

Possible impacts of the access proposals on The Dee Estuary SAC/SPA/Ramsar site are:

- Disturbance of non-breeding waterbirds
- Damage to habitats as a result of increased trampling
- Reduction in extent of habitats as a result of installing new access management infrastructure
- Impacts on natterjack toads

Considering these in turn:

<u>Additional disturbance of feeding or resting non-breeding waterbirds</u>

Alignment and creation of the England Coast Path

The proposed ECP follows an existing path that is the main route used by people walking round the shore from Stanley Road to West Kirby. An optional alternative route is also proposed along this section that follows existing pavements and is available at all states of the tide and at all times. In West Kirby the proposed ECP follows the existing surfaced route around the seaward edge of Marine Lake. The ECP is aligned landward of a main high tide roost near West Kirkby where volunteer warden scheme is in place (see below).

Coastal access rights

Large areas of mud and sandflat, and Hilbre Island, would fall within the coastal margin. The margin includes large areas of sandy and muddy flats, including Hilbre Island. There is an established right by long-standing permission to use this part of the foreshore for a variety of beach leisure activities, including walking and walking with a dog. Most of this area has low levels of public access, with the exception of the strip of margin close to the coastline (up to 100m) between Red Rocks and West Kirby, which is popular with walkers and other beach users, the route to Hilbre Island and Hilbre Island itself. The designated route across to Hilbre Island from West Kirby is heavily promoted by the local Council, signage at West Kirkby and is included in many guidebooks. The creation of coastal access rights does not change the position and therefore patterns and levels of access over the foreshore will not be affected by introduction of the new national arrangements for coastal access. Existing arrangements for accessing the islands are governed by bylaws that are unaffected by the access proposals. For these reasons, identification of Coastal Margin and creation of coastal access rights does not pose a risk to the site conservation objectives.

[3] Pers comm. Sarah Bennett, Cheshire Wildlife Trust

Managing existing pressures

Wirral MBC own and manage access over the foreshore and to Hilbre Islands and have taken a number of actions to manage recreational activities. Cheshire Wildlife Trust and the Dee Estuary Volunteer wardens are also actively involved in managing visitors in the West Kirby area.

The foreshore in the West Kirby area is used by birds of both Mersey Narrows & North Wirral Foreshore and The Dee Estuary SPAs and the access management measures discussed in D3.2A apply equally to this section of the coast. There are existing information points in West Kirby at Stanley Road and next to the sailing centre. As part of the Coastal Access Programme we propose to add new information about access in the Red Rocks area at these locations, the details of which will be discussed with local partners and refined during the establishment stage as appropriate.

There is a high tide roost near West Kirkby in an area which falls within the coastal margin. Voluntary wardens guide people away from the area when birds are roosting. As part of developing proposals for coastal access NE discussed with the Dee wardens whether high tide restrictions in the area used by roosting birds would be beneficial: they advised that as the success of this scheme relies on a positive relationship with local users, they believe restrictions could undermine that relationship. The route that the wardens currently ask people to use at incoming high tides is the one we have proposed as the Coast Path. This decision not to use access restrictions can be revisited with advice from the local wardens in future if necessary. Note that the route around the shore at Red Rocks may be covered with water at high tide and an optional alternative route for the Coast Path is proposed that avoids the sensitive area.

<u>Damage to habitats as a result of increased trampling</u>

Sand dunes

The proposed ECP is aligned on an existing popular path through the sand dunes, and sand dune habitat falls within the landward and seaward coastal margin. There is expected to be negligible change in access on the line of the trail and in the coastal margin as a result of the proposals, as this is already a popular area. Therefore there is a low risk of an increase in trampling of sand dune habitats as a result of the proposals.

Salt marsh

There is expected to be negligible change in access on the line of the trail and in the coastal margin as a result of the proposals, as this is already a popular area. The saltmarsh is not particularly conducive for walking due to the terrain, most people walk on the existing paths or further out on the foreshore. Therefore there is a low risk of an increase in trampling of saltmarsh habitats as a result of the proposals.

<u>Reduction in extent of sand dune habitat as a result of installing new access management infrastructure</u>

The infrastructure proposed within European site boundaries along this section of the coast is in sand dune habitat and comprises 5 waymarker posts, 2 interpretation panels and a 3m sleeper bridge. We estimate this infrastructure, including the area underneath the sleeper bridge, will take up about $3m^2$ in total.

The proposed route of the Coast Path in the Red Rocks area follows an established path through the dunes. The sleeper bridge will be approximately 3m long and 900mm wide, spanning an area of saltmarsh prone to waterlogging and alongside an access point occasionally used by vehicles.

The waymarker posts and interpretation panels between them will comprise 9 x 100mm timber posts and will be installed alongside the path to help guide walkers through the dunes area.

The scale of loss can be regarded as trivial in the context of the conservation objectives, and the nature of the works will not adversely affect the continuity and functioning of the habitat types and their transitions. The new infrastructure should encourage people to keep to the path, reducing wider impacts.

In addition to the items proposed to be installed, a heavy cut back of blackthorn is planned at two locations where scrub vegetation is encroaching the path. At one of these locations, scrub will be cleared to realign the path onto slightly higher ground that will provide a better surface for walking. Works will be undertaken under the supervision of Cheshire Wildlife Trust who manage the site.

Impacts on natterjack toads

Disturbance to natterjack in and around breeding pools

The proposed route for the ECP follows a main path through the Red Rocks area. The site is a well-known and popular visitor destination, access to which is managed by Cheshire Wildlife Trust. The route proposed for the ECP is a convenient and easy to follow path through the site that is already in regular use by visitors. There are a number of scrapes and ponds used by natterjack over the site, both landward and seaward of the proposed route. The main breeding pools are in areas with established access routes, where patterns of recreational use are unlikely to be significantly affected by the proposals and where management measures are already in place, including temporary fencing of the main pools used by natterjack. Therefore there is a low risk of an increase in disturbance of toads in breeding pools.

Spread of disease between natterjack toad colonies

Some of the natterjack toad populations in the UK are known to have the chytrid fungus *Batrachochytrium dendrobatidis*. Studies in the UK have found that spread of the fungus is most likely linked to where people have deliberately introduced non-native alpine newts into pools with native amphibians, or transferred infected animals between pools. Bio security measures have been introduced for people that handle native amphibians e.g. capturing animals to collect biological data or involved in translocation schemes [19]. Beyond these specific activities, the risks of spreading the chytrid fungus in UK are considered low.

As noted in the previous section concerning disturbance, the pools used by natterjack at Red Rocks are in areas with established access routes where patterns of recreational use are unlikely to be significantly affected by the proposals and where management measures are already in place, including temporary fencing of the main pools used by natterjack.

Disturbance, injury or death of natterjack toads during establishment works and ongoing path maintenance works

Where works associated with establishing or maintaining the Coast Path might cause injury, disturbance or death of natterjack toads reasonable avoidance measures will be used. Wirral MBC will submit method statements as part of the SSSI assent process and prior to carrying out any works during establishment stage, outlining how they will carry out the work, and liaising with Cheshire Wildlife Trust who manage the site as necessary.

Natterjack toad - conclusion

In conclusion, the coastal access proposals will not significantly alter the population abundance or supporting habitat of natterjack toads. Therefore there will not be an adverse effect on the population of the natterjack toads.

C. Tell's Tower, West Kirby to Heswall fields

Current situation

Access baseline

The coastal cliffs can be accessed in a few places along this stretch of coast, but for half of the stretch this is not possible due to barriers such as residential developments, a boatyard, golf course and caravan park. The Wirral Way, a very popular walking, cycling and horse riding route that runs along a disused railway line, runs through this whole stretch. It is located slightly inland and doesn't provide many views of the sea. The Wirral Country Park at Thursaston is a very popular location for visitors with a network of paths, car parking, toilets, visitor centre and café. At the southern boundary of the Country Park, wide gullies and agricultural land prevent onward access immediately along the top of the cliffs. The foreshore can be accessed from the Country Park and also at Heswall Fields, a National Trust site with several popular paths.

Although used by some, the foreshore between West Kirby and Cubbins Green is not particularly popular. It is owned by Wirral MBC.

Wirral MBC also own and manage access to and over the foreshore at Cubbins Green. There are public slipways onto the top of the sandy beach and notices about public safety. Access along the top of the beach is only affected by the highest tides and is popular with users of all ages. However most people tend to stay at the top of the foreshore rather than venturing out onto the more difficult and dangerous terrain of the mudflats. This strip of foreshore extends all the way through to Heswall Fields and there are several public slipways and steps. The foreshore is accessible from Shore Road, the slipway near Dee sailing club, Station Road, Wirral Country Park and Heswall Fields. There is a visitor centre at the country park and the site is a well-known and promoted destination for visitors. A narrower section of foreshore to the south of the country park is more affected by high tides.

Environmental baseline

The foreshore along this section is mainly mud and sand flats and is an important feeding area for several non-breeding waterbird species. On higher tides the entire foreshore is inundated. The foreshore in this area has large numbers of waders roosting on the lower high tides.

Drift line vegetation is an ephemeral community with limited distribution round the estuary. It has been recorded on the foreshore near Heswell and can be damaged by trampling [6].

Detailed design and assessment of possible risks to qualifying features

Possible impacts of the proposals on The Dee Estuary SAC/SPA/Ramsar site are:

- Disturbance of non-breeding waterbirds
- Damage to habitats as a result of increased trampling

Considering these in turn:

Additional disturbance to non-breeding waterbirds of The Dee Estuary SPA / Ramsar roosting and feeding in intertidal areas

Alignment and creation of the England Coast Path

At the southern end of Marine Lake, the proposed ECP is aligned inland through a housing estate, and follows pavements to Cubbins Green, where it joins a public right of way along the clifftop. It then moves inland to avoid an area of housing and golf course and follows the Wirral Way to Wirral Country Park, where it follows an existing path along the edge of the coastal cliff. The proposed trail follows an existing path through the country park at Thursaston. From the Country Park to Heswall Fields, the ECP is aligned on a new route along the clifftop, until it joins with Heswall Fields where the route continues through the existing National Trust site at Heswall Fields, where access in the form of various paths is already provided and well used.

Between Tell's Tower and the Wirral Way, there may be a small increase in access as a result of promoting the route as a National Trail. Where the ECP is aligned on the Wirral Way and on existing paths through Wirral Country Park and Heswall Fields there is likely to be negligible change in the levels and patterns of use on these existing popular paths.

At the southern edge of the country park, the proposed line of the trail will follow a new route along the top of the cliffs across agricultural land. Although some existing unauthorised access takes place along the edge of the cliffs now, we expect that formalising a route here would see an increase in people using this part of the route.

This alignment means that the ECP is removed from the areas used by non-breeding waterbirds, and therefore the risk of an increase in disturbance of roosting and feeding waterbirds by people using the ECP is negligible.

Coastal access rights

The margin in this section consists of large areas of sand and mudflats. Beyond a large creek that runs fairly parallel to the coast the flats are considered to be unsuitable for access and access will be excluded under s25A.

Access over the wider area of mudflats is fairly low. A narrow strip of foreshore between Cubbins Green and Heswall Fields is already popular with walkers. This area is not available at high tide. The proposed route for the Coast Path is set back from the foreshore through urban areas, on a disused railway line and on clifftop paths. It is not easy to access the foreshore from the ECP, access to the foreshore is only possible at certain points where steps or slipways are already provided. No new access points onto the foreshore will be created as part of our proposals, and we will not be raising awareness of existing access points through ECP signage. ECP walkers are likely to stick to the route of the ECP as it is

an easy surface to walk on and access points to the foreshore are limited. Therefore we do not expect levels and patterns of access to the foreshore to increase as a result of our proposals.

As we do not expect access to increase in the coastal margin as a result of the proposals, there is a low risk of an increase in disturbance to feeding non-breeding waterbirds between Tell's Tower and Heswall Fields.

Damage to drift line vegetation as a result of increased trampling

Annual vegetation of drift lines is an extremely ephemeral plant assemblage, which has been recorded in the vicinity of the Point of Ayr and near Heswall on the English shore (Dargie, 2001). As these areas experience some of the most intense recreation pressure in the European marine site, the vegetation is considered to be highly exposed to abrasion. Thus its vulnerability to abrasion is also high. [4].

A narrow strip of foreshore between Cubbins Green and Heswall Fields, in the area where drift line vegetation occurs, is already popular with walkers. This area is not available at high tide. The proposed route for the Coast Path is set back from the foreshore through urban areas, on a disused railway line and on clifftop paths. It is not easy to access the foreshore from the ECP, access to the foreshore is only possible at certain points where steps or slipways are already provided. No new access points onto the foreshore will be created as part of our proposals, and we will not be raising awareness of existing access points through ECP signage. ECP walkers are likely to stick to the route of the ECP as it is an easy surface to walk on and access points to the foreshore are limited. Therefore we do not expect levels and patterns of access to the foreshore to increase as a result of our proposals.

As we do not expect access to increase in the area where this habitat occurs as a result of the proposals, there is a low risk of an increase in trampling of drift line vegetation as a result of the proposals.

D. Heswall shore (between Heswall Fields and Cottage Lane, Gayton)

It is proposed that the main route for the England Coast Path between the National Trust land at Heswall Fields and the slipway and boat yard at Banks Lane should follow an existing path through the coastal salt marsh. An optional alternative route is proposed along Target Road, for use at tides of over 9.4m when parts of the route between Target Road and Banks Road may be affected.

From the slipway at Banks Road, the trail will follow an inland route via existing roads and the Wirral Way, re-joining the coast at Cottage Lane, Gayton. The possibility of using one of the existing walked routes along the marsh between Banks Road and Cottage Lane, Gayton was considered but rejected for nature conservation reasons. Creating a suitable surface for walking over this section of the marsh would have required substantial new infrastructure to be installed and the resulting path would be in close vicinity to a tidal creek used by teal, redshank and other non-breeding waterbirds.

Current situation

It is clear that public use of this part of the marsh is assumed. The local council maintain several public steps and slipways to provide a physical means of access. The path between Heswall Fields and Banks Lane is regularly used by walkers, dog walkers, runners, horse-

riders (confirmed by site observations, local access managers and summary data from mobile apps). This section of path is also part of a circular walk promoted by Wirral Council. The path is not a recorded public footpath but its character and long-standing use mean that it can reasonably be assumed to be part of the baseline conditions affecting the site.

At the northern end of this section, the habitat consists of a narrow strip of dune / saltmarsh below a low cliff, with a shingle/sand beach grading into saltmarsh and mudflat (Dawpool Bank). This mudflats gives way to saltmarsh on either side of a wide creek (approx. 130m wide opposite where the proposed alignment leaves Heswall Fields and descends to the foreshore) which narrows south towards the slipway (approx. 40m wide).

Detailed design and assessment of possible risks to qualifying features

Possible impacts of the proposals on The Dee Estuary SAC/SPA/Ramsar site are:

- Disturbance to non-breeding waterbirds
- Disturbance of redshank/ shelduck in the breeding season
- Damage to habitats as a result of increased trampling
- Reduction in extent of transitional saltmarsh habitat due to path improvement works

Considering these in turn:

Additional disturbance to non-breeding waterbirds of The Dee Estuary SPA/Ramsar

The foreshore in this area is important for a number of the SPA/Ramsar site non-breeding features. WeBS data indicate that six species that are qualifying features of Dee Estuary SPA/Ramsar make use of the creek (shelduck, teal, black-tailed godwit, knot, oystercatcher and redshank) and several species that are component species of the waterbird assemblage (including mallard and lapwing) [3].

In more detail:

- This area is probably one of the densest concentrations of teal in the site, with this species making extensive use of the flats in front of Heswall Fields and into the creek at Banks Road.
- Though black-tailed godwit do make use of this area, the key concentration in this part of the estuary at low tide is on the flats at Thurstaston.
- Distribution of knot is similar to black-tailed godwit. During a site visit, numbers (several 100) of knot where retreating into the creek at this part of the stretch with the rising tide. This suggests the outer reaches of the creek may be a high tide retreat, with some more limited low tide foraging.
- Oystercatcher distribution as black-tailed godwit.
- Redshank are recorded at greater concentration on the flats in front of Thurstaston and at lesser densities on the flats in front of Heswall Fields and into the creek. Observations on site suggest the creek is used to retreat from a rising tide.
- Shelduck appear to make limited use of this area, with none recorded in the 2008/09 Low Tide Counts.
- This area is one of two key mudflat (as opposed to saltmarsh) areas for lapwing, with the flats in front of Heswall Fields and the creek mouth being used.

- Mallard are recorded at low density in this area (however, total numbers on site are low so low density is probably a reflection of site numbers rather than lack of importance).
- Inland fields at Whittering Lane are occasionally used by roosting curlew and gulls[4].

The tidal channel is wide and deep at this point; birds feeding on the mud at low tide are fully screened from people using the path. Use of the path doesn't appear to interfere with feeding behaviour in the tidal channel - data on low tide feeding corroborate this assumption.

The salt marsh at this point is some 60-80m wide. The vegetation is shin height typically, difficult to walk over and provides an effective buffer zone between the path and the channel.

This section of path is already well-known and regularly used. The slipway at Banks Road is the most popular access point along this section of coast and there is an active boat yard, car park, bus stop, restaurant and several residential properties. There are moorings north along the channel.

The proposed improvements between Heswall Fields and Banks Road will make the path easier to use and can expect to increase the frequency of visits. New signage will direct people inland and along roads and the Wirral Way so we would expect use to be concentrated on the path, since it provides a convenient and pleasant route. There are no specific limitations to public use of the area for recreation, or reason to believe that coast path proposals will alter the type or distribution of recreational activities that take place at this location.

Between Banks Road and Cottage Lane, Gayton an inland route for the Coast Path is proposed so as to avoid increasing disturbance to birds using the tidal creek. As part of our proposals we intend, for conservation reasons, to install two new information boards at the main access points where the proposed route leaves the marsh to go inland and join the Wirral Way. The messages on these boards will be directed as much at local people as first time users and will help to raise awareness of how visitors can help protect wildlife using the area.

Fields at Whittering Lane will be seawards of the inland route of the trail between Banks Road and Cottage Lane, Gayton. Recent counts show curlew and gulls make some use of these fields. The fields are separated and screened from the proposed route of the Coast Path by scrub and trees. It is unlikely people will enter this area which is a mix of small fields and residential properties. Persons wishing to access the foreshore can easily do so via several residential roads and public steps.

<u>Disturbance of redshank/ shelduck in the breeding season</u>

Breeding redshank may be present where the saltmarsh is suitable and shelduck feed on the flats and at the water's edge. Since the proposed route for the Coast Path is inland for much of this section of coast, and because the tidal channel limits access to the edge of the marsh, and the saltmarsh vegetation and creeks provide good cover, the risk of disturbance to breeding redshank is low.

<u>Damage to habitats as a result of increased trampling</u>

A large number of small freshwater streams enter the estuary, especially between Heswall and Shotton, where there are also freshwater springs at the top of the marsh. In areas where

[4] Recent count data kindly provided by local bird recorders

there is a significant influence of fresh water in the upper reaches of the estuarine system, and where the marsh joins higher ground, important transitional communities are found.

In places between Heswall Fields and Banks Lane the existing path has become poached in places and surrounding saltmarsh vegetation is being trampled. New sleeper bridges and stone flags are proposed to be installed in these waterlogged sections of path that will reduce current impacts and create a more sustainable path surface. Between Banks Road and Cottage Lane, Gayton walkers will be directed inland and away from the marsh.

Reduction in extent of transitional saltmarsh habitat due to path improvement works

This section of the trail runs along the boundary of the European site. Salt marsh is an extensive habitat in the Dee Estuary, though upper transitional saltmarsh has a more limited distribution.

The infrastructure proposed within European site boundaries along this section of the coast comprises 4 sleeper bridges and 2 lengths of stone flagging. We estimate this infrastructure, including the area underneath the sleeper bridges, will take up about 85.2m^2 in total.

The following works are proposed:

- Existing structures would be replaced by sleeper bridges at 3 locations
- An additional sleeper bridge would be installed to cross an outfall channel
- Two sections of stone flags (6m and 60m) would be installed where the existing track is particularly waterlogged in front of the sewerage works.

The sleeper bridges will be 3 planks in width (approximately 900mm) and 10m, 7m, 3m and 2m in length. They will replace mixed materials (rubble and timber) that has been placed where the path becomes waterlogged. Removal of this material will enable some further recovery of vegetation and is less likely to impede water movement.

Stone flagging will be used on particularly waterlogged sections where freshwater enters the marsh by the sewerage works. The stones will be laid onto the surface of the marsh with gaps between to enable water movement. Stone flagging is a technique that has been widely used to reduce the impact of trampling on sensitive substrates and vegetation. Once the flags are installed the area affected by trampling will be reduced and adjacent vegetation will recover.

All of these works will be carried out within the footprint of the established path, so ensuring there is no loss of saltmarsh habitat. The path improvements proposed will enable small areas of trampled and poached marsh adjacent to the path to recover.

In addition to the items proposed to be installed, scrub clearance and mowing prior will be carried out to realign an approximately 70m section of the existing path onto slightly higher ground. The new alignment will provide a better surface for walking and allow trampled vegetation along the currently walked route to recover.

E. Cottage Lane, Gayton to Denhall Quay

Current situation

Access baseline

This section is already popular with walkers, with public rights of way and roadside pavements running along most of the coast.

A public right of way runs on the top of a stone wall (defence embankment) between Cottage Lane, Gayton and Boathouse Lane. This section is already very popular with walkers because of the proximity of the route to the car park, the flat and hard surface of the route, the views it gives over the Dee estuary and the opportunity it gives people to create short circular walks by linking up with the Wirral Way.

Parkgate is a really popular tourist attraction with café's, pubs, restaurants, and shops and the pavement that runs along Parkgate front is always very popular with walkers. There is some evidence from walked lines on the ground that that some people do walk along the top of the marsh (parallel to the pavement). Interpretation boards are already in situ part way along the pavement along with benches and resting areas.

At the southern end of The Parade, there is limited evidence of people continuing to walk south on the marsh to the seaward side of the housing near Manorial Road. Parts of this route can be quite wet and is interrupted by tall reedbeds. Most people seem to follow the existing public right of way which leads walkers slightly inland and along roads through the existing residential area. The high number of visitors and walkers that congregate along the frontage at Parkgate does reduce significantly away from that location.

A public right of way near Moorside follows the back edge of the marsh through to Little Neston. This is a popular route although the first part of the PROW is badly surfaced and is often waterlogged. The public right of way eventually moves slightly inland across 2/3 fields before it picks up a surfaced track that eventually leads to Quayside at the back of the marsh. The route from Parkgate to Little Neston is part of a locally promoted route and on site information and interpretation at Quayside tells users of the history of the old Quay and industrial past.

Continuing south from Quayside, a popular surfaced public right of way / cycletrack continues all the way through to Denhall Lane. This route has a high number of walkers and cyclists and is fenced off from the marsh.

The margin is dominated by large expanses of saltmarsh and mudflats. Existing levels of access in these areas are pretty limited mainly due to the habitat – saltmarsh with large and wide creeks and ditches. For much of this stretch of coast, a wide channel that runs roughly parallel to the back of the saltmarsh (about 50-100m out) provides a 'natural' barrier that seems to discourage and physically prevent most people from walking out any further.

There is evidence that people do more regularly use parts of the saltmarsh close to Quayside and Denhall Quay. Some of the users are likely to use the road and informal car parking near The Harp and appear to walk out onto the marsh often with dogs following walked lines. Much of this activity takes place within an area bounded by a large meandering gutter / channel that extends out 400m from the mainland. Signage, installed by RSPB around the edge of this ditch informs people that access to the outer parts of the marsh and estuary is not permitted. Some people have been observed walking further out onto the marsh but numbers are limited.

Environmental baseline

The saltmarsh is used by roosting and feeding waders, and loafing and feeding teal.

A 32ha area of marsh adjacent to Denhall Quay which is confined by a meander in a creek, is well-used with a network of paths. It does not appear to be particularly significant for the SPA features.

The saltmarsh is thought to be accreting and is in favourable condition.

Detailed design and assessment of possible risks to qualifying features

Possible impacts of the proposals on The Dee Estuary SAC/SPA/Ramsar site are:

- Disturbance of non-breeding waterbirds
- Disturbance of redshank/ shelduck in the breeding season
- Damage to salt marsh habitat as a result of increased trampling
- Reduction in extent of salt marsh habitat as a result of installing new access management infrastructure

Considering these in turn:

<u>Additional disturbance of feeding or resting non-breeding waterbirds of The Dee Estuary SPA/Ramsar</u>

Alignment and creation of the England Coast Path

The proposed ECP follows the public right of way between Gayton Cottage and Parkgate, then follows the pavement at Parkgate, before continuing south via public roads and public rights of way between Parkgate and Denhall Quay.

For most of this section, there is likely to be negligible change in levels and patterns of access as a result of our proposals. This is because the ECP is aligned on rights of way and pavements which are already very popular with walkers.

Between Moorside Lane and Old Quay, the ECP is aligned on a public right of way that sits at the back edge of the saltmarsh. We are proposing to make surface improvements to this section of route as, at certain times of the year it can be waterlogged. Local people have been campaigning for surface improvements to this path for a number of years. There is a strong freshwater influence in this part of the marsh and the vegetation is dominated by reeds. The reedbeds provide natural screening of people using the path from the saltmarsh beyond.

Coastal access rights

Large areas of saltmarsh fall within the coastal margin. Large parts of the saltmarsh are separated from the coast path by creeks and ditches which are difficult to cross.

In the area between Moorside Lane and Old Quay, where access may increase on the line of a public right of way due to surface improvements and promoting it as the ECP, there is likely to be negligible change in access to the margin. This is because people are likely to stick to the ECP, as it will be the driest, easiest and most convenient route to take along the foreshore. There are reed beds seaward of the ECP, which act as a barrier preventing access to the saltmarsh.

At Denhall Quay, a 32ha area of marsh with a well-used network of paths is confined by a meander in a creek. Existing use will continue, and access is not expected to increase in this area as a result of our proposals.

Most of the saltmarsh (apart from the area at Denhall Quay) within the margin is unsuitable for access, and access will be restricted under s25A. There will be no new access rights created in the areas where these birds roost and feed, as the saltmarshes are unsuitable for access. A deep creek runs adjacent to the shore, which helps to prevent access onto the majority of the saltmarshes in this section.

Signage and information will be installed at key access points to inform the public about these exclusions. Natural England will work with RSPB on designing and installing information boards at Moorside Lane, Old Quay (Little Neston) & Marshlands Road and Denhall Quay, which will then be maintained by RSPB.

Therefore there is likely to be negligible change in levels and patterns of access in the margin as a result of our proposals. Therefore, as access is not expected to increase in the areas where non-breeding waterbirds roost and feed, there is a low risk of an increase in disturbance to these features.

Disturbance of redshank/ shelduck in the breeding season

Breeding redshank make use of the saltmarsh along this section and the area opposite Parkgate is noted as particularly suitable - RSPB estimate the number of breeding pairs to be approximately 60 per km^2 in this area. The proposed route for the Coast Path follows existing paths mainly on drier ground just inland of the saltmarsh. The saltmarsh itself is unsuitable for access on foot and the vegetation and creeks provide good cover for breeding redshank meaning that the risk of disturbance to birds out on the marsh is low. Shelduck are present in the area but mainly further out in the estuary, feeding on the flats or at the water's edge.

Damage to salt marsh habitat as a result of increased trampling

The ECP is aligned on a public right of way on saltmarsh between Moorside Lane and Old Quay. The path is, in part, currently very wet, meaning that in some waterlogged areas, people spread out to avoid wet areas, causing a widening of the path. Surface improvements will act to reduce the width of the path, therefore reducing the area of saltmarsh affected by trampling.

Beyond the path, the saltmarsh is unsuitable for access and, as explained above when considering possible impacts of disturbance to waterbirds, the access proposals will not lead to further trampling of the marsh.

Loss of salt marsh habitat as a result of installing new access management infrastructure

The infrastructure proposed within European site boundaries along this section of the coast comprises 1 waymark post, 1 interpretation panel, 1 length of timber revetment (7m by 150mm), 3 lengths of boardwalk with a handrail (15m, 5m & 20m in length by 1.5m wide), 2 lengths of stone flags (100m & 60m by 1m wide) and a short length of aggregate (5m by 1.5m). We estimate this infrastructure, including the area underneath the sections of boardwalk, will take up about 223.58m^2 in total.

All of the path surfacing works will be carried out within the footprint of the established path and will not impact on the extent of saltmarsh habitat. The revetment work will allow that

section of path to be regraded so it is a level surface for walking and less lightly to become eroded. Gaps will be left between stone flags in low lying wetter areas to enable water to pass. In addition to the new surfaces to be installed, a 20m section of existing stone flags will be lifted and re-lain so that improved drainage can be installed.

The waymark post and interpretation panel will be placed adjacent to the path and may lead to a reduction in extent of saltmarsh of up to 0.03m^2. This scale of loss can be regarded as trivial in the context of the conservation objectives, and the nature of the works will not adversely affect the continuity and functioning of the habitat types and their transitions. The new signage will help guide walkers along the path, reducing wider impacts.

In addition to the items proposed to be installed, it is planned to slightly realign a 20m section of path by clearing a strip of vegetation at back of marsh to create a new line on a raised section of bank. The re-aligned section will follow drier ground over a substrate that provides a better surface for walking and is less likely to become poached or eroded. The original line of the path will be left to revegetate naturally.

F. Denhall Quay to Welsh Border

Current situation

Access Baseline

A multi user track (for walkers and cyclists) leaves Denhall Lane and follows a surfaced track all the way through to the Welsh border near Burton Point. It is a very popular route, particularly for walkers, cyclists and bird watchers.

From Denhall Quay all the way through to Burton Point and the Welsh border, there is little evidence of any access out onto the saltmarsh. Signage in place along the edge of the road/path/marsh by RSPB and MoD inform people that access out onto the marsh is not permitted. From Denhall Quay to Denhall Road, the marsh is fenced off. From Denhall Road through to Burton Point and the Welsh border, the marsh is not fenced off from the path but it appears that that most people remain off the marsh and adhere to the various RSPB / MoD signs that are installed.

Environmental baseline

The saltmarsh between Denhall Quay and the Welsh Border is part of Dee Estuary RSPB Reserve and is managed to provide habitat for roosting, feeding and breeding waterbirds. The area is very important for breeding redshank. Wintering birds, including all the SPA waders, pintail and teal, use the area in high numbers. .

Detailed design and assessment of possible risks to qualifying features

Possible impacts of the proposals on The Dee Estuary SAC/SPA/Ramsar site are:

- Disturbance of non-breeding waterbirds
- Disturbance of redshank/ shelduck in the breeding season
- Damage to salt marsh habitat as a result of increased trampling
- Reduction in extent of salt marsh habitat as a result of installing new access management infrastructure

Considering these in turn:

Additional disturbance of feeding or resting non-breeding waterbirds of The Dee Estuary SPA/Ramsar

Alignment and creation of the England Coast Path

The proposed ECP will be aligned on the existing multi use route and public road. As the route will be aligned on an existing popular surfaced multi use route there is likely to be negligible change in the levels and patterns of use.

Coastal access rights

Large areas of saltmarsh fall within the coastal margin. A creek runs near the landward edge of the saltmarsh, the saltmarsh seaward of the creek is unsuitable for access, and access will be excluded under s25A or s28 of CRoW.

Parts of the saltmarsh between Denhall Quay and Burton Point form part of the MoD Sealand Firing Range. As coastal access rights do not apply on land where military byelaws prevent such access, those parts of the range which are covered by such byelaws would not have any new coastal access rights introduced. For the remaining areas of the range that are not covered by byelaws, MOD intend to propose to exclude coastal access rights under s28 of CROW.

A strip of saltmarsh at the landward edge of the saltmarsh is not covered by s25A or s28 exclusions or military bylaws. Currently a small number of people walk south on this strip of marsh for a short section south of Denhall Quay, the rest of this strip has very low levels of access. The area with low levels of access is very important for breeding redshank. Wintering birds, including all the SPA waders, pintail and teal, use the area in high numbers. The proposed ECP is separated from this strip of marsh by a fence.

In order to prevent an increase in access and disturbance in this area, access to the marsh will be excluded year round for nature conservation reasons, under s26 of CRoW. Signage and information will be installed at key access points to inform the public about these exclusions. Natural England will work with RSPB on designing and installing information boards at Junction of Denhall Lane / Station Road and Burton Point, which will then be maintained by RSPB.

Disturbance to breeding redshank/ shelduck in the breeding season

The proposed route for the Coast Path follows existing paths mainly on drier ground just inland of the saltmarsh. The saltmarsh itself is unsuitable for access on foot and the vegetation and creeks provide good cover for breeding redshank meaning that the risk of disturbance to birds out on the marsh is low. Shelduck are present in the area but mainly further out in the estuary, feeding on the flats or at the water's edge.

Damage to salt marsh habitat as a result of increased trampling

There are notable areas of brackish swamp vegetation along the landwards edge of the marsh, particularly on Burton Marsh and further northwards along the English shore. Most of these communities are found in areas receiving freshwater seepage from slopes inland. The risk of the access proposals leading to increased trampling in these areas is very low due to the nature of the terrain, which is unsuitable for walking over, and because the ECP is aligned inland, on an existing surfaced multi use route.

Loss of salt marsh habitat as a result of installing new access management infrastructure

The infrastructure proposed within European site boundaries along this section of the coast comprises 3 information panels. The panels will be placed adjacent to the path and may lead to a reduction in extent of saltmarsh of up to 0.03m^2 in total. This scale of loss can be regarded as trivial in the context of the conservation objectives, and the nature of the works will not adversely affect the continuity and functioning of the habitat types and their transitions.

D3.3 Assessment of potentially adverse effects (taking account of any additional mitigation measures incorporated into the design of the access proposal) alone

In this section we assess the potential for adverse effects on site integrity resulting from the six environmental pressures and consequent risks to site conservation objectives identified in Table 6. We consider the whole Coast Path stretch and take into account mitigation measures incorporated into the design of our access proposal. Each of the following subsections deals with one type of pressure. For ease of reference, we repeat the risk to conservation objectives and the qualifying features affected given in Table 6 (see D1) before summarising relevant design features, our conclusions on site integrity and whether non-significant residual effects remain which need to be considered in combination with non-significant effects of other plans or projects (see D4).

Disturbance of feeding or roosting non-breeding waterbirds from recreational activities

Risk to conservation objectives: Repeated disturbance to foraging or resting non-breeding waterbirds, under existing and increasing recreational activities, that is promoted by the ECP proposal leads to reduced fitness and reduction in population and/or contraction in the distribution of Qualifying Features within the site.

Qualifying features affected:

Mersey Narrows and North Wirral Foreshore SPA/Ramsar

- Bar-tailed godwit; common tern; knot; little gull & waterbird assemblage

The Dee Estuary SPA/Ramsar

- Bar-tailed godwit; black-tailed godwit; curlew; dunlin; grey plover; knot; oystercatcher; pintail; redshank (nb & passage), Sandwich tern; shelduck; teal & waterbird assemblage

Relevant design features of the access proposals:

Mersey Narrows and North Wirral Foreshore SPA/Ramsar

The proposed route for the Coast Path along the north coast of the Wirral is an existing well-known and promoted, surfaced, multi-user trail. This route is outside of the SPA and encouraging walkers to use the promenade at sensitive times as an alternative to the foreshore is a recommended action to help manage the existing disturbance pressure.

There is an established right by long-standing permission to use the north Wirral foreshore for a variety of beach leisure activities, including walking and walking with a dog. The creation of coastal access rights does not change the position that is already widely

advertised through signage, literature and digital media. Existing limitations on access will continue to apply and informal access management by Wirral MBC, Cheshire Wildlife Trust and Dee Estuary Voluntary Wardens are supported by the proposals. Therefore patterns and levels of access over the foreshore will not be affected by introduction of the new national arrangements for coastal access.

Further actions have been identified to address and manage wider issues affecting achievement of MN&NWF conservation objectives, and particularly the target to reduce disturbance from recreational activities. There is an opportunity to deliver some of these actions as part of Coast Path establishment works, including:

- At Hoylake-Leasowe We propose to install up to five new information panels on the promenade at the main access points to the beach between the lifeboat station and Kings Gap.
- At Mockbegger Wharf We propose to install an information panel on the seafront adjacent to each breakwater (at 4 locations) to explain why these are important for resting birds and ask people to stay away whilst they are being used.
- There are existing information points in West Kirby, at Stanley Road and next to the sailing centre. As part of the Coastal Access Programme we propose to add new information about access in the Red Rocks area at these locations.

In addition, at the time the Coast Path is opened, Natural England will incorporate conservation messages in relevant promotional material and online stories

<u>The Dee Estuary SPA/Ramsar</u>

The proposed route for the Coast Path along the English coast of the Dee Estuary follows existing coastal paths and pavements. The route is largely outside of the SPA/Ramsar site and so removed from the areas used by non-breeding waterbirds for both feeding and roosting.

Between Banks Road and Cottage Lane, Gayton an inland route for the Coast Path is proposed so as to avoid increasing disturbance to birds using the tidal creek. Signage and information will be installed directing walkers inland for this section.

The margin in this section consists of large areas of sand and mudflats, the majority of which is unsuitable for access and over which coastal access rights will be excluded year round for safety reasons. Closer to the Welsh border, no new coastal access rights will be created over MoD land, including the Sealand Firing Range.

In the Denhall Quay area coastal access rights will be excluded from an area of the salt marsh that might otherwise be suitable for access on nature conservation grounds.

Signage and information will be installed at key access points between Moorside Lane and Burton Point to inform the public about the proposed local exclusions.

Can ‘no adverse effect’ on site integrity be ascertained? Yes, taking into account the design features explained in D3.2A to D3.2F and summarised above.

Are there residual effects? Yes

Disturbance of feeding or roosting non-breeding waterbirds from works

Risk to conservation objectives: Disturbance to feeding or roosting waterbirds, during path establishment work, leads to reduced fitness and reduction in population and/or contraction in the distribution of Qualifying Features within the site.

Qualifying features affected:

Mersey Narrows and North Wirral Foreshore SPA/Ramsar

- Bar-tailed godwit; common tern; knot; little gull & waterbird assemblage

The Dee Estuary SPA/Ramsar

- Bar-tailed godwit; black-tailed godwit; curlew; dunlin; grey plover; knot; oystercatcher; pintail; redshank (nb & passage), Sandwich tern; shelduck; teal & waterbird assemblage

Relevant design features of the access proposals:

Risks of bird disturbance during the installation of access management infrastructure on this stretch are low because of the limited amount proposed. No infrastructure is proposed to be installed within Mersey Narrows and North Wirral Foreshore SPA/Ramsar. Some path surface improvements and additional signage is proposed to be installed in the Dee Estuary SAC/SPA/Ramsar. All locations are on established paths close to the boundary of the site. The mitigation measures concerning access routes, timing of work and methods described in Table 7 will be followed to minimise any risk of disturbance.

Can 'no adverse effect' on site integrity be ascertained? Yes, taking into account the design features summarised above and explained in D3.1 and Table 7.

Are there residual effects? No

Disturbance of redshank/shelduck in the breeding season

Risk to conservation objectives: The access proposals modify how the site is used for recreation, causing disturbance to breeding redshank/ shelduck that make a significant contribution to the non-breeding population of these species.

Qualifying features affected:

The Dee Estuary SPA/Ramsar

- Non breeding redshank & shelduck

Relevant design features of the access proposals:

Redshank nest in areas of suitable saltmarsh of the inner Dee Estuary. The Coast Path follows existing paths mainly on drier ground just inland of the saltmarsh and the marsh itself is unsuitable for access. The vegetation and creeks of the marsh provide good cover and breeding redshank are unlikely to be disturbed by people using the Coast Path.

Coastal access rights will be restricted over an area of marsh near Denhall Quay that is important for several non-breeding waterbird and is also used by breeding redshank.

Shelduck nest in burrows over a wide area mostly in land surrounding the estuary and unaffected by the access proposals. Post-breeding shelduck increase in numbers and feed over the flats and at the water's edge where they are unlikely to be disturbed by people using the Coast Path.

Can 'no adverse effect' on site integrity be ascertained? Yes, taking into account the design features explained in D3.2D to D3.2F and summarised above.

Are there residual effects? No

Trampling of habitats

Risk to conservation objectives: Repeated trampling, following changes in recreational activities as a result of the access proposal, may damage sensitive habitats, plant communities or species, leading to long-term declines in their quality, distribution or numbers within the site. Types of possible effect include physical changes to habitats (for example through compaction or erosion of the substrate), shifts in the species composition of plant communities, and reductions in species' population size or distribution.

Qualifying features affected:

The Dee Estuary SAC/Ramsar

- Drift line vegetation - annual vegetation of drift lines; estuaries (annual vegetation of drift lines sub-feature)
- Salt marsh - *Salicornia* and other annuals colonising mud and sand; Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); estuaries (*Salicornia* and other annuals colonising mud and sand & Atlantic salt meadows sub-features)
- Sand dunes - shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); shifting dunes with marram; fixed dunes with herbaceous vegetation ("grey dunes"); dune grassland; humid dune slacks; embryonic shifting dunes
- Natterjack toad (via impacts on supporting habitat)

Relevant design features of the access proposals:

Drift line vegetation

Annual vegetation of drift lines is an extremely ephemeral plant assemblage that occurs at the top of the foreshore between Cubbins Green and Heswall Fields.

Access to the foreshore is limited to existing public slipways and steps and no new access points will be created as a result of the access proposals.

The proposed route for the Coast Path along this section is set back from the foreshore through urban areas, on a disused railway line and on clifftop paths. Some improvements to the continuity of the clifftop path are proposed, that will tend to encourage walkers to follow this route, rather than walk along the foreshore.

As we do not expect access to increase in the area where this habitat occurs as a result of the proposals, there is a low risk of an increase in trampling of drift line vegetation as a result of the proposals.

Salt marsh

Salt marsh is an extensive habitat over the inner Dee Estuary. The vegetation and creeks of much of the marsh mean that it is difficult terrain to walk over. The vast majority of the salt marsh is unsuitable for public access and no new coastal access rights will be created over it.

In places where it is proposed to follow existing paths over the marsh and there are signs of vegetation being trampled, new sleeper bridges and short lengths of stone flags/ board walk or aggregate are proposed to be installed that will reduce the extent of current impacts and create a more sustainable path surface.

Sand dunes and areas used by natterjack

Sand dunes and associated transitional habitats have a limited distribution along this stretch of the coast and are present only in the Red Rocks area. Access to this site is managed by Cheshire Wildlife Trust and the established access routes where patterns of recreational use are unlikely to be significantly affected by the proposals. The proposed ECP is aligned on an existing popular path through the sand dunes and avoiding areas of embryonic dunes that might be more sensitive to trampling.

Can 'no adverse effect' on site integrity be ascertained? Yes, taking into account the design features explained in D3.2B to D3.2F and summarised above.

Are there residual effects? No

Loss of habitat as a result of installing new access management infrastructure

Risk to conservation objectives: The installation of access management infrastructure may lead to a permanent loss of extent of habitats that are qualifying features or that support bird or amphibian species that are qualifying features.

Qualifying features potentially affected:

Dee Estuary SAC/SPA/Ramsar

- Salt marsh - Salicornia and other annuals colonising mud and sand; Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); estuaries (*Salicornia* and other annuals colonising mud and sand & Atlantic salt meadows sub-features)
- Sand dunes - shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); shifting dunes with marram; fixed dunes with herbaceous vegetation ("grey dunes"); dune grassland; humid dune slacks; embryonic shifting dunes
- Non-breeding waterbird features (via impacts on supporting habitat)
- Natterjack toad (via impacts on supporting habitat)

Relevant design features of the access proposals:

The proposed alignment of the Coast Path on the west side of the Wirral follows the edge of the Dee estuary. In places, the surface of the established paths along which it is proposed to align the Coast Path have become waterlogged, degraded and difficult to walk on. As part of establishing the Coast Path, targeted works are proposed to improve the path surface at

affected locations, comprising installation of sleeper bridges (5), boardwalks (40m length), stone flags (226m length), revetment (7m length) and aggregate (5m length).

All of the proposed surface improvements will be installed within the footprint of the established path and will not lead to a permanent loss in extent of saltmarsh or dune habitat. By improving the surface of the path, the risk of trampling impacts spreading around affected area, as walkers seek to avoid muddy or damaged sections of path, is reduced.

In additional to the surfacing works, 6 new waymarker posts and 6 new interpretation panels will be installed adjacent to the path within Dee Estuary European sites and may lead to a reduction in extent of habitat of up to 0.18m^2. This scale of loss can be regarded as trivial in the context of the conservation objectives, and the nature of the works will not adversely affect the continuity and functioning of the habitat types and their transitions. The new signage will help guide walkers along the path, reducing wider impacts.

Can 'no adverse effect' on site integrity be ascertained? Yes, taking into account the design features explained in D3.2B, D3.2D, D3.2E & D3.2F and summarised above.

Are there residual effects? No

Impacts on toads, including disturbance, spread of disease and injury as a result of works

Risk to conservation objectives:

The following risks to natterjack toads are considered:

- An increase in incidences of dogs accessing breeding ponds, following changes in recreational activities as a result of the access proposal, may cause disturbance, injury or death of amphibian eggs, tadpoles or adults. This could lead to a reduction in population abundance.
- Potential for chytrid fungus *Batrachochytrium dendrobatidis* and other diseases to be spread between Natterjack colonies by people and dogs. This could lead to a reduction in population abundance.
- Works to construct the England Coast Path or ongoing path maintenance tasks cause disturbance, injury or death of toads, leading to reduction in population abundance.

Qualifying features affected:

<u>The Dee Estuary Ramsar</u>

- Natterjack toad

Relevant design features of the access proposals:

Natterjack have a limited distribution along this stretch of the coast and are present only in dunes and associated habitats in the Red Rocks area managed by Cheshire Wildlife Trust.

The parts of the site used by natterjack are in areas with established access routes where patterns of recreational use are unlikely to be significantly affected by the proposals and where management measures are already in place, including temporary fencing of the main pools used by natterjack.

Where works associated with establishing or maintaining the Coast Path might cause injury, disturbance or death of natterjack toads reasonable avoidance measures will be used. Wirral MBC will submit method statements as part of the SSSI assent process and prior to carrying out any works during establishment stage, outlining how they will carry out the work, and liaising with Cheshire Wildlife Trust who manage the site as necessary.

Can 'no adverse effect' on site integrity be ascertained? Yes, taking into account the design features explained in D3.2B and summarised above.

Are there residual effects? No

Conclusion:

The following risks to achieving the conservation objectives identified in D1 are effectively addressed by the proposals and no adverse effect on site integrity (taking into account any incorporated mitigation measures) can be concluded:

- Disturbance of feeding or roosting non-breeding waterbirds birds from works
- Disturbance of redshank/shelduck in the breeding season
- Trampling of habitats
- Permanent loss in extent of habitat as a result of installing new access management infrastructure
- Impacts on natterjack toads including disturbance, spread of disease and injury as a result of works

The following risks to achieving the conservation objectives identified in D1 are effectively addressed by the proposals and no adverse effect on site integrity (taking into account any incorporated mitigation measures) can be concluded, although there is some residual risk of insignificant impacts which will be considered further in combination with other plans and projects:

- Disturbance of feeding or roosting non-breeding waterbirds from recreational activities

D4 Assessment of potentially adverse effects considering the project 'in-combination' with other plans and projects

The need for further assessment of the risk of in-combination effects is considered here.

Natural England considers that it is the appreciable effects (from a proposed plan or project) that are not themselves considered to be adverse alone which must be further assessed to determine whether they could have a combined effect significant enough to result in an adverse effect on site integrity.

Residual risk of insignificant impacts from the access proposals

Natural England considers that in this case the potential for adverse effects from the access proposals has not been wholly avoided by the incorporated or additional mitigation measures outlined in section D3. It is therefore considered that there are residual and appreciable effects likely to arise from this project which have the potential to act in-combination with those from other proposed plans or projects. These residual effects are shown in Table 9.

Table 9: Residual risk of insignificant impacts from the access proposals

Residual risk	Qualifying features affected
Disturbance of feeding or resting non-breeding waterbirds during the winter or passage periods	Mersey Narrows and North Wirral Foreshore Bar-tailed godwit; common tern; knot; little gull & waterbird assemblage The Dee Estuary Bar-tailed godwit; black-tailed godwit; curlew; dunlin; grey plover; knot; oystercatcher; pintail; redshank (nb & passage), Sandwich tern; shelduck; teal & waterbird assemblage

Combinable risks arising from other live plans or projects

In this section we consider other live plans or projects we are aware of, that might interact with the access proposals, to identify any insignificant and combinable effects that have been highlighted in corresponding Habitats Regulations Assessments. Our review of insignificant and combinable effects from other projects is shown In Table 10.

Table 10: Review of other live plans and projects

Competent Authority	Plan or project	Have any insignificant and combinable effects been identified?
Liverpool City Region Authorities	Local Plans in the Liverpool City Region	**No.** Liverpool City Region authorities are progressing with development of a joint Recreational Mitigation Strategy for mitigating the combined additional recreational disturbance impacts from additional housing. Further assessment in relation to the details of this package is not possible at this stage, however; the improvement and maintenance of a high quality coastal walking route will help to provide for and manage any increased demand for recreation as a result of new housing. The possibility of in-combination effects arising in connection with individual local plans is considered below.
Wirral MBC	Wirral Unitary Development Plan 2000	**No.** The majority of policies have been retained including Policy NC01- Principles for Nature Conservation. This policy includes the protection (directly or indirectly) of the integrity of the Borough's International, National and Locally designated sites. It is envisaged that the possibility of disturbance as a result of increased demand for opportunities for recreation are to be mitigated via the Liverpool City Region Visitor Management Strategy which is currently being produced. Wirral MBC published an Action Plan in 2019 in which they affirm the need for a LCR Visitor Mitigation Strategy for European Sites including a Wirral-specific mitigation statement and action plan.

Competent Authority	Plan or project	Have any insignificant and combinable effects been identified?
Liverpool Council	Liverpool Local Plan	**No**. The potential impacts of disturbance from recreational activities is being considered for the Liverpool Local Plan. The Habitat Regulations Assessment (HRA) associated with the Local Plan (yet to be adopted) considers recreational pressure and habitat loss from proposed new development. A number of mitigation measures have been built into the Plan to address these potential impacts. It is a requirement for project specific HRAs to be produced for the identified housing allocations. It is envisaged that the possibility of disturbance as a result of increased demand for opportunities for recreation are to be mitigated via the Liverpool City Region Visitor Management Strategy which is currently being produced. It was concluded that there would be no adverse effect on integrity, and with the mitigation measures (including the Visitor Management Strategy) in place no residual effects were identified.
Cheshire West and Chester	Cheshire West and Chester Local Plan	**No.** The potential impacts of disturbance from recreational activities is considered for the Cheshire West and Chester Local Plan. The Habitat Regulations Assessment associated with the Local Plan concludes that the over-arching strategic policies contained within the local plan comprise a sufficient policy framework to enable the subsequent delivery of necessary measures that would avoid or adequately mitigate effect on integrity. It is envisaged that the possibility of disturbance as a result of increased demand for opportunities for recreation are to be mitigated by participation in the Liverpool City Region Visitor Management Strategy which is currently being produced.
Wirral MBC	Hoylake Neighbourhood Development Plan 2015-2020	**No.** Policy NC1 Protection of Natura 2000 Sites, includes the requirements for all proposals that may result in likely significant effects on Natura 2000 Sites must be accompanied with detailed information to allow the Council to prepare and HRA.
Flintshire County Council	Flintshire Local Development Plan Preferred Strategy November 2017	**No.** This Plan has been subject to a Habitat Regulations Assessment. The LDP Policy STR13: Natural and Built Environment, Green Networks and Infrastructure - specifically looks at protecting the natural environment. The implementation of this policy is considered to have no adverse impacts and potentially some beneficial effects on European sites.
North-West Inshore Fisheries	Cockle picking on North Wirral Foreshore	**No.** A Habitats Regulations Assessment was undertaken in 2016 which concluded that current management and mitigation measures of the Leasowe cockle fishery are sufficient to ensure it has no adverse

Competent Authority	Plan or project	Have any insignificant and combinable effects been identified?
and Conservation Authority	(impacting on MN&NWF SPA/Ramsar)	effect on the integrity of the Dee Estuary European Site interest features.
North-West Inshore Fisheries and Conservation Authority	Static Fixed Netting on the North Wirral Foreshore and Dee Estuary	**No.** A Habitats Regulations Assessment was undertaken in 2016 which concluded that the current low level of fishing, using gill nets, trammels and entangling nets, and drift nets, has no adverse effect on the integrity of the Dee Estuary European Site interest features.
North-West Inshore Fisheries and Conservation Authority	Mussel fishery on the Dee Estuary (impacting Dee Estuary SPA/Ramsar)	**No.** A Habitats Regulations Assessment was undertaken in 2017 which concluded that hand gathering of size mussel from the mussel beds at West Kirby and Thurstaston has no adverse effect on the integrity of the Dee Estuary European Site interest features.
Wirral MBC	Licencing of sandyachting & parakarting	**No.** Sandyachting & parakarting is permitted on the foreshore at Hoylake under a licence between Wirral MBC (who own the foreshore) and Wirral Sandyacht Club. These activities are regulated by licence so as to minimise any environmental impact that may occur.
Wirral MBC	Beach Management Operations at Wirral Beaches (Hoylake, West Kirby, Wallasey and New Brighton) - Combined HRA Screening Assessment and application.	**No.** The HRA assessment concludes that there will be no likely significant effect either alone or in-combination with other projects upon qualifying features of the Dee Estuary Ramsar, SPA and SAC or the Mersey Narrows and North Wirral Foreshore SPA/Ramsar.
Wirral MBC	Wirral Waters	**No.** A substantial multi-phase development at Birkenhead called 'Wirral Waters', has outline planning permission for around 13,000 residential units. Applications are coming forward in stages and include a residential development for 500 units at East Float. The overall HRA for Wirral Waters concludes that additional demand for greenspace as a result of the development could have an adverse effect on Mersey Narrows and North Wirral Foreshore SPA/Ramsar site and that mitigation is required. A framework of mitigation measures has been proposed and each development within the wider scheme is required to make a green infrastructure contribution, the funds generated from which will be used for coastline and recreation management. It is assumed that sufficient mitigation can be provided during the lifetime of this major development to conclude that there will be no adverse effect on integrity. No residual effects have been identified at this stage.
Liverpool Council	Liverpool Waters	**No.** The outline permission for Liverpool Waters is considering strategic mitigation of developments arising from this multi-phase development. Project specific

Competent Authority	Plan or project	Have any insignificant and combinable effects been identified?
		mitigation is being developed and several of the developments have already contributed to mitigation of disturbance to cormorants, including for installation of a raft at Princes Half Tide Dock. It is assumed that sufficient mitigation can be provided during the lifetime of this major development to conclude that there will be no adverse effect on integrity. No residual effects have been identified at this stage.
Wirral MBC	Live planning applications	**No.** Population increase and further development on the Wirral is likely to increase demand for local greenspace and visits to north Wirral foreshore, potentially increasing the level of disturbance to non-breeding waterbirds. A Liverpool City Region Visitor Management Strategy is currently being produced that will include Wirral-specific mitigation, however; in the meantime, possible impacts of new developments must be assessed on a case by case basis and appropriate mitigation measures provided as necessary. NE has recently provided advice on mitigation for several recent planning applications in the Wirral MBC area and on this basis we assume that there are no further residual effects to consider from these.
Wirral Council and Cheshire West and Chester Council	Flood Risk Management Strategy	**No.** HR concludes no likely significant effect.
Shoreline Management Plan 2	North West Shoreline Management Plan	**No.** The Shoreline Management Plan is a high level study. Due to the fact that it is about Policy setting, rather than proposing specific options at a scheme or project level, where specific details about construction or engineering proposals will be detailed, it is very difficult to determine the exact effects any proposal would have on the integrity of the N2K sites concerned, especially in the long term. HRAs would need to be undertaken at strategy/project level when more detail was available.
Natural England	Wildfowling	**No.** Wildfowling in designated areas is carried out under consent granted by Natural England. Dee Wildfowlers and Wetlands Management Club operate in the Dee Estuary area. Wildfowling typically takes place at dawn/dusk and in parts of the saltmarsh that are difficult and dangerous to access. The level of wildfowling activity will not be affected by the access proposals and the impacts of consented wildfowling are a part of the characteristics and baseline environmental conditions affecting The Dee Estuary SPA/Ramsar site. Natural England is not aware of any new wildfowling notices affecting areas within the project area at the present time. Therefore no in-combination effects with wildfowling are identified at this time.

Competent Authority	Plan or project	Have any insignificant and combinable effects been identified?
Natural England	Cormorant Management Licences	**No.** Groups of fisheries may apply to Natural England for a licence to control cormorants causing serious damage within a defined area or catchment. In 2020, Natural England carried out HRAs of all cormorant licence renewals within 10km of Ribble and Alt Estuaries, Mersey Narrows and North Wirral Foreshore, and Liverpool Bay SPAs, including shooting to reinforce scaring for the purposes of preventing serious damage to fisheries. These HRAs found that there were no residual effects of the cormorant management licence renewals.

In light of this review, we have not identified any insignificant and combinable effects that are likely to arise from other plans or projects and therefore no further in combination assessment is required.

A key factor in reaching this conclusion is the commitment by Liverpool City Region authorities to develop a joint Recreational Mitigation Strategy for mitigating possible impacts of increased demand for greenspace as a result of population growth and building new homes in the region. This strategy is in development at present, and NE will continue to liaise with local authorities in the region during establishment stage for ECP to ensure the access management measures proposed to be delivered through the Coastal Access Programme are integrated with the strategy as far as possible.

D5. Conclusions on Site Integrity

Because the plan/project is not wholly directly connected with or necessary to the management of the European site and is likely to have a significant effect on that site (either alone or in combination with other plans or projects), Natural England carried out an Appropriate Assessment as required under Regulation 63 of the Habitats Regulations to ascertain whether or not it is possible to conclude that there would be no adverse effect on the integrity of a European Site(s).

Natural England has concluded that:

It can be ascertained, in view of site conservation objectives, that the access proposal (taking into account any incorporated avoidance and mitigation measures) will not have an adverse effect on the integrity of Liverpool Bay SPA; Mersey Narrows and North Wirral Foreshore SPA/Ramsar; Dee Estuary SPA/Ramsar; & Dee Estuary SAC either alone or in combination with other plans and projects.

PART E: Permission decision with respect to European Sites

Natural England has a statutory duty under section 296 of the Marine and Coastal Access Act 2009 to improve access to the English coast. To fulfil this duty, Natural England is required to make proposals to the Secretary of State under section 51 of the National Parks and Access to the Countryside Act 1949. In making proposals, Natural England, as the relevant competent authority, is required to carry out a HRA under Regulation 63 of the Habitats Regulations.

We, Natural England, are satisfied that our proposals to improve access to the English coast between Birkenhead and Welsh Border are fully compatible with the relevant European site conservation objectives.

It is open to the Secretary of State to consider these proposals and make a decision about whether to approve them, with or without modifications. If the Secretary of State is minded to modify our proposals, further assessment under the Habitats Regulations may be needed before approval is given.

Certification

HRA prepared by:

Name: Sarah Wiseman & Gavin Stark Date: 18/11/ 2020

HRA approved by:

Name: Ginny Hinton Date: 08/12/20

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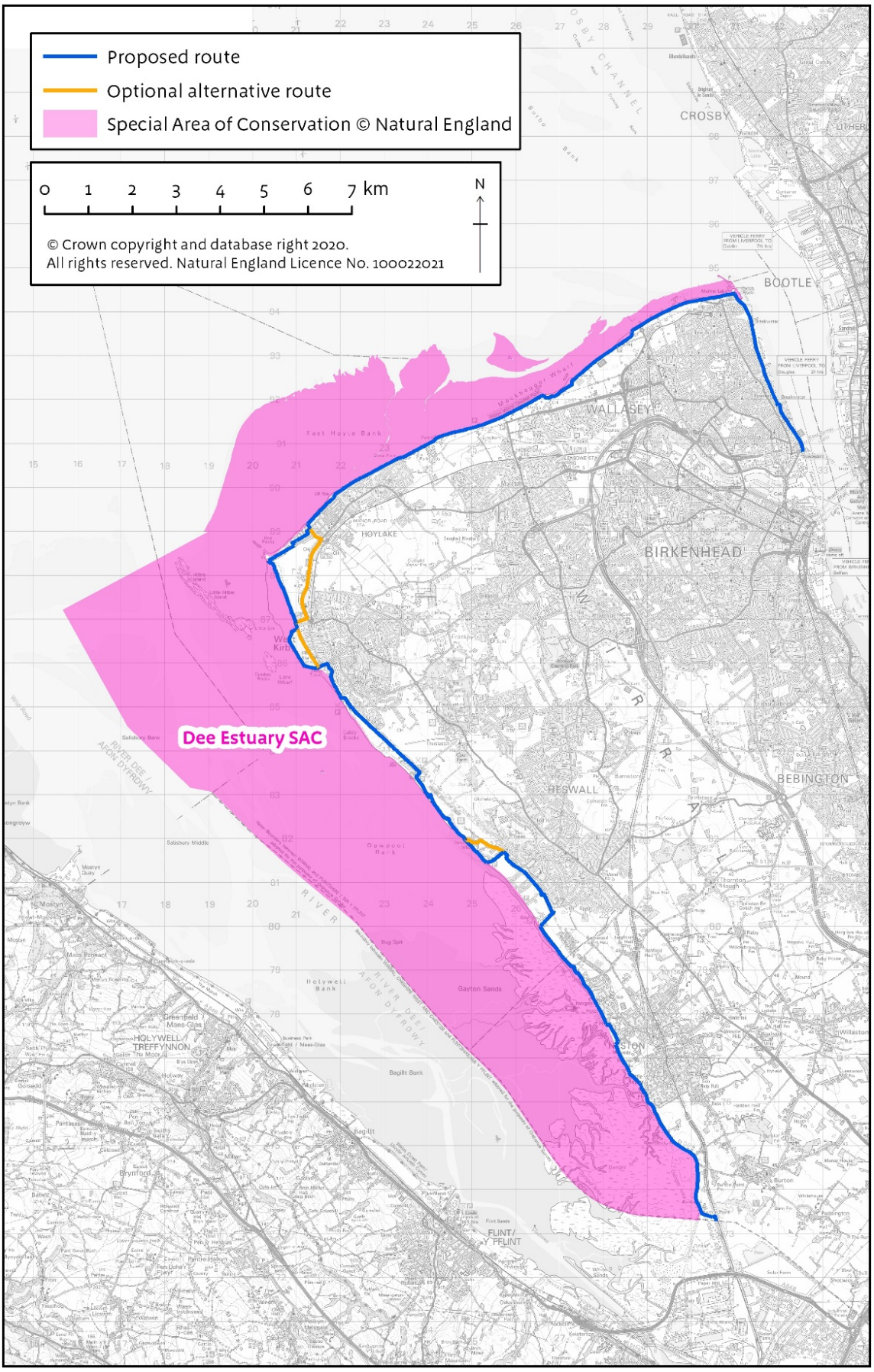
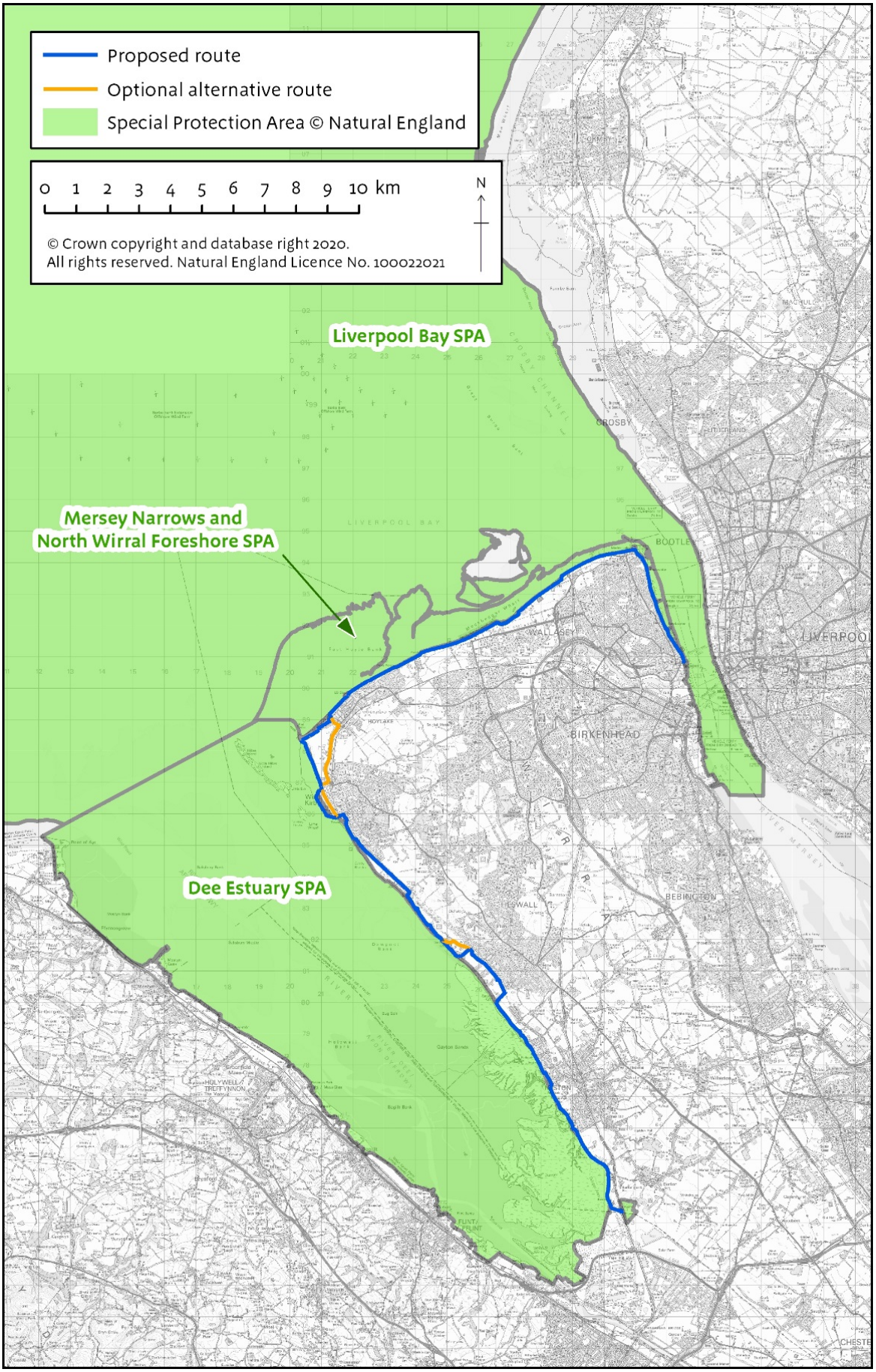
Annex 1. Maps of European Sites

Annex 1A. Map of SACs



Annex 1B. Map of SPAs



Annex1C. Map of Ramsar sites