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Habitats Regulation Assessment of England Coast Path proposals between East Cowes Ferry and Wootton Bridge, Isle of Wight on Sites of European Importance for Nature Conservation





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Assessment of Coastal Access proposals under regulation 63 of the Habitats Regulations 2017 (as amended) ('Habitats Regulations Assessment')

Summary

I) Introduction

This is a record of the Habitats Regulations Assessment ('HRA') undertaken by Natural England, on behalf of the Secretary of State, 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 East Cowes to Wootton Bridge on the following sites of international importance for wildlife:

- Solent and Southampton Water Special Protection Area (SPA)
- Solent and Southampton Water Ramsar
- Solent Maritime Special Area of Conservation (SAC)
- Solent and Dorset Coast SPA
- Briddlesford Copses SAC

Natural England's proposals for the Isle of Wight (IOW) are being submitted to the Secretary of State in two tranches. This assessment concerns the final tranche, comprising the Report for IOW1 and its associated Overview. The assessment should be read alongside these documents that between them fully describe and explain the access proposals for the section of coast clockwise between East Cowes Ferry and Wootton Bridge (IOW1). The Overview explains common principles and background and the Report explains how we propose to implement coastal access within the stretch.

Note that Natural England's coastal access proposals for the length of Isle of Wight coast running clockwise between Wootton Bridge and the East Cowes Ferry Terminal (IOW2-10) were submitted to the Secretary of State on 18 March 2020. A separate Habitats Regulations Assessment was produced to accompany the proposals for IOW2-10.

II) Background

The main wildlife interests for this part of the Isle of Wight coast are summarised in Table 1 (see Tables 3 and 4 for a full list of qualifying features)

Table 1. Main Wildlife Features

Interest	Description
Non-breeding water birds	During the winter months the Solent and Southampton Water SPA/Ramsar supports an internationally recognised population of non-breeding water birds. The extensive areas of soft mud exposed at low tide provide feeding habitat, whilst suitable undisturbed places to roost are necessary at high tide.
Breeding terns and gulls	During the breeding season Solent and Southampton Water SPA/Ramsar supports an internationally recognised population of nesting seabirds. These include three species of tern (little, common, and Sandwich) and the Mediterranean gull. The site is also designated for roseate tern, though this species has not nested in recent years. Shingle banks and saltmarsh islands are the main potential nesting areas. These birds need undisturbed access to both nesting and foraging areas.
Foraging terns	The Solent and Dorset Coast SPA protects the foraging habitat used by the terns that nest within the Solent and Southampton Water SPA and adjacent coastal SPAs. Terns use subtidal areas within harbours and on the open coast, as well as coastal lagoons, to forage. Relatively undisturbed foraging areas are required to ensure successful breeding.
Intertidal Habitat	The northern coast of the Isle of Wight has many harbours and estuary inlets which consist of mudflats, sandflats and saltmarsh designated as part of the Solent Maritime SAC. Where sea defences are absent, important transitions between intertidal and terrestrial habitat can be seen, including to woodland and reedbed.
Vegetated shingle	Annual vegetation of drift lines and perennial vegetation of stony banks are types of vegetated shingle habitat designated as part of the Solent Maritime SAC that can be found at Kings Quay. These features make up a rare habitat within the UK and play an important role within the transition between intertidal and terrestrial habitat. Shingle spits and islands are also potential habitat for breeding birds including terns and ringed plovers.
Assemblage of wetland plants and invertebrates	The Solent and Southampton Water Ramsar site supports assemblages of plants and invertebrates that are nationally scarce, rare and/or declining. These species are associated with saltmarshes, reedbeds, grazing marshes and their ditches, or other brackish coastal habitats.

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 the King Charles III England Coast Path (KCIIIECP) 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 landowners, 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 landowners or occupiers, conservation organisations and 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 has been the possible impact of disturbance on non-breeding waterbirds, breeding seabirds, or sensitive habitats, as a result of recreational activities.

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

- Avoid exacerbating issues by aligning the trail away from sensitive locations and/or by making use of established coastal paths¹ (where these are not having an existing detrimental impact) and/or introducing mitigation measures where necessary. By using existing walked routes, existing patterns of use (and disturbance) are unchanged, though potential uplift in use is considered.
- Work with local partners to design detailed proposals that take account of and complement efforts to manage access in sensitive locations.

¹ Where access use and patterns are already established (be it statutory or de facto access) it is often best to accommodate and manage that access, rather than wrongly assume that KCIIIECP exclusions or restrictions will curtail those, as they won't on their own, in either a legal or practical sense.

 Where practical, incorporate opportunities to raise awareness of the importance of this part of the 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 East Cowes and Wootton Bridge might have an impact on Solent and Southampton Water SPA/Ramsar, Solent and Dorset Coast SPA, Briddlesford Copse SAC or Solent Maritime SAC. In Part C of this assessment, we identify 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 (assuming there is a likely significant effect (LSE)).

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 below.

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

Risk to conservation objectives	Relevant design features of the access proposals
Disturbance to non-breeding waterbirds, following changes in recreational activities as a result of the access proposals, leads to reduced fitness and reduction in population and/or contraction in the distribution of qualifying features within the site.	 Route Alignment A carefully aligned and well-maintained path, and associated infrastructure, that avoids the most sensitive areas and enables people to enjoy and appreciate wildlife without adding to disturbance pressure over the European site. Aligning along Public Rights of Way (PRoW) or other existing walked routes wherever possible, and where this would not add significantly to current levels of disturbance. Clear signage will ensure walkers find it easy to follow the trail and minimise the risk that they accidently access sensitive areas. Interpretation panels and other signage at appropriate locations will inform people of any restrictions, sensitive habitats/species, and encourage responsible behaviour to minimise disturbance. Interpretation will be designed in partnership with Bird Aware Solent. The alignment avoids Kings Quay, including the shingle and saltmarsh habitats used as a high tide roost, and mudflats used for feeding at low tide.
	Under S25A of the Countryside and Rights of Way (CRoW) Act 2000, access will be excluded to

- saltmarsh and mudflat as these areas are unsuitable for public access on foot.
- Under S26, access will be excluded to the shingle spit at Kings Quay on nature conservation grounds.
- Signage at Woodside Beach will explain the exclusions from the margin, that there is no access to the mouth of Kings Quay, and no circular routes.

Disturbance to breeding birds that form a non-trivial proportion of the wintering SPA population, following changes in recreational activities as a result of the access proposal, leads to reduction in the abundance and distribution of breeding birds and a knock-on reduction in the population of nonbreeding birds.

Route Alignment

- At King's Quay, the alignment avoids the shingle spit that has formed at the mouth of the estuary, where ringed plovers potentially nest.
- The trail avoids wet woodland at King's Quay where shelducks nest.

Coastal Margin

S26 nature conservation exclusion on the shingle spit at King's Quay (see directions map IOW1a).

Damage to coastal habitats and associated rare wetland plant and invertebrate communities following changes in access

Overall:

- A carefully aligned and well-maintained path, with clear waymarking, to encourage walkers to stay on the trail and avoid areas of sensitive habitat
- Restriction or exclusion of Coastal Access Rights where there is a risk of increased recreational activity in sensitive areas

Vegetated shingle:

- Alignment of trail to avoid and S26 nature conservation exclusion covering the spit at the mouth of King's Quay.
- Signage at Woodside Beach will explain the exclusions from the margin, that there is no access to the mouth of Kings Quay, and no circular routes.

Saltmarsh

Under S25A of CRoW, access will be excluded to saltmarsh as these areas are unsuitable for public access on foot.

Wetland invertebrate and plant assemblage

Trail alignment outside the woodland on the northwestern side of King's Quay avoiding the wet woodland (which supports the invertebrate and plant interest) either side of Palmer's Brook (which feeds into King's Quay).

Directions to exclude access from saltmarsh, mudflats and vegetated shingle.
 Clear signage and interpretation panels where appropriate to inform users of the exclusions

VI) Implementation

Once a route for the trail has been confirmed by the Secretary of State, we will work with Isle of Wight Council 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 Bird Aware Solent, local WeBS counters and other local experts whose contributions and advice have helped inform the development of our proposals.

VIII) Acknowledgements

This assessment contains Wetland Bird Survey (WeBS) data from Waterbirds in the UK 2022/23 © copyright and database right 2024. WeBS is a partnership jointly funded by the BTO, RSPB and JNCC, with fieldwork conducted by volunteers and previous support from WWT.

This assessment includes site-specific data kindly provided by the Solent Wader and Brent Goose Strategy (SWBGS). These data are subject to copyright and should not be reproduced without permission.

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Assessment of Coastal Access proposals under regulation 63 of the Habitats Regulations 2017 (as amended) ('Habitats Regulations Assessment')

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 King Charles III 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 site²', 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 memorandum³ 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 coast of the Isle of Wight clockwise from East Cowes Ferry Terminal to Wootton Bridge. Our proposals to the Secretary of State are presented in a series of documents comprising an Overview, which explains common principles and background, and Report which explain how we propose to implement coastal access along this stretch of coast (IOW1). Within this

² 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

³ Published at: http://publications.naturalengland.org.uk/publication/5327964912746496?category=50007

assessment we consider the Overview and Report for IOW1. We also carry out an assessment of the potential effects of the proposals for this stretch in combination with the published coastal access proposals for IOW2-10, and any other relevant plans or projects.

Our proposals for coastal access have two main components:

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

King Charles III England Coast Path

A continuous walking route around the coast – the King Charles III 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 standards⁴. 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 (CARs), unless land within it is excepted, is subject to certain other public access rights⁵, or is locally excluded from them. CARs are rights of access on foot for open air recreation. 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 has an existing right of access by statute or by express or implied permission (for example where there already are public-facing signs or messaging) CARs exist in parallel. 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 CARs secure this existing use legally, subject to the normal national

⁴ National Trails: management standards - GOV.UK (www.gov.uk)

⁵ As defined in CROW section 15

restrictions on CARs, and to any additional local restrictions or exclusions that may prove necessary.

Local restriction or exclusion of Coastal Access Rights

Local restrictions and exclusions, where needed, are normally put in place through directions given by NE. NEs direction making powers are explained in Chapter 6 of the Coastal Access Scheme [1].

There must be valid grounds to make a direction; particularly relevant to this assessment are directions made on grounds of nature conservation (s26(3)(a) of CROW) and where saltmarsh and flats are unsuitable for public access (s25A of CROW). In estuaries where there are extensive areas of saltmarsh and flats that are unsuitable for public access, we normally use our general exclusion making power under s25A, supplemented by directions made on other grounds to cover additional areas where necessary. Should a direction no longer be required under the grounds upon which it was made, NE would consider whether any other type of direction is needed in its place before it is revoked.

Specific directions are discussed in Part D of this assessment as necessary.

Access management

Through the coastal access programme, we can deliver practical access management measures that help to avoid or reduce possible impacts of recreation on sensitive sites. Interventions may be an inherent feature of the access proposals (e.g. providing a managed path that avoids more sensitive parts of a site) or additional measures added to the proposals for conservation reasons (e.g. installing new screening between a path and sensitive area). Theoretical impacts of coastal access are often avoided at the design stage by how the path is aligned and other inherent features of the proposals, such as exclusion of CARs for reasons of public safety. Our proposals for ECP often make use of existing routes or create CARs over areas where there is established access (a common situation at the coast where public access to the foreshore is widely accepted). In this situation, the access proposals may not create any new issues, and the interventions delivered through the programme are more relevant to managing existing pressures.

Our general approach to access management is described in our Coastal Access Scheme (see Chapter 6 for our general approach and Part C for discussion of particular coastal land types and land uses) [1]. Our practical experience, and that of practitioners we work with, is that access management measures work best when used in combination and deployed as part of an integrated, area wide approach. The specific proposals we make are tailored to local circumstances and new interventions are often combined with existing access management and natural features of the site.

The main types of access management delivered by the programme are:

- Manipulation of the physical environment (e.g. improving the surface of a path or installing barriers);
- Limited access rights with local restrictions or exclusions where necessary; and,
- Signs directing people to behave in particular ways.

Direct manipulation of the physical environment, for example by the alignment or surfacing of a path or installing barriers to make certain routes or areas attractive or unusable, are a widely used group of techniques for managing access to sensitive sites. Such practical measures are favoured by practitioners where circumstances allow and are widely used for controlling where people walk on sensitive sites. Local restriction or exclusion of CARs is likely to work best at locations where social norms have not been established and alternatives are readily available. In contrast, imposing limitations on access will generally be less effective where the behaviour they are directed at has already become normalised and socially accepted, and enforcement or surveillance is difficult [2].

On-site signs or notices are often needed to convey messages to access users, for example where there are restrictions on dogs. Signs alone are unlikely to be an effective way of changing already established behaviour at a site. Signs are more likely to be effective when used alongside other measures and have the advantage of being low-cost and always present. Where signs are specified in ECP proposals they are used alongside other access management measures (such as path alignment and restrictions) and designed to suit the local circumstances, using principles established from practitioner experience (for example [3])

Access management measures in the proposals are discussed in Part D of this assessment as necessary.

Promotion of the King Charles III England Coast Path (KCIIIECP)

The KCIIIECP 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 to clarify to the scope and/or extent of coastal access rights.

Information about the KCIIIECP 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 route is depicted on Ordnance Survey maps using the green diamond (lozenge) symbol for promoted route placed along the route and named KCIIIECP with the National Trail acorn symbol placed alongside the name. Alternative routes will be shown by hollow version of the green diamond (lozenge) symbol. The extent of the coastal margin is depicted by a newly created symbol, a 10% magenta wash bounded on its landward edge by distinctive magenta semi-circles. The reason for this is to clearly reflect the different nature of this new designation from open access, which is depicted by a yellow wash. An explanation about the margin and about CARs, where they do and don't apply and how to find out about any local restrictions or exclusions is provided in the map key.

Establishment and maintenance of the King Charles III England Coast Path

Establishment works to make the trail fit for use and prepare for opening, including any additional 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 the Isle of Wight Council, subject to any further necessary consents being obtained, including to undertake operations on a SSSI. Natural England will provide further advice to the access authority carrying out the work as necessary.

The access proposals provide for the permanent establishment of a path and associated infrastructure, including any additional measures referred to in this assessment and described in the access proposals. Ongoing maintenance of the route will be carried out by the Isle of Wight Council. The KCIIIECP will be part of the National Trails family of routes, for which there are national quality standards. A Trail Partnership will be established to oversee delivery and there will be regular reporting and scrutiny of key performance indicators, including the condition of the trail.

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.

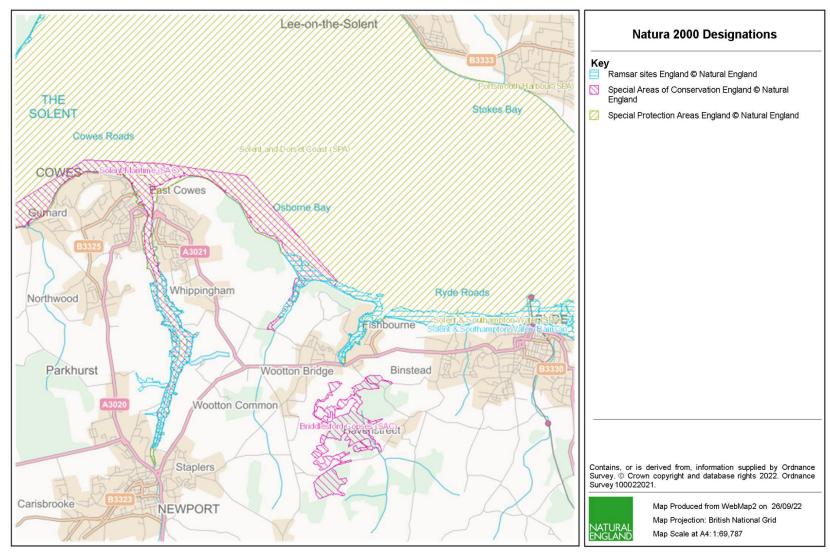


Figure 1: Map to show Natura 2000 designations on the Isle of Wight

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

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

Solent and Southampton Water SPA & Ramsar site

The SPA/Ramsar stretches from Hurst Spit to Hill Head on the mainland, and from Yarmouth to Whitecliff Bay on the north coast of the Isle of Wight. The site is composed of extensive intertidal mudflats and sandbanks, saltmarsh, coastal lagoons shingle banks and grazing marsh. The estuarine sediments support rich populations of invertebrates which provide an important food source for overwintering birds. The area supports approximately 10% of the world's dark-bellied brent geese, which feed on seagrass beds, saltmarsh, Enteromorpha, and grazing marsh within the SPA, but also make use of arable crops and grassland outside of the SPA boundary. The shingle banks and islands provide important nesting habitat for terns and Mediterranean gulls.

Solent and Dorset Coast SPA

This relatively recently designated area covers subtidal areas used by foraging Sandwich, common, and little terns associated with the breeding colonies of the Chichester & Langstone Harbours SPA, Solent and Southampton Water SPA and Poole Harbour SPA. The seaward boundary of the Solent and Dorset Coast SPA extends around the Isle of Wight coast from Blackgang Chine, near the southern tip of the island, around the northern shore of the island and to the southeast side at Sandown.

Solent Maritime SAC

The Solent and its inlets are unique in Britain and Europe for their unusual tidal regime, including double tides and long periods of tidal stand at high and low tide. As a result, the Solent Maritime SAC is a unique suite of functionally linked estuaries and dynamic marine and estuarine habitats. Within the site are extensive areas of intertidal mudflats and sandflats, often supporting eelgrass (Zostera species), subtidal sandbanks, saltmarsh and natural shoreline transitions such as drift line vegetation. The SAC is of particular interest as it is the only site to support all four species of cordgrass (Spartina) found in the UK, including the rare native small cordgrass (Spartina maritima). At the time of designation, the SAC also supported a population of the rare Desmoulin's whorl snail (Vertigo moulinsiana).

Briddlesford Copses SAC

This site is a species rich area of ancient broadleaved woodland near Wootton Bridge, designated for its breeding population of Bechsteins's bat Myotis bechsteini. The bats use crevices in mature trees for roosting and connecting woodlands for feeding.

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

Table 3. **Avian Qualifying Features**

Avian Qualifying feature	Solent & Southampton Water Ramsar	Solent and Southampton Water SPA	Solent and Dorset Coast SPA
A156 Black-tailed godwit Limosa limosa islandica (non-breeding)	✓	✓	
A046a Dark-bellied brent geese Branta bernicla bernicla (non-	✓	✓	
breeding)			
A137 Ringed plover Charadrius hiaticula (non-breeding)	✓	✓	
A052 Teal Anas crecca (non-breeding)	✓	✓	
Waterbird assemblage ¹ (non-breeding)	✓	✓	
A193 Common tern Sterna hirundo ²	√B	√B	√F
A195 Little tern Sternula albifrons ²	√B	√B	√F
A176 Mediterranean gull Ichthyaetus melanocephalus ²		√B	
A192 Roseate tern Sterna dougallii ²	√B	√B	
A191 Sandwich tern Thalasseus sandvicensis ²	√B	√B	√F

Notes:

'Main component species' of an assemblage are those which regularly occur on the site in internationally or nationally important numbers, regularly exceed 2,000 individuals, or are otherwise named on the citation. The main component species are: dark-bellied brent geese; teal; ringed plover; black tailed godwit; dunlin Calidris alpina; great crested grebe Podiceps cristatus; grey plover Pluvialis squatarola; lapwing Vanellus vanellus; little egret Egretta garzetta; pintail Anas acuta; turnstone Arenaria interpres; shoveler Spatula clypeata; whimbrel Numenius phaeopus; wigeon Mareca penelope and greenshank Tringa nebularia.

In addition to the main components, other wintering waterbirds should be considered as these contribute collectively to the assemblage diversity, in particular proportionally abundant populations of species of conservation importance, for example curlew Numenius arguata.

Table 4. **Non Avian Qualifying Features**

Non Avian Qualifying feature	Solent and Southampton Water Ramsar	Solent Maritime SAC	Briddlesford Copses SAC
H1110 Sandbanks which are slightly covered by sea water all the time		✓	
H1130 Estuaries	√1	√ 2	
H1140 Mudflats and sandflats not covered by seawater at low tide		✓	
H1150 Coastal lagoons		✓	

¹ The wintering waterbird assemblage is a qualifying feature of both the SPA and Ramsar site. When classifying a waterbird assemblage as an SPA qualifying feature, the Ramsar Convention's Strategic Framework definition of 'waterbird' is used and as such we consider the two qualifying features synonymous.

² **B** denotes breeding interest and **F** denotes foraging.

H1210 Annual vegetation of drift lines		✓	
H1220 Perennial vegetation of stony banks		✓	
H1310 Salicornia and other annuals colonising mud and sand		✓	
H1320 Spartina swards (Spartinion maritimae)		✓	
H1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)		✓	
H2120 Shifting dunes along the shoreline with Ammophila arenaria		✓	
('White dunes')			
S1016 Desmoulin's whorl snail, Vertigo moulinsiana		✓	
S1323 Bechstein's bat, Myotis bechsteini			✓
Wetland plant assemblage ³	✓		
Wetland invertebrate assemblage ⁴	✓		
Sheltered Channel between island/mainland	✓		

Notes:

- ¹ The Solent and Southampton Water Ramsar site comprises a series of estuaries and adjacent coastal habitats including intertidal mud and sandflats, saline lagoons, vegetated shingle, saltmarsh, reedbeds, damp woodland, and grazing marsh [4]. Natural England considers the estuary feature of Solent and Southampton Water Ramsar site is largely synonymous with the estuaries feature of Solent Maritime SAC. For the purposes of this assessment, where there are differences in the landward boundary of Solent Maritime SAC and Solent and Southampton Water Ramsar site, and where a transition between marine and adjacent coastal habitats is apparent, we have treated these areas as forming part of the estuaries feature.
- ² A description of the Estuaries habitat (H1130) is given in the Interpretation Manual of European Union Habitats [5]. In this document it is noted that estuaries form an ecological unit with surrounding terrestrial coastal habitat types. The following are cited [6] as contributing to the SAC estuaries feature, each of which are considered in the assessment that follows: intertidal seagrass beds; intertidal sand and muddy sand; intertidal mud; intertidal mixed sediments; intertidal coarse sediment, subtidal coarse sediment, subtidal mixed sediment; subtidal sand, subtidal seagrass beds.
- ³ Species included in the wetland plant assemblage as listed on the Ramsar Information Sheet [4] are: Dwarf spike-rush. Eleocharis parvula, little robin, Geranium purpureum forsteri, slender birds-foot trefoil, Lotus angustissimus, Hampshire purslane, Ludwigia palustris, yarrow broomrape, Orobanche purpurea, foxtail stonewort, Lamprothamnium papulosum, small cordgrass Spartina maritima, common eelgrass, Zostera marina.
- ⁴ Species included in the wetland invertebrate assemblage as listed on the Ramsar Information Sheet [4] are: Gammarus insensibilis (lagoon sand shrimp), Nematostella vectensis (starlet sea anemone), Arctosa fulvolineata (yellow striped bear spider), Aulonia albimana (a spider), Anisodactylus poeciloides (a ground beetle), Anthonomus rufus (a weevil), Baris analis (a weevil), Berosus, spinosus (an aquatic beetle). Cantharis fusca (a soldier beetle). Drypta dentata (a ground beetle). Leptura fulva (a long-horned beetle), Meligethes bidentatus (a beetle), Paracymus aeneus (a water beetle), Staphylinus caesareus (a rove beetle), Aphrosylus mitis (a long-legged fly), Atylotus latistriatus (saltmarsh horsefly), Dorycera graminum (picture winged fly), Haematopoda grandis (long horned cleg), Hippobosca equina (a true fly), Linnaemya comta (a parasitic fly), Stratiomys longicornis (long horned general soldier fly), Syntormon mikii (a long legged fly), Tetanocera freyi (Frey's buff snail-killer fly), Villa circumdata (a bee fly), Trachysphaera lobata (a pill millipede), Paludinella littorina (lagoon snail), Truncatellina cylindrica (the cylindrical whorl snail), Andrena alfkenella (Alfken's mini mining bee), Acleris lorguiniana (marsh button moth), Elachista littoricola (a micro moth), Melissoblaptes zelleri (twin-spot honey moth), Platytes alpinella (a moth), Psamathrocrita argentella (silvery neb moth), Armandia cirrhosa (lagoon sandworm).

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 Supplementary Advice on the Conservation Objectives is available, this 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 supplementary advice is taken into account in this assessment.

The links below are provided to the conservation objectives for each site:

Solent and Southampton Water SPA
Solent Maritime SAC
Briddlesford Copses SAC
Solent and Dorset Coast SPA

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.

Assessment of Coastal Access proposals under regulation 63 of the Habitats Regulations 2017 (as amended) ('Habitats Regulations Assessment')

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 <u>all</u> 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, i.e. 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 there is potential to 'undermine 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 Table 5.

Table 5. **Feature Groups**

Note: Qualifying features are shown in bold text while sub features are shown in brackets

Feature group	Qualifying feature(s)
Breeding terns	Common, little, roseate and Sandwich tern
Breeding Mediterranean gull	Mediterranean gull
Non-breeding waterbirds	Black-tailed godwit; ringed plover; dark-bellied brent goose; teal; waterbird assemblage
Bats	Bechstein's bat
Subtidal features	Sandbanks which are slightly covered by seawater all the time (subtidal coarse sediment, subtidal mixed sediment, subtidal sand, subtidal seagrass beds); Estuaries (subtidal coarse sediment, subtidal mixed sediment; subtidal sand, subtidal seagrass beds); sheltered channel between island/mainland
Desmoulins whorl snail	Desmoulins whorl snail, Vertigo moulinsiana
Wetland plants and invertebrates	Wetland plant assemblage
	Wetland invertebrate assemblage
Intertidal habitats	Estuaries (intertidal seagrass beds; intertidal sand and muddy sand; intertidal mud; intertidal mixed sediments; intertidal coarse sediment)
	Salicornia and other annuals colonising mud and sand; Atlantic salt meadows; Spartina swards
	Mudflats and sandflats not covered by seawater at low tide (intertidal coarse sediment; intertidal mixed sediments; intertidal mud; intertidal sand and muddy sand; intertidal seagrass beds); Submerged or partially submerged sea caves
Vegetated shingle	Annual vegetation of drift lines; Perennial vegetation of stony banks

The risk of significant effects alone is considered in the following table:

Assessment of likely significant effects alone Table 6.

Feature group	Relevant pressure	Sensitivity to coastal access proposals	Assessment of risk to site conservation objectives	LSE alone?
Non-breeding waterbirds	Disturbance from recreational activities outside the breeding season	Birds feeding on the foreshore or roosting in the vicinity of the coast path may be disturbed by recreational activities including walking and walking with a dog, which impacts their energy budgets and hence fitness	Waterbirds are present in significant numbers in many locations on the northern coastline of the Isle of Wight. Disturbance could lead to changes in population abundance or distribution, so a significant effect is considered likely at this stage of the assessment.	Yes
Non-breeding waterbirds	Disturbance from recreational activities in the breeding season	Non-breeding waterbirds (that are wholly or largely resident in the area) and which breed within or near to the SPA in the vicinity of the coastal path may be disturbed, or nests may be trampled by recreational activity. Ringed plover is a Qualifying Feature known to breed on the Isle of Wight. In addition, waders and shelducks nest in the vicinity of King's Quay. These species form part of the wintering bird assemblage.	The breeding population of ringed plover on the Isle of Wight represents a non-trivial proportion of the SPA non-breeding population. If disturbance affects the productivity of nesting birds, this may reduce the recruitment of individuals into the wintering population, affecting the abundance Conservation Objective. There is potential for displacement of assemblage species due to disturbance, which could affect the diversity of the assemblage. Therefore, there is a likely significant effect.	Yes
Non-breeding waterbirds	Disturbance from construction works	Waterbirds may be disturbed by construction activities necessary for the physical establishment of the path.	The trail does not pass close to any areas where waterbirds are present in significant numbers. The only major installation of infrastructure is the new crossing of Palmer's Brook. Woodland screens the crossing from the intertidal habitats of Kings Quay so waterbird distribution within the SPA is	No

Feature group	Relevant pressure	Sensitivity to coastal access proposals	Assessment of risk to site conservation objectives	LSE alone?
			unlikely to be affected by construction works.	
Non-breeding waterbirds	Disturbance from construction works in the breeding season	Non-breeding waterbirds (that are wholly or largely resident) and which breed within or near to the SPA in the vicinity of the coastal path may be disturbed by construction activity and nest failure may result. Ringed plover is the only Qualifying Feature known to breed on the Isle of Wight	The breeding population of ringed plover on the Isle of Wight represents a non-trivial proportion of the SPA non-breeding population. It potentially nests on the shingle spit at Kings Quay. As this is around 930m from the nearest section of trail, disturbance impacts from construction works can be ruled out.	No
Non-breeding waterbirds	Loss of supporting habitat through installation of access management infrastructure	The supporting habitats of the qualifying features may be permanently lost due to installation of new access management infrastructure	The proposed alignment avoids and is outside the designated sites and hence there will be no loss of supporting habitat from the installation of access management infrastructure.	No
Breeding terns	Disturbance to foraging terns from recreational activities in the breeding season.	Foraging behaviour may be interrupted if birds are feeding close to places where recreational activities take place, including walking and walking with a dog. This may then affect the productivity of nesting populations.	Where terns forage offshore there is likely to be sufficient spatial separation between trail users and the birds to avoid disturbance. Furthermore, whilst the presence of people on the shore may discourage birds from feeding close to the shore, this is unlikely to significantly reduce the available foraging area. However, where terns make use of inland lagoons or harbours, there is a risk of significant disturbance, with consequent impacts on population levels, which therefore requires further assessment.	Yes
Breeding terns	Disturbance to nesting birds and potential	The qualifying features are colonial species and nest on shingle spits and islands, shallow scrapes in the sand or	Tern species no longer breed on the Isle of Wight, however there is potential breeding habitat within Kings Quay. There is a risk that recreational	Yes

Feature group	Relevant pressure	Sensitivity to coastal access proposals	Assessment of risk to site conservation objectives	LSE alone?
	breeding sites from recreational activities	in low vegetation. Nesting birds are particularly vulnerable to disturbance as a result of recreational activities (including walking and walking with a dog) which can lead to direct trampling of nest sites and eggs as well as flushing of parent birds from nests, leading to exposure and predation of eggs and chicks.	activity could compromise the achievement of the Conservation Objective to restore breeding tern populations within the SPA. As a result, a significant effect is considered likely at this stage of the assessment.	
Breeding terns	Disturbance to nesting terns from construction activities	Breeding birds may be flushed from the nest as a result of noise and visual disturbance caused by the installation of access infrastructure. This may lead to exposure or predation of eggs and chicks, with consequent impacts at a population level.	Terns do not currently nest on the Isle of Wight. No access infrastructure will be installed near potential tern nesting habitat at Kings Quay, and so likely significant effects can be ruled out based on the spatial separation.	No
Breeding Mediterranean gull	Disturbance to nesting and foraging birds from recreational activity	This species nests colonially in short to medium swards of vegetation, and sometimes on vegetated shingle islands. Nesting birds are particularly vulnerable to disturbance as a result of recreational activities (including walking and walking with a dog) which can lead to direct trampling of nest sites and eggs as well as flushing of parent birds from nests, leading to exposure and predation of eggs and chicks.	Mediterranean gulls nest on the Isle of Wight at Newtown Harbour and forage in the coastal waters and terrestrial habitats in this area. They do not currently nest in the vicinity of IOW1. However, there is potential habitat at Kings Quay and any significant recreational disturbance here could limit any expansions in distribution. Therefore, a likely significant effect cannot be ruled out at this stage.	Yes
Breeding Mediterranean gull	Disturbance to nesting birds from construction activity	Breeding birds may be flushed from the nest as a result of noise and visual disturbance caused by the installation of access infrastructure. This may lead to exposure or predation of eggs and chicks, with consequent impacts at a population level.	Mediterranean gulls do not currently nest in the vicinity of IOW1. There is potentially suitable habitat at Kings Quay, but as this is around 930m from the trail, likely significant effects from any construction activity can be ruled out based on distance.	No

Feature group	Relevant pressure	Sensitivity to coastal access proposals	Assessment of risk to site conservation objectives	LSE alone?
Bats	Disturbance to roosting and foraging patterns	Bats are not generally vulnerable to disturbance from recreational activity on foot, except when roosting or hibernating, as they feed nocturnally.	The SAC is around 400m landward of the trail at Wootton Bridge. Therefore there will be no interaction between coastal path users and roosting bats within the SAC. Whilst bats may forage beyond the SAC boundary, users of the trail are unlikely to have any impact due to the temporal separation between daytime walkers and nocturnally foraging bats.	No
Subtidal features	Physical damage from recreational activities	Areas below mean low water are outside of the coastal margin. The access proposals are concerned with recreation on foot along the shore to which marine features are not sensitive	No new coastal access rights will be created over subtidal habitats, and where they are adjacent to beaches that are used for recreation, there will be minimal interaction between users and the habitat.	No
Desmoulins whorl snail	Trampling of species and its supporting habitat	Could be vulnerable where the coast path creates or improves access to the banks of calcareous wetlands, streams and lakes in which this species is found.	At time of designation, Desmoulin's whorl snail was found in fen and reedbed habitat in Fishbourne Channel, Chichester Harbour, though was absent from surveys of the area in 2009/10 [7]. The trail is not aligned close to any habitats that may support the feature. Therefore, there is no risk that the proposals will compromise the achievement of the Conservation Objective to restore the population, and hence no likely significant effect.	No.
Coastal lagoons	Trampling from walkers or dogs entering the lagoons	An increase in recreational activity could cause physical damage to lagoons if walkers or dogs enter them, disturbing the features within them.	There are no coastal lagoons in the vicinity of IOW1. In addition, SAC Supplementary Advice on Conservation Objectives [8] states minimal risk from recreational activities on coastal lagoons.	No
Wetland plants and invertebrates	Physical damage from	The assemblages of rare wetland plants and invertebrates depend on the	Wetland plants and invertebrates that form part of the assemblage occur within a	Yes

Feature group	Relevant pressure	Sensitivity to coastal access proposals	Assessment of risk to site conservation objectives	LSE alone?
	recreational activities	maintenance, in good condition, of the habitats in which they are found. These habitats may be damaged due to trampling where people regularly walk away from established paths.	number of habitats that could be affected by the proposals, including intertidal mudflats, shingle beaches, coastal lagoons, saltmarsh, vegetated maritime slopes, reedbeds and wet woodland. The level of risk is higher at places where the access proposals are likely to place wetland plants and the habitats that support wetland invertebrates at risk from repeated trampling. Therefore, significant effects cannot be ruled out at this stage of the assessment.	
Wetland plants and invertebrates	Physical damage from installation of access management infrastructure	Wetland plant assemblages and the habitat that the invertebrate assemblages rely on may be lost due to the installation of new access management infrastructure. Wetland plants and habitat for invertebrates may also be indirectly affected, for example by changes to drainage patterns.	The proposed alignment avoids, and is outside, the designated sites and hence there will be no loss of supporting habitat from the installation of access management infrastructure. Palmers Brook will be crossed outside the designated site and will not affect water flows. Therefore, likely significant effects will be avoided.	No
Intertidal habitats	Trampling of sensitive species and habitats from recreational activities	Of the features in this group saltmarsh vegetation and sea grass beds are at greater risk as they can be more easily damaged or destroyed by people walking repeatedly over the same area. Bare patches may be created which make the surrounding habitat more vulnerable to erosion.	Saltmarsh is found along the north coast of the Island and may form part of the coastal margin. If erosion occurs due to the new access rights, this may affect the Conservation Objective to maintain the distribution of habitats. Significant effects cannot therefore be ruled out at this stage of the assessment.	Yes
Intertidal habitats	Loss of habitat through installation of access management infrastructure	Installation of new access management infrastructure could lead to a permanent reduction in the extent of this habitat.	There is no access infrastructure is proposed within the SAC. Therefore, there will be no loss of habitat and so a likely significant effect can be ruled out.	No
Vegetated shingle	Trampling of vegetation	Vegetated shingle can be damaged or destroyed by people walking over it repeatedly.	Areas of vegetated shingle are present at Kings Quay. Significant effects therefore cannot be ruled out at this stage of the assessment.	Yes

Feature group	Relevant pressure	Sensitivity to coastal access proposals	Assessment of risk to site conservation objectives	LSE alone?
Sand dunes	Trampling of colonising vegetation	Vegetation colonising the dunes could be damaged or destroyed by people repeatedly walking on the same areas. This can lead to erosion of the dune system.	There are no sand dunes in the vicinity of IOW1. Therefore, a likely significant effect via trampling can be ruled out.	No

Conclusion:

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

- Non-breeding waterbirds (dark-bellied brent geese; teal; ringed plover; black-tailed godwit; water bird assemblage) as a result of disturbance from recreational activities.
- Non-breeding waterbirds (ringed plover and waterbird assemblage species) present in the breeding season, as a result of disturbance from recreational activities.
- Terns (breeding and foraging common, little, roseate and Sandwich terns) as a result of disturbance from recreational activities
- Mediterranean gull (breeding) as a result of disturbance from recreational activities
- Wetland plant and invertebrate assemblages as a result of physical damage from recreational activities
- Intertidal habitats (estuaries intertidal seagrass beds, intertidal sand and muddy sand, intertidal mud, intertidal mixed sediments, intertidal coarse sediment; Salicornia and other annuals colonising mud and sand; Atlantic salt meadows; Spartina swards and mudflats and sandflats not covered by seawater at low tide) as a result of physical damage from trampling.
- Vegetated shingle (annual vegetation of drift lines; perennial vegetation of stony banks) as a result of physical damage from trampling.

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

- Bats (Bechstein's bat, Myotis bechsteini)
- Subtidal habitats (sandbanks which are slightly covered by seawater all the time; estuaries - subtidal coarse sediment, subtidal mixed sediment; subtidal sand, subtidal seagrass beds; sheltered channel between island/mainland; submerged or partially submerged sea caves)
- Coastal lagoons
- Desmoulins whorl snail

(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 <u>not</u> 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 where an 'Appropriate Assessment' and further 'in combination' assessment is undertaken. For all other features there are no other plans or projects that could act in combination with the coastal access proposals to produce a significant effect. It has therefore been concluded, on the basis of objective information, that the project is not likely to have a significant effect on bats, subtidal features, coastal lagoons and Desmoulins whorl snail in-combination with any 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.

Assessment of Coastal Access proposals under regulation 63 of the Habitats Regulations 2017 (as amended) ('Habitats Regulations Assessment')

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 7. **Scope of Appropriate Assessment**

Environmental pressure	Qualifying Feature(s) affected (nb = non-breeding b = breeding)	Risk to Conservation Objectives
Disturbance of feeding or roosting non-breeding waterbirds from recreational activities	Solent & Southampton Water SPA/Ramsar site Black-tailed godwit (nb) Ringed plover (nb) Dark-bellied brent geese (nb) Waterbird assemblage (nb) Teal (nb)	Repeated disturbance to feeding or resting non-breeding waterbirds, following changes in recreational activities as a result of the access proposal, leads to reduced fitness and reduction in population and/or contraction in the distribution of qualifying features within the site.
Disturbance to non- breeding waterbirds present in the breeding season from recreational activities	Solent & Southampton Water SPA/Ramsar site Ringed plover (nb) Waterbird assemblage (nb)	Disturbance to breeding birds, following changes in recreational activities as a result of the access proposal, leads to reduced fitness of adult birds and a reduction in productivity, resulting in a decline in the population of non-breeding birds. The Conservation Objective for the waterbird assemblage is to maintain the population abundance at a level above 51,361 individuals. Therefore, it is unlikely that impacts on breeding birds (e.g.

Environmental pressure	Qualifying Feature(s) affected (nb = non-breeding b = breeding)	Risk to Conservation Objectives
		oystercatcher and shelduck) will have a knock-on effect on the wintering assemblage abundance. However, there is potential for the Conservation Objective regarding the diversity of the assemblage to be affected.
Disturbance to nesting terns and gulls from recreational activities	Solent & Southampton Water SPA/Ramsar site Common tern (b) Little tern (b) Roseate tern (b) Sandwich tern (b) Mediterranean gull (b)	Disturbance to terns and gulls at nesting site, or potential nesting sites, following changes in recreational activities as a result of the access proposal, either deters birds from nesting or impacts productivity.
Disturbance to foraging terns from recreational activities	Solent & Dorset Coast SPA Common tern Little tern Sandwich tern	Disturbance to foraging terns following changes in recreational activities as a result of the access proposal could lead to reduced fitness and reduction in population and/or contraction in the distribution of qualifying features within the site.
Trampling of sensitive species and habitat	Solent Maritime SAC Annual vegetation of drift lines Perennial vegetation of stony banks Estuaries (intertidal seagrass beds, intertidal sand and muddy sand, intertidal mud, intertidal mixed sediments, intertidal coarse sediment) Atlantic salt meadows Spartina Swards Salicornia and other annuals colonising mud and sand Solent & Southampton Water Ramsar Wetland invertebrate assemblage Wetland plant assemblage 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 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.

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

The Solent and Southampton Water SPA and Ramsar site provides important foraging and roosting sites for over wintering birds, and nesting sites for breeding birds (considered further below). Intertidal mudflats within the estuaries on the north coast of the Isle of Wight form important low-tide foraging habitat for waders and wildfowl designated as part of the SPA/Ramsar. These birds then roost at high tide on upper saltmarsh, islands within the intertidal area or terrestrial habitat within or close to the SPA/Ramsar.

Disturbance resulting from recreational activities during wintering periods can affect a bird's ability to feed due to increased vigilance or having to move to an undisturbed area, which then affects the bird's energy balance. Energy expenditure is also increased if roosting birds are disturbed causing them to fly. Repeated disturbance can be problematic if it causes displacement of birds from an area or if it affects the fitness of individuals to the extent that there are population-level effects.

As part of the Supplementary Advice on Conservation Objectives for the SPA [9], Natural England has set targets for all qualifying features that are necessary to meet the Conservation Objectives for the site. The Supplementary Advice sets out the attributes that are considered to best describe the site's ecological integrity, and which if conserved will achieve the Conservation Objectives. All the features have a target to 'reduce disturbance caused by human activities'. Therefore, the need to avoid significant disturbance to birds using the Solent and Southampton Water SPA and Ramsar site, and reduce it where possible, has been a driving factor in determining the route alignment.

Natural England has also set targets to maintain the abundance of SPA waterbird features and restore the extent of supporting habitats. Supporting habitats in this context include intertidal feeding areas and high tide roosts on upper saltmarsh and nearby wet grassland and freshwater habitats. The target to restore supporting habitats has been set due to the loss of saltmarsh across the SPA as a result of coastal squeeze. Waterbirds may also roost and feed on arable and pasture fields that are not part of the designated site. This has been mapped by the Solent Wader and Brent Goose Strategy (SWBGS) [10], which has also characterised the level of use of each field.

Dark-bellied brent geese

The SPA supports 6,799 individuals (5-year peak mean 2018/19 - 2022/23) [11] of the wintering Western European population of dark-bellied brent goose. The Wetland Bird Survey (WeBS) Alert Report produced by the British Trust for Ornithology (BTO) examines trends in bird numbers on SPAs over time. The latest report shows that the Solent and Southampton Water SPA brent goose population declined by 22% between 1994/95 and 2021/22. As the decline is less than 25%, no Alerts have been triggered for this species [12]. The proportion of the regional population held by the site is stable, suggesting that conditions remain relatively favourable for the species. Therefore, a target to maintain the population abundance has been set in the Supplementary Advice on Conservation Objectives [9].

Brent geese start to arrive on the Isle of Wight in late September and depart again by early April. The main food sources in early winter are the green algae (Ulva spp.) and seagrass

beds growing on the intertidal sediments. They will also feed on pasture or arable fields and coastal grazing marshes at high tide. Studies have found that use of improved pasture, winter cereals and oil seed rape peaks in November to February, whilst use of permanent pasture increases through until spring as geese prefer the new grass growth [13]. WeBS data shows that Kings Quay supports around 2% and Wootton Creek supports around 1% of the SPA population of brent geese [11].

Black-tailed godwit

The SPA supports 940 black-tailed godwits (5-year peak mean 2018/19 – 2022/23) [11]. Numbers within the SPA have been declining in the long-term having previously increased and there has been a 36% decline since designation, triggering a medium WeBS Alert [12]. This site trend is in contrast to the increasing national and regional trends, which suggests that the decline in numbers is likely due to site-specific pressures.

Black-tailed godwits prefer extensive mudflats with nearby wet grasslands. As this combination of habitats is not present within the IOW1 sector, black-tailed godwits are not found in significant numbers on this part of the island.

Ringed plover

The SPA supports a 5-year peak mean (2018/19 – 2022/23) of 439 ringed plovers [11]. Numbers have declined by 60% since designation, triggering a high WeBS Alert [12]. However, the trend on site appears to be tracking the regional and national trend, and the proportion of the regional population held by the site has remained stable, suggesting broadscale reasons for declines, e.g. wintering range shifts due to climate change. Given the declines, an objective has been set in the supplementary advice for the Solent and Southampton Water SPA to restore the size of the population [9], but as it is apparently tracking wider species trends it is unclear if site-specific conservation measures would be successful.

Ringed plovers will roost on habitats such as sandbanks, spits, beaches and islands. At low tide they feed on invertebrates found on sand and shingle shores and mudflats. Kings Quay currently supports around 3% of the Solent and Southampton Water SPA population of ringed plovers.

Teal

Teal have seen relatively stable populations within the SPA with 4,463 individuals present (5-year peak mean 2018/19 – 2022/23) [11]. The feature is in good condition with no WeBS Alerts triggered, and therefore has a target to maintain population abundance set within the Supplementary Advice [9]. Small numbers of teal are found at Kings Quay and Wootton Creek.

Waterbird Assemblage

The non-breeding waterbird assemblage feature of the Solent and Southampton Water SPA has seen a decline in numbers since designation, most recently averaging 40,468 individuals (2018/19 - 2022/23) [11]. There has been a 34% decline (between 1994/95 and 2021/22), triggering a medium WeBS Alert [12]. The waterbird assemblage is made up of the geese. ducks, waders and other waterbirds that depend on the plant and invertebrate communities present within intertidal habitats and grazing marsh (and other supporting terrestrial habitats) in the area.

All waterbirds contribute to the overall population abundance and diversity of the assemblage. However, some species are present in particularly important numbers. These are the main component species and are those which regularly occur on the site in internationally or nationally important numbers, regularly exceed 2,000 individuals or are otherwise named on the citation. The qualifying features considered above form part of the assemblage but are not repeated below. The proportions of the Solent and Southampton Water SPA populations referred to below are derived from WeBS core counts [11].

Main component species:

- Shelduck Around 2% of the SPA population can be found at Kings Quay, though Newtown Harbour is the key site on the Isle of Wight for this species. Shelducks also breed in the woodland adjacent to Palmers Brook, which feeds into Kings Quay.
- Shoveler Not found in significant numbers (i.e. less than 1% of SPA population) along the coastline of IOW1.
- Wigeon Feed on extensive wet grasslands and as this habitat is not present at IOW1, wigeon are not found in significant numbers.
- Pintail Not found in significant numbers along the coastline of IOW1.
- Great-crested grebe Around 5% of the SPA population can be found at Kings Quay.
- Little egret This species fishes along the water's edge in any sheltered areas around the coast of the Isle of Wight. Kings Quay and Wootton Creek provide good habitat and support 7% and 12% of the SPA population, respectively. The woodland at Kings Quay supports a significant roost for little egrets (and grey herons).
- Grey plover Found in small numbers in Kings Quay.
- Whimbrel Found in small numbers in Kings Quay, particularly on passage.
- Turnstone Favours rocky coastlines and shingle beaches, feeding along the strandline. The latest Non-Estuarine Waterbird Survey (NEWS) in 2015/16⁶ found concentrations of turnstones using the open coast to the east of Cowes and at the mouth of Wootton Creek [14].
- Lapwing Prefer areas of wet grassland close to intertidal habitats. As this habitat is not present at IOW1, lapwings do not tend to be found in significant numbers.
- Dunlin Not found in significant numbers along the coastline of IOW1.
- Greenshank Not found in significant numbers along the coastline of IOW1.

Solent-wide initiatives to manage impacts on wintering waterbirds

Bird Aware Solent

Extensive research has been undertaken to assess the impact of recreational activity on wintering birds in The Solent in light of planned new housing. This found evidence that current levels of recreational disturbance were impacting SPA birds, and so adverse impacts from further residential growth could not be ruled out. The implications this has for management of recreational activities within the Solent SPAs has been addressed by local authorities as part of the planning process. The resulting mitigation strategy aims to ensure

⁶ NEWS surveys are carried out every 9 or 10 years and aim to record waterbird use of stretches of open coast not covered by WeBS.

no net increase in bird disturbance through a series of management measures (including provision of rangers, a dog project, signage and other infrastructure, and provision of alternative greenspace) which actively encourage coastal visitors to enjoy their visits in a responsible manner [15].

Solent Waders and Brent Goose Strategy

The Solent Waders and Brent Goose Strategy (SWBGS) [10] presents evidence, analysis and recommendations to inform decisions relating to strategic planning as well as individual development proposals. The strategy relates to internationally important brent goose and wading bird populations within and around the SPAs and Ramsar wetlands of the Solent Coast.

Sites within and outside the Solent SPAs used by waders and brent geese have been identified, mapped and categorised according to their use. Movement studies have also been carried out, which have identified sites that are important as 'hubs' linking other sites together, and as such are important to the functioning of the network as a whole.

Guidance on mitigation and off-setting requirements has been prepared by the Strategy Steering Group to achieve the long-term protection of the wider dark-bellied brent goose and wader network of sites [16]. The underlying principle of the Strategy is to conserve existing sites, but where this is not possible, the guidance sets out requirements to ensure that new sites enhance the quality and extent of the feeding and roosting resource.

Non-breeding waterbirds (waterbird assemblage) present in the breeding season

Where a breeding population of a species significantly contributes to the non-breeding population on the same site by being wholly or largely resident (or this cannot be ruled out), there is the potential for impacts on that breeding population to have consequences for the non-breeding population.

Ringed plovers are partially resident in the Solent, and whilst they are not known to nest within the IOW1 stretch, there is potentially suitable habitat at the mouth of Kings Quay. Other species that make up part of the wintering waterbird assemblage are also partially resident, with some individuals present in the breeding season. Species of relevance to this HRA are shelduck and oystercatcher, both of which nest in the Kings Quay area.

Breeding terns and gulls

Little, common, Sandwich and roseate tern populations have declined across the SPA since designation. 5-year peak means for the period 2013 to 2017 are 11, 147, 95 and 2 pairs respectively [9]. Counts undertaken for the national seabird census between 2016 and 2021 were 9 pairs of little terns, 173 pairs of common terns, 90 Sandwich terns and 0 roseate terns [17]. The reasons for decline are increased recreational disturbance to nesting sites, predation, and coastal squeeze reducing the shingle habitat they require to nest, with increased storminess leading to the flooding of nest sites. Given the declines, all tern species have a target in the Supplementary Advice on Conservation Objectives to restore the size of the breeding population across the SPA, along with a target to reduce disturbance caused by human activity [9]. Efforts are being made to restore habitat at Newtown Harbour, but currently no tern species nest on the Isle of Wight.

Breeding pairs of Mediterranean gulls have increased across the SPA to 13 pairs (5 year mean 2013-2017) [9]. 14 pairs were recorded during the latest national seabird census [17]. The feature is considered to be in favourable condition and has a target to 'maintain' the size of the breeding population. This species also has a target to reduce disturbance caused by human activity set in in the Supplementary Advice on Conservation Objectives. On the Isle of Wight, Mediterranean gulls nest at Newtown Harbour.

Foraging terns

The Solent and Dorset Coast SPA [18] is designated for foraging terns which breed within the coastal SPAs and covers deeper waters below Mean Low Water (MLW). Interaction between coast path users and foraging terns will be minimal over the majority of the SPA given the distance between the path and the subtidal foraging areas. However, where the SPA extends into inlets, such as at Wootton Creek, the foraging terns are closer to sources of potential disturbance. The sheltered nature of these areas, and their role as nurseries for small fish, means they are favoured by foraging terns. Therefore, the potential coast path interaction at these locations will be assessed in section D3.2C.

Vegetated Shingle

The 'annual vegetation of drift lines' habitat feature comprises principally annual plants that occupy accumulations of drift material and gravel, rich in nitrogenous organic matter. It occurs on shingle or sand/shingle beaches, which are mobile, but not so dynamic as to prevent short-lived plants from establishing. 'Perennial vegetation of stony banks' is the habitat type that forms on more stable beaches, which allow perennial plants to persist.

These designated features of the Solent Maritime SAC and can be found on the Isle of Wight at Kings Quay. Vegetated shingle is sensitive to abrasion from trampling due to the potential for damage to succulent plants and their root systems. Compaction of the surface may also affect the seed bank making it more difficult for some species to germinate [19].

Natural England's Supplementary Advice on Conservation Objectives for the Solent Maritime SAC [6] sets targets to maintain the extent and distribution of vegetated shingle within the site.

Intertidal habitats

The Solent Maritime SAC comprises a wide range of intertidal habitats, representing different sediment regimes and transitions from subtidal to terrestrial. The sub-features are considered below:

Estuaries (intertidal sub-features)

The Solent Maritime SAC encompasses a suite of tightly packed estuaries either side of the Solent. They are unique in Britain and Europe for their unusual tidal regime including double tides and long periods at high and low tide. Habitats present within the Solent estuaries include intertidal mudflats and sandflats, seagrass and saltmarsh. Rare and unusual transitions to terrestrial and freshwater habitats such as reedbed, woodland and shingle vegetation are also present, for example at Kings Quay.

Salicornia and other annuals colonising mud and sand; Atlantic salt meadows and Spartina swards

These saltmarsh features are all present within the Solent Maritime SAC. The 'Salicornia and other annuals colonising mud and sand' pioneer saltmarsh feature is found at Kings Quay Shore. The Solent Maritime SAC is the only site in the UK where all four species of cordgrass (Spartina) are found in close proximity. Cordgrass species are an important precursor to saltmarsh development where sediments are accreting as they colonise a wide range of substrates in areas that are sheltered from strong wave action.

Atlantic salt meadows comprise the low marsh to upper marsh zones and transitions to terrestrial habitats. A particularly good example of the natural transition from woodland to reedbed, to brackish swamp to saltmarsh and mudflat is found at Kings Quay.

The Supplementary Advice on Conservation Objectives for the Solent Maritime SAC set a target to restore the extent of Salicornia pioneer saltmarsh, Atlantic salt meadows and Spartina swards as surveys show that these have declined since designation [6].

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 a greater susceptibility to erosion or colonisation by invasive Spartina anglica. The relative susceptibilities to trampling damage of different saltmarsh communities depend as much on where they grow as on the intrinsic sensitivity of their constituent species.

Mudflats and sandflats not covered by seawater at low tide

Intertidal mudflats and sandflats are found throughout the Solent Maritime SAC and form much of the intertidal region. Mud communities are present in the most sheltered areas of the site and are dominated by worms, bivalve molluscs and the mud snail Hydrobia ulvae. Coarser sand and cobble communities are found on beaches on the more exposed open coast areas. The intertidal mudflat and sandflat communities provide a vital food source for internationally important populations of birds.

The intertidal habitats of the Solent Maritime SAC are currently being adversely affected by poor water quality: high levels of nutrients are causing algal mats to form on the mudflats and saltmarsh [6]. These algal mats can prevent wading birds reaching the mudflat beneath, and if anoxic conditions develop, benthic invertebrate communities can also be affected.

Wetland plant and invertebrate assemblages

The Solent and Southampton Water Ramsar site is designated, in part, for its wetland invertebrate and plant assemblages. The species are associated with grazing marsh and saltmarsh, ditches, saline lagoons, shingle beaches and coastal cliffs. See notes under table 4, above, for a list of species. The risk associated with the coastal access proposal is the possible increase in repeated trampling where the coast path changes current access levels and patterns at sensitive sites and where infrastructure might be established causing a loss of supporting habitat.

Current access 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, but also trampling and erosion of sensitive habitats. 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 Isle of Wight, 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 and on-line information for visitors. We have made extensive use of the results of visitor surveys undertaken to inform strategic mitigation for new housing (Bird Aware Solent). Our access management has been informed by local knowledge and advice from local access managers including the Isle of Wight Council and Bird Aware Solent rangers.

In 2019, the Island's resident population totalled 141,538 people [20]. The more populous urban areas on the island are to the north of the Island, particularly Ryde, Newport and Cowes. This is reflected in the responses to household surveys carried out to inform Bird Aware Solent, which revealed that Cowes and Ryde had the highest numbers of visits whereas the stretch of coast between Norris Wood and Woodside had the lowest number of visits (accounted for by visits to Osbourne House) [21]. There is an existing coast path around the Isle of Wight which is popular among locals and visitors.

Tourism is one of the major contributors to the economy on the Isle of Wight. Large numbers of visitors are attracted by the historic landscapes and heritage on the Island. Recreational events such as the Walking Festival and Cowes Week, and a number of music festivals attract large numbers of people. Visit Britain calculated that there were an average of 5.45 million day visits to the Isle of Wight and 0.61 million holidays with overnight stays annually between 2017 and 2019 [22]. Research in 2022 by Visit Isle of Wight found that the number of visitors in the period April to June had increased by 2% since the 2019 survey [23].

In a visitor survey undertaken for Bird Aware Solent over the winter of 2019/20 [24], around half (48%) of interviewees were aware of the development of the KCIIIECP, and 68% said that they expected its development would lead to them exploring new sections of the coast.

Housing growth

Between 2011 and 2020, the population of the Isle of Wight grew by 2.8%, with this growth driven by an increase in the number of people aged 65 or over, whilst at the same time there was a decrease in those under 65 [25]. This pattern is projected to continue, with an increase in the population aged over 65 predicted by 2038, partly offset by decreases in working age people and children, resulting in an overall predicted increase of around 11,100 people [20]. Therefore, increased house building is necessary, and allocations for sites have been consulted on by the Isle of Wight Council [20]. The majority of the proposed sites are around Newport, with Cowes, East Cowes and Ryde delivering most of the rest of the housing. This housing growth is likely to increase demand for recreational access to the coast. Consequently, the HRA of the draft Island Plan [26] concludes that green infrastructure and contributions to the Bird Aware Solent strategic mitigation project are necessary to mitigate adverse effects. As the majority of the growth is centred on the existing main towns on the Isle of Wight, the pattern of access to the coast is not likely to change considerably from that predicted by visitor survey information collected for Bird Aware Solent with high visitor rates around the coastal towns and low rates away from these [21].

The effects of planned growth in combination with ECP proposals are considered in section D4.

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 Approach to assessment of risks

In assessing risks to the conservation objectives, we have considered the relevant environmental pressures, the nature of activities associated with the proposals and sensitivity of features to those activities. Direct risks from the access proposals are loss of habitat from installing new infrastructure and disturbance from construction works. Indirect risks of disturbance to birds or damage to habitats arises from the way the interventions delivered by the programme affect the distribution, intensity or type of recreational activities that take place in areas where sensitive features may be present. The risks to the site conservation objectives are summarised at the start of this Appropriate Assessment - in Table 7.

In this part of the assessment, we make some general points about assessment of each of the risks identified and our approach to predicting how the interventions will affect recreational activities. In section D3.2 we consider the detailed design of the access proposals and possible impacts at specific locations and in section D3.3 we summarise our conclusions.

Possible impacts of the access proposals

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

A key nature conservation issue for the north coast of the Isle of Wight is the protection of non-breeding water birds that are SPA or Ramsar qualifying features. 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 currently impacting the 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) there are sensitive locations likely to hold concentrations of birds, such as high tide roosts and important feeding areas, either within or outside SPA boundaries.

To assess sensitive locations for bird disturbance, we used BTO WeBS data [11], the Solent Wader and Brent Goose Strategy mapping data [10], observations during site visits, and

information provided to us by local naturalists. To identify parts of the stretch where at least a moderate increase in levels of recreational 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.

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, 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."

On the north coast of the Isle of Wight the proposals follow existing walked routes where possible, and where this is the case the potential for the access proposals to cause a significant increase in disturbance to non-breeding waterbirds is reduced. This is because the pattern of access and distribution of visitors is unlikely to be affected where existing routes are used. Also, the number of new walkers attracted by the KCIIIECP is likely to be only a small proportion of existing users.

In a report to the Solent Recreation Mitigation Partnership, Footprint Ecology [21] note that in general, where access levels are already very high, increased recreational use is perhaps to be expected to result in less impact as the birds will be either avoiding the area at times when people are present, or have become habituated to the level and type of disturbance at that location. By contrast, increasing recreational use in areas that currently have little or no access is likely to have the biggest impact. However, it should be stressed that this does not mean that adding further visits to an already stressed system is acceptable. It is just that in these cases the ECP is likely to only be a small contributor to an existing issue, and it is not the ECP's role to resolve existing disturbance issues, but opportunities should be taken to improve the situation where possible.

Where we are proposing new access or significantly improving coastal paths, we consider that demand for access is likely to increase on present levels, and with projected population growth on the island. In section D4 of this HRA we consider any specific in-combination effects with Local Plans and substantial development proposals.

Our objective in designing proposals for coastal access has been to ensure they do not increase the disturbance pressure affecting the site and that where possible they contribute to wider efforts to manage existing and future demand for places for coastal recreation in ways that help to reduce disturbance to wintering birds. To achieve this on the Isle of Wight our proposals for coastal access make use of the following principles:

- Where possible, we make use of popular established paths where an increase in the level of use is unlikely to increase the disturbance pressure affecting the SPA.
- Where new access is proposed, locations with habitats and species particularly sensitive to recreational disturbance are avoided.
- The trail will be well-maintained and easy to follow, with appropriate signage. minimising the likelihood that users will stray into sensitive areas.
- No new coastal access rights will be created over intertidal mudflats and saltmarsh that are used by feeding waterbirds. In practice, use of such intertidal areas for recreation on foot is limited as they are unattractive, dangerous and inherently unsuitable for public access. A year-round Section 25A exclusion will be applied over the mudflats and saltmarsh along this part of the coast therefore not creating any new coastal access rights. Maps of excluded areas are shown in the published stretch report, and at the beginning of each section in D3.2 below.
- Contribute to raising awareness and encouraging appropriate visitor behaviour close to areas used by wintering birds by installing new information panels at key points along this part of the coast. These will be developed with Bird Aware Solent, reinforcing their messages by explaining how to enjoy the area without damaging sensitive wildlife. More detail on the positioning of particular signs and the messages to be conveyed at a local level is set out in section D3.2 below.

These design features mean that the KCIIIECP proposals can make a positive contribution by helping to address and manage wider issues of waterbird disturbance.

A key finding from the research underpinning the Solent Recreation and Mitigation Strategy (now Bird Aware Solent) for wintering waterbirds is that how people behave, and how access is managed at each location determines the extent of disturbance [27]. Therefore, Bird Aware Solent focusses on engaging with users through ranger patrols, events and signage. One of the main ways access management strategies encourage responsible recreation is to urge people stick to existing footpaths and avoid letting dogs run on the intertidal habitat. Therefore, by using existing walked routes wherever possible, and excluding access to saltmarsh and mudflats, the ECP proposals complement the approach taken by Bird Aware Solent.

Overall, by using existing walked routes, careful route alignment, restrictions and signage, recreational disturbance will be minimised. However, where there are sensitive locations and/or changes in access levels predicted, these are considered in more detail below (see D3.2A to D3.2C).

Disturbance to breeding birds from recreational activities

Whilst terns do not currently nest on the Isle of Wight, there is potentially suitable habitat at Kings Quay. In addition, oystercatchers nest on the shingle spit at Kings Quay and shelducks nest in the nearby woodland. In general, recreational disturbance will be avoided by routing the trail away from the shingle spit at Kings Quay. However, the risk is considered further in sections D3.2B.

Disturbance to foraging terns from recreational activities

All tern species forage in subtidal waters but may choose to feed close to the shoreline. Where they feed offshore terns are not susceptible to recreational disturbance. However, where they feed in sheltered inlets such as Wootton Creek and the mouth of Kings Quay, they are closer to the source of disturbance and potentially susceptible. Potential impacts on foraging terns are considered in more detail in sections D3.2B & C.

Trampling of habitats

Solent & Southampton Water SPA/Ramsar and Solent Maritime SAC

The proposed trail route is outside the Solent Maritime SAC and Solent and Southampton Water SPA/Ramsar site and so there will be no trampling or erosion of habitats from the use of the trail itself. Saltmarsh and mudflat will be excluded from the coastal margin, as will sensitive vegetated shingle habitats at Kings Quay. Whilst these exclusions mean there will be no right of access on foot over these habitats, we have considered the need for any additional mitigation measures to ensure damage is avoided in sections D3.2B.

Predicting how the access proposals will affect recreational activity

The Coastal Access Programme delivers interventions to improve or secure public access to the coast (as described in A2). Detailed proposals are developed through an iterative design process during which constraints and opportunities are considered, including any relating to nature conservation. In this assessment we consider possible direct impacts of the proposals on affected European sites and features from path improvement works and indirect impacts that might arise from changes to the distribution, intensity, and type of recreational activity because of the interventions made.

Assessment of indirect impacts requires an understanding of the baseline access situation and how this will be affected by the access proposals. Detailed consideration of possible impacts is made in sections D3.2A to C of this assessment; in this section we describe the general approach we have used to predicting how the access proposals are likely to affect recreational activity, expanding on the method outlined in Chapter 6 of the Coastal Access Scheme [1].

Access baseline

For the purposes of this assessment, the baseline distribution, intensity, and types of recreational activity is inferred by combining evidence from several sources including:

- Data that provides an indication of how a site is used, for example user apps like Strava⁷ and car park provision
- Information about recreation and access to sites in printed and on-line maps, guides, apps etc
- Advice from local access professionals, rangers and land managers
- Bespoke walk over surveys to look for signs of use, such as well beaten paths

By combining evidence from these and other sources a comprehensive picture of access at a given location can be established.

⁷ Strava is an app used by recreational users to record activities. Strava Metro provide aggregated data to active transport planners to help understand mobility patterns, identify opportunities for investment and evaluate the impact of infrastructure changes.

Several sources of data provide background information about demand for access, including the Monitor of Engagement with the Natural Environment (MENE) survey [28] and its successor, the People and Nature Survey, that provide information about how people use the natural environment at a national level. In addition, we have used visitor surveys carried out by the Solent Recreation Mitigation Partnership [21] [29] and more recently by Bird Aware Solent [30] [24], that estimate visitor numbers to the Solent area.

Also relevant to this assessment is access in the sense of people having access for recreational purposes. Broadly speaking, public access may be 'given' or 'taken'. Access that is given includes all forms of statutory access (like Coastal Access Rights), access under local acts or where dedication of access has occurred or permission for access has been given. Some types of access rights are easily identified, for example from Ordnance Survey maps, others can be more difficult to establish. There are often clues on the ground, for example where a means of access has been provided or there are regulations concerning specific activities, but given access can be difficult to prove conclusively and may appear similar to access that is taken. Access that is taken is sometimes referred to as de facto access: meaning that it is true in fact but is not legally sanctioned. De facto access is access that is taken without force, without secrecy and without permission. In this assessment, where the legal status of current access is unclear, we refer to 'existing access'.

Predicting change

The types of interventions delivered through the programme are described in Part A of this HRA. The access proposals incorporate three main types of on-site interventions:

- Manipulation of the physical environment
- Limiting access rights with local restrictions and exclusions
- Signs directing or encouraging people to behave in particular ways.

Access management techniques like these are widely used by site managers, and this provides a basis for predicting what impact they are likely to have on recreational activity at a given location. The specific proposals we make are tailored to local circumstances and new interventions are often combined with existing access management and natural features of the site. Because there is a degree of uncertainty when making predictions about on-site interventions, where we consider the sensitivity of features presents a higher level of risk (at Kings Quay) we have sought expert advice from an independent access and recreation consultant.

Coastal Access Rights (CARs) are a new form of access rights and there are some minor differences in the limitations that apply, however, they are very similar to other statutory access rights from which reasonable assumptions can be made about how they are likely to affect recreational activities at a given location. Members of the public rarely, if ever, distinguish between the many forms public access can take beyond whether access is or isn't allowed at a particular location and any advertised limitations that apply. Monitoring open access confirmed the strong tendency of people in open spaces to follow defined paths and tracks and also that this tendency is not generally affected by the creation of open access rights [31]. More important for predicting how a site might be used for recreation are the types of factor listed in the method outlined in Chapter 6 of the Coastal Access Scheme

[1]. Therefore, the predictions we have made are bottom-up assessments made at the local level considering factors such as existing use, terrain, physical barriers, access points, proximity to settlements, alternatives, legal limitations, and other factors, as well as the detailed design of specific interventions proposed, such as the position of the path, any improvements to the path and any other physical interventions.

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

In this part of the assessment, we explain how the detailed design of our proposals in the relevant report or reports takes account of possible risks.

The features occurring at each of these key locations are shown in the table below.

Location	Stretch		Relevant risks			
	Numbers	Disturbance of non- breeding waterbirds	Disturbance to non-breeding waterbird feature in breeding season	Disturbance of breeding terns and gulls	Disturbance to foraging terns	Trampling of sensitive species and habitat
East Cowes to Norris Wood	IOW-1-S001 to IOW-1- S015	Υ				
Whippingham to Wallishill Copse	IOW-1-S036 to IOW-1- S053	Υ	Υ	Υ	Υ	Υ
Wallishill Copse to Wootton Bridge	IOW-1-S053 to IOW-1- S078	Υ			Υ	

Overview Proposals Map

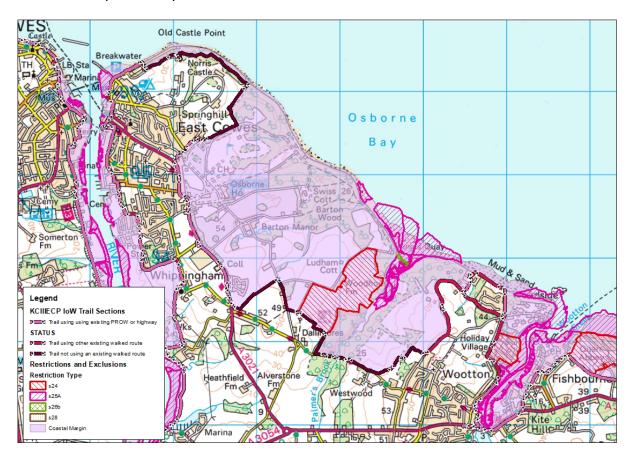


Figure 2: Overview of trail and restrictions

For the detailed assessment of potential impacts, the IOW1 stretch has been divided into three sections:

- A East Cowes Ferry Terminal to Norris Wood
- B Whippingham to Wallishill Copse
- C Wallishill Copse to Wootton Bridge

D3.2A East Cowes Ferry Terminal to Norris Wood

Key features of the access proposals

The proposed route of the KCIIIECP starts at East Cowes Ferry Terminal and follows public pavements along the seafront and out of town along the Esplanade (IOW-1-S001 to IOW-1-S005). Passing the playground, the trail then heads inland through Springhill Wood and turns eastwards creating a new access route parallel to the coastline (IOW-1-S007 to IOW-1-S011). The new access continues through the Norris Castle estate following a route within woodland and parallel to, but set back from, the coastline (IOW-1-S012). The trail then heads inland just before Norris Wood, creating a new access route linking back to existing public footways in East Cowes (IOW-1-S013 to IOW-1-S015). It then continues on existing public footways towards Whippingham. The route will be established and maintained to National Trail quality standards.

Coastal margin would be created by default seawards of the proposed route. No additional landward margin is proposed in this area.

Local exclusion of CARs is proposed as follows:

All year round exclusion of saltmarsh and mudflats that are unsuitable for public access under S25A of the CRoW Act 2000. (area proposed for exclusion in IOW 10 The Medina, approved May 2025)

The map in figure 3, below, shows the proposed route for the KCIIIECP, together with the extent of the seaward Coastal Margin and areas from which CARs would be excluded. Details of the route and the associated path improvements are described in the Proposals Report map IOW 1a.

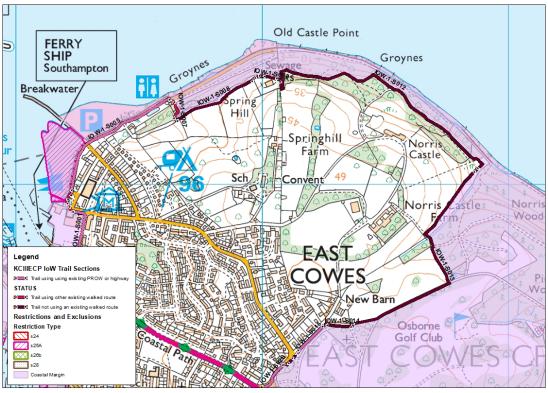


Figure 3: Map of KCIIIECP proposals from East Cowes Ferry Terminal to Norris Wood

Current situation

Access baseline

The route starts at East Cowes Ferry Terminal, which links the island to the mainland via a vehicle ferry service. This part of the stretch is, therefore, well connected for day visitors and longer-staying tourists. East Cowes has a population of 8,428 based on the 2021 census [32]. Waverley Park Holiday Centre is on the edge of East Cowes with access on foot to the Esplanade. Given the local and tourist population plus visitor connections, the beach at East Cowes seafront, east of the breakwater at the mouth of the Medina, is well used.

At high tide the beach is narrow. However, as there is an adventure playground and paddling pool landward of the Esplanade, the seafront is visited at all states of the tide. The Isle of Wight Council-owned Springhill Woodland is an additional attractor.

To the east of Springhill Woodland is Norris Castle Grade 1 listed park and garden within which are various Grade 1 and 2 listed buildings [33]. Norris Castle is privately owned, and the buildings and grounds are not open to the public.

Environment baseline

This part of the assessment considers possible impacts on European sites within the project area between East Cowes Ferry Terminal and Norris Wood:

- Solent Maritime SAC
- Solent to Dorset Coast SPA
- Solent and Southampton Water SPA and Ramsar site

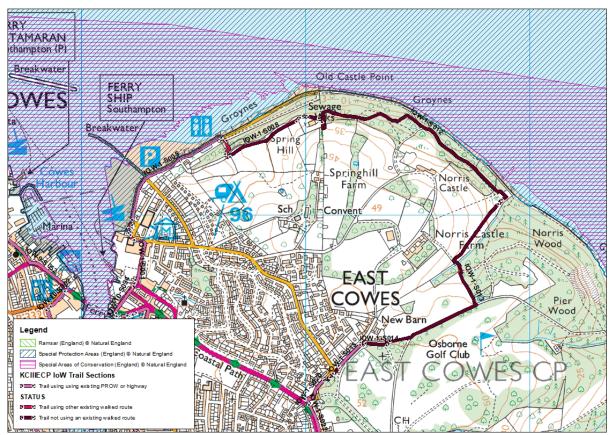


Figure 4: Nature conservation designations at East Cowes

The Solent Maritime SAC covers the subtidal waters in this part of IOW1: the boundary is Mean Low Water, and therefore the intertidal habitats exposed at low tide are not part of the designation.

The Solent and Dorset Coast SPA, designated for foraging terns, extends over the subtidal and intertidal habitats, with the landward boundary being Mean High Water.

This part of the coastline does not form part of the Solent and Southampton Water SPA and Ramsar site. There are two sites in the area categorised as 'low use' by the Solent Wader and Brent Goose Strategy (SWBGS), as shown on figure 5 below. IOW124 is a jetty at the mouth of the Medina used as a high tide roost by small numbers of turnstones (a peak of 12 was recorded in November 2018). IOW31 covers the mud and sandflats at East Cowes beach and is used by turnstones and brent geese (peaks of 20 recorded for both species in December 2018) [10]. The Non-Estuarine Waterbird Survey (NEWS), last run in 2015/16 by the BTO, covered the coastline between East Cowes and Norris Wood, and recorded 21-30 turnstones (see figure 6, below) [14]. Whilst not designated, the rocky coast and intertidal habitats of this stretch are likely to be functionally linked to the Solent and Southampton Water SPA, by providing additional supporting habitat for turnstones (and small numbers of brent geese).



Figure 5: Solent Wader and Brent Goose sites at East Cowes



Figure 6: Turnstones recorded by the Non-Estuarine Bird Survey (NEWS) in 2016/16

Detailed design and assessment of possible risks to qualifying features

Possible impacts on European Sites are:

 Additional disturbance of feeding or roosting non-breeding waterbirds (Solent & Southampton Water SPA/Ramsar)

Impacts on the Solent Maritime SAC can be ruled out as the site is designated for subtidal features in this location which are not sensitive to trampling as they are not accessible on foot. Impacts can also be ruled out on foraging terns as the landscape of the open coast and estuary mouth in this location do not bring foraging birds close to the shore where they may be susceptible to disturbance. Furthermore, where new access is being provided (and hence where an increase in use is expected) this is set back from the coastline within woodland where use of the trail will not cause any disturbance to terns that might be foraging close to the shore.

Additional disturbance of feeding or roosting non-breeding waterbirds

Alignment and creation of the KCIIIECP

Adoption of public footways on East Cowes as part of the KCIIIECP is unlikely to make an appreciable difference to the way the seafront is used or lead to an increase in disturbance to wintering birds in the area. The two SWBGS sites adjacent to the stretch (see fig. 5, above) are in an area already well used by boat traffic (including the ferry service) and by people walking on the seafront. Turnstones roosting on the jetty at IOW124 will be habituated to the current level of use by boats, which will not change as a result of the coastal access proposals. Although the installation of the KCIIIECP will create a new circular walk of around 4.7km from East Cowes, which may lead to an increase in the use of the East Cowes seafront, this is unlikely to constitute a significant proportion of the existing users. Therefore, use of the trail at East Cowes seafront is not likely to cause any significant additional disturbance to brent geese or turnstones foraging on the intertidal habitats of the IOW31 SWBGS site.

The new trail created from IOW-1-S008 to IOW-1-S014 will lead to an increase in recreational use of the area as it is new access and forms a circular route from East Cowes.

However, use of the trail itself will not lead to any additional disturbance of turnstones using the beach as the trail is set back from the coastline within the woodland.

Coastal access rights

Coastal margin will be created between the trail and Mean Low Water. Whilst it is possible to access the foreshore from the Esplanade southwest of the breakwater at the mouth of the Medina, most visitors don't because the terrain is muddy and difficult to walk over. Creation of CARs is unlikely to change this established pattern of use, but for the avoidance of doubt, CARs will be excluded over this area on the grounds that it is unsuitable for public access (see figure 3). Therefore, there will be no additional disturbance to birds foraging on the mudflats southwest of the breakwater.

Northwest of the breakwater there is a change of habitat to a sand and shingle substrate. As this is suitable for walking on, no exclusions to the margin are proposed on public access grounds. As noted above, East Cowes beach is already well used by people and is also identified as a 'low use' SWBGS site as it is used by small numbers of brent geese and turnstones. Creation of CARs in this location is unlikely to lead to any significant change in the numbers of people using the beach, and so is unlikely to lead to any increase in disturbance to birds foraging at low tide.

Small numbers of turnstones use the narrow shingle beach landward of the trail at Norris Estate (IOW-1-S012). In particular, Old Castle Point is favoured as it forms a wider area of habitat (see figure 6, above). This area is currently accessible along the Esplanade from East Cowes beach, therefore, its inclusion in the coastal margin is unlikely to change the pattern of access, nor add significant disturbance. East of Old Castle Point, trail users may potentially access the beach via the woodland coastal margin. However, the woodland is dense and very difficult to traverse and hence unlikely to be used to access the beach by significant numbers of people.

Therefore, it is possible to conclude that the creation of coastal margin in this section is unlikely to lead to significant additional disturbance to turnstones using the functionally linked land. Hence an adverse effect on the integrity of the SPA can be ruled out.

D3.2B Kings Quay

Key features of the access proposals

From Whippingham, the trail follows the route of the existing IOW coast path along Whippingham Road. At IOW-1-S039, new access is proposed, heading towards the coast before connecting with Mount Road which the trail follows southwards (IOW-1-S040). The trail then continues around the edge of agricultural fields until reaching Woodhouse Copse (IOW-1-S041). The trail does not enter the woodland but runs southwards adjacent to it (IOW-1-S042) until the trail meets Brock's Copse Road. A new path will be established on the road verge, initially on the northern side of the road. The trail then crosses Brock's Copse Road at a safe location and continues on the southern side of the road. A new crossing over Palmer's Brook, on the southern side of the road, will be installed.

At IOW-1-S048 the trail crosses back to the northern side of Brock's Copse Road. From here the trail enters a field and continues eastwards adjacent to the road (IOW-1-S049). This new access trail then heads on the higher ground towards the coast (IOW-1-S050 to S051). From here the trail joins Palmers Road heading northwards, then eastwards along Lower Woodside Road (IOW-1-S052-S053). At IOW-1-S054 the route heads to Woodside beach and then eastwards. An optional alternative is to continue along Lower Woodside Road.

The route would be established and maintained to National Trail quality standards, including being well signposted and easy to follow.

Coastal margin would be created by default seawards of the proposed route. No additional landward margin in proposed in this area.

Local restriction or exclusion of CARs is proposed as follows:

- All year round exclusion over saltmarsh and flats that are unsuitable for public access, under S25A of CRoW.
- All year round exclusion from the shingle spit at Kings Quay on conservation grounds, under S26 of CRoW.
- All year round exclusion from land at Woodhouse Farm from land management reasons, under S24 of CRoW.

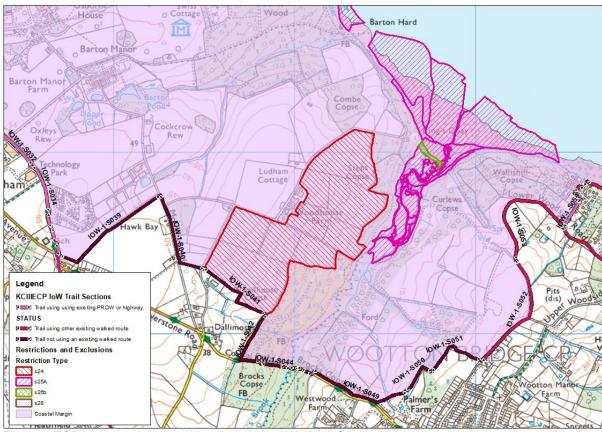


Figure 7: ECP proposals between Whippingham and Wallishill Copse

The map above in figure 7 shows the proposed route of the KCIIIECP, together with the extent of seaward coastal margin and areas from which CARs would be excluded. Details of the route and the associated path improvements are described in the Proposals Report maps IOW1c and 1d.

Current situation

Access Baseline

There is currently no public access to the majority of this stretch of coastline and much of the hinterland. The only publicly accessible area is Woodside Beach, to the southeast of Kings Quay, where the trail follows the existing walked route (IOW-1-S058), adjacent to the Woodside Bay Holiday Retreat. Land on both sides of Kings Quay is in private ownership and there are no public footpaths leading to the estuary. However, people do walk towards it from Woodside Beach. To counteract this, the landowners have erected signs on the beach advising that it is private property with no right of way, and a fence has been erected to prevent access to Wallishill Copse. There is also an issue with people accessing Kings Quay from the water (reported during interviews with the previous landowner and WeBS surveyors), for example on paddle boards or small boats, and the previous landowner has installed a sign at the mouth of the inlet to inform people there is no right of access.

On the western side of Kings Quay the woodlands of Steps Copse, Combe Copse and Barton Wood have no public access. However, Woodhouse Copse is Open Access land dedicated by the Forestry Commission (see figure 8, below). Whilst the woodland is now in private ownership the open access designation remains. However, as it has been used for makeshift encampments, and has a close board fence separating it from the road (albeit with

a gate to allow access), it is not attractive as a recreational space and as such is unlikely to be used by the public in any significant numbers.

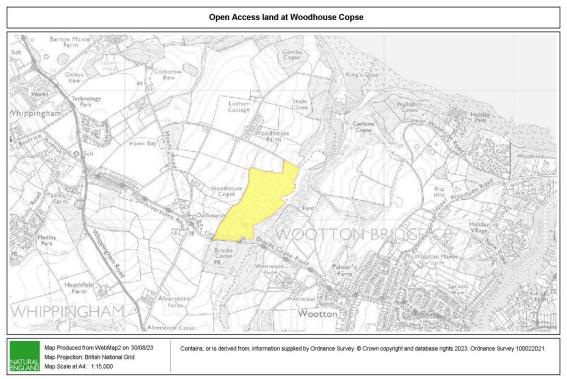


Figure 8: Open access land at Woodhouse Copse

The route of the current IoW coast path follows Brocks Copse Road and as such will have some walkers following this route. A highways assessment has concluded that this road is too dangerous for a National Trail, so is unlikely to be attractive for people other than those specifically following the coast path. As there are no parking facilities or draws to bring people specifically to this area, most will be passing through on longer walks utilising the rest of the coast path or public network.

Environment baseline

This part of the assessment considers possible impacts on European sites within the project area at Kings Quay:

- Solent Maritime SAC
- Solent and Southampton Water SPA
- Solent and Southampton Water Ramsar site
- Solent and Dorset Coast SPA

A map showing the extent of these sites along this section of the coast is shown in figure 9.

Solent Maritime SAC

Kings Quay represents an excellent example of the transition from saline to freshwater and terrestrial habitats. As such the SAC designation includes the saltmarsh, mudflat and shingle habitats at the mouth of the estuary and extends upstream to the bridge (Brock's Copse Road) over Palmers Brook. The transitional habitats include the tidal lagoon, brackish reedbed and wet woodland.

A survey of Solent vegetated shingle communities in 2013 found that the shingle spit and beaches at Kings Quay were the most natural of those surveyed on the Isle of Wight [34].

The shingle is clearly highly mobile, as was seen during site visits by the HRA author before and after the storms in early 2022, which had moved shingle onto the eastern beach.

Solent and Southampton Water SPA

Whilst Kings guay is only a small part of the SPA (around 2% by area), it is relatively important for certain species (for example, it holds 2% of the current SPA brent goose population, 7% of the SPA little egrets, 5% of the SPA great crested grebes, 3% of the SPA ringed plovers, 5% of the SPA whimbrels, and 4% of the SPA curlews). Figure 10, below, summarises the bird use of Kings Quay.

The mouth of the inlet is where the largest number of waterbirds are found. The key feature is the shingle spit that is used as a high tide roost by brent geese and waders, principally curlews, whimbrels, ringed plovers and oystercatchers. In the woods to the west of the tidal lagoon there is a grey heron and little egret roost (maximum count 42 individuals) [35].

In the breeding season, oystercatchers nest on the spit, though the WeBS surveyors report that they are often washed out by the tides. Although there are currently no reports of terns nesting on the spit or Mediterranean gulls nesting on the upper saltmarsh, these features have been scoped in to the assessment on a precautionary basis. Sandwich terns and Mediterranean gulls forage in the estuary [35].

The SPA extends upstream covering the tidal lagoon, reedbed and part of the wet woodland, but not as far as the road. The lagoon is not generally counted during core WeBS counts (which are undertaken at high tide), but ad hoc supplementary low tide counts undertaken by Natural England reveal that it is used by brent geese, little egrets and waders for feeding, albeit in lower numbers than at the mouth of the inlet. Site visits by Natural England to investigate trail route options have shown that birds move up and down the estuary with the tide, demonstrating a strong functional linkage between the different parts of Kings Quay.

The wet woodland supports breeding shelducks that nest in old rabbit burrows. The chicks then walk to the lagoon. The local WeBS surveyors report 3 to 4 clutches annually. As such, the breeding shelduck significantly contribute to the wintering population.

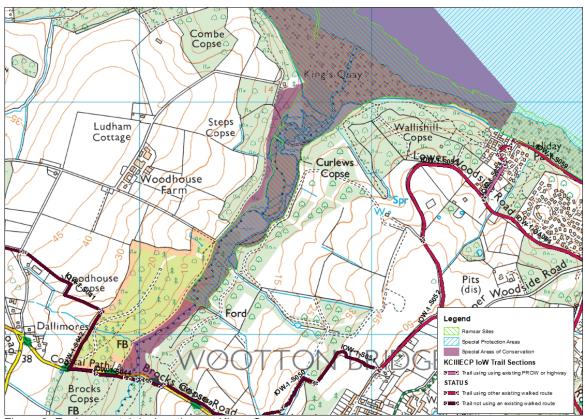


Figure 9: Environmental designations at Kings Quay

Solent and Southampton Water Ramsar

The Ramsar site is designated for the same bird species as the SPA and follows the same boundary in this location. In addition, it is designated for its wetland plants and invertebrates. The transition from wet woodland to reedbed to mudflat and saltmarsh demonstrates a natural hydrological and salinity gradient. This diversity of habitats means that Kings Quay supports a diverse range of plant and invertebrate species.

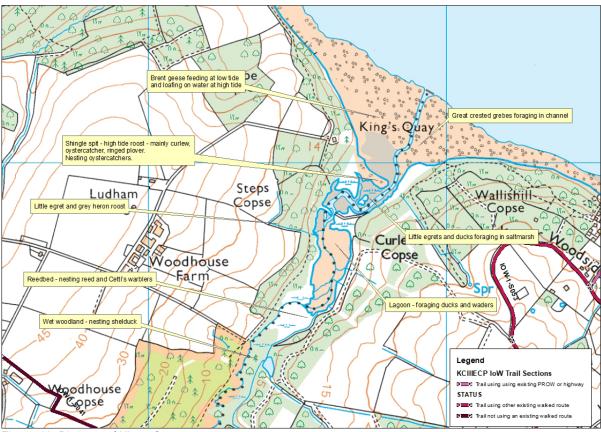


Figure 10: Bird use of Kings Quay

Detailed design and assessment of possible risks to qualifying features

Possible impacts on European Sites are:

- Additional disturbance of feeding or roosting non-breeding waterbirds (Solent & Southampton Water SPA/Ramsar)
- Additional disturbance to wintering waterbirds in the breeding season (Solent & Southampton Water SPA/Ramsar)
- Additional disturbance to potentially nesting terns and Mediterranean gulls (Solent and Southampton Water SPA/Ramsar)
- Trampling of sensitive vegetation and supporting habitat (Solent Maritime SAC and Solent and Southampton Water Ramsar)

These risks are considered further below:

Additional disturbance of feeding or roosting non-breeding waterbirds

Alignment and creation of the KCIIIECP

New access is proposed from IOW-1-S039 to S051, between Whippingham Road and Palmers Road. As this is a new route⁸, some people may wish to visit initially because it is just that, otherwise there are no draws to bring people specifically to this area other than to

⁸ People are currently able to walk along Brock's Copse Road, which is the route of the current IoW coast path, but it is not safe due to the lack of verge. Therefore, new access will be created adjacent to the road.

pass through on longer walks utilising the rest of the KCIIIECP or public network. We cannot quantify the increase as it will be driven by a range of factors. But as the trail in this location is likely to be most attractive to long distance walkers, there are expected to be fewer users than if visitors were drawn from the local population or areas with key service draws (such as parking and facilities).

Whilst there will automatically be an increase in use as the trail will be on newly created routes, these have been aligned away from the SPA and Ramsar site so that users will not cause any disturbance to birds using habitats within them. The trail is at least 300m away from the intertidal habitats at Kings Quay, which is well beyond the 200m zone identified by Bird Aware Solent research in which birds could potentially be disturbed by recreational activities [29]. Furthermore, the estuary is surrounded by woodland, which screens users of the trail from the birds using the intertidal habitats (see figure 11, below). There is no evidence from the Solent Wader and Brent Goose Strategy, or other sources, that SPA/Ramsar birds use habitats outside the designated sites that would bring them closer to the trail. This is because the habitat is not suitable for waterbirds, as it is either woodland or agricultural fields on higher ground.

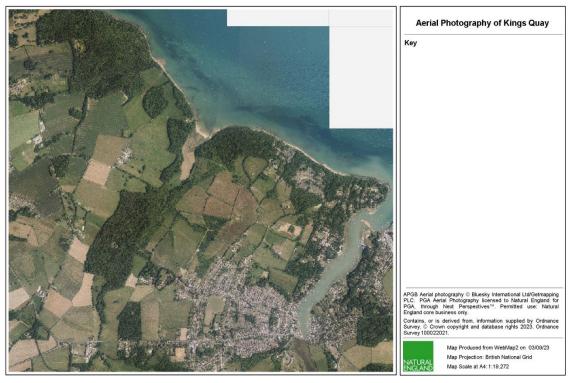


Figure 11: Aerial photography mapping layer at Kings Quay

Therefore, the alignment of the trail away from the SPA/Ramsar ensures that the increase in recreational use expected along the trail will not result in significant disturbance that would harm the Conservation Objectives of the site.

Coastal access rights

As the trail is set back from the coast, a significant area of coastal margin will be created, as shown on figure 7. The habitats comprise woodland and agricultural fields, plus the wet woodland, reedbed, shingle and intertidal habitats of the SPA/Ramsar. As described above, SPA/Ramsar birds use the shingle and intertidal habitats at Kings Quay and so the key consideration in terms of potential impacts of the use of the margin is access to these

habitats and the edge of the estuary. A S25A exclusion is proposed on the intertidal saltmarsh and mudflats as they are unsuitable for access on foot. In addition, a S26 exclusion will cover the shingle spit to protect its use as a high tide roost. As no new access rights are created over these habitats, the creation of the margin will not add to disturbance of birds using them provided people comply with the exclusion.

There is currently an issue with people accessing the shingle spit from the water, via small boats, canoes or paddleboards [34]. The proposed exclusions will reinforce the existing signage which notifies people that there is no public access to the spit.

Given the current relatively undisturbed nature of the area, it is important that the creation of coastal margin does not significantly increase the recreational use of Kings Quay. Therefore, Natural England has assessed the likelihood that people will leave the trail and access Kings Quay via the coastal margin. We have also considered whether any additional mitigation measures are necessary to ensure that people will comply with the exclusions and that the creation of coastal margin will not add any significant disturbance pressure. To aid these decisions, we have sought the advice of an independent adviser with expertise in the management of access for people and dogs.

As noted above, the principal users of this section of the trail are likely to be those on an onward journey. Such users typically stay on the trail as their key goal is to cover the distance in the time available to them. Natural England's experience from KCIIECP implementation in other parts of the country is that users of the margin tend to require a clear entrance point with options for a circular walk preferred. Linear, out and back, routes tend to only be used in significant numbers were there is a clear and visible attractor such as a vantage point or historic feature.

Looking at the risk from each part of the trail in detail:

The coastal margin seaward of the trail from IOW-1-S039 to S041 comprises fields and woodland. There is a farm vehicle track that runs from Mounts Road (IOW-1-S040) to Woodhouse Farm and on to Kings Quay Cottage near the mouth of the estuary. This farm track is the only obvious route from this part of the trail that people could use to get close to the mouth of Kings Quay, where the greatest bird interest is found. However, as Kings Quay Cottage is excepted land (i.e. Coastal Access Rights do not apply) it does not offer a route to Kings Quay. Furthermore, this track is 1.5km and so does not present an easy or attractive detour for coast path walkers who are on a long-distance hike. Local walkers may choose to explore via the farm track, but it does not link to features of interest and does not form a circular walk. Fields between the farm track and Woodhouse Copse are fenced excluded from the margin for land management reasons. In conclusion, it is not likely that very many walkers will access the margin in this location, and few are likely to reach the estuary. Therefore, no additional measures are necessary to mitigate potential disturbance.

At IOW-1-S042, the trail runs south within Woodhouse Copse and then turns east to follow adjacent to Brocks Copse Road. Woodhouse Copse is currently Open Access land (see figure 8) and so its inclusion in the margin does not change the current access arrangements. As noted above, Woodhouse Copse is not particularly welcoming, but people wishing to explore the margin can do so via several forest tracks through the Open Access land. There is only one track that is easy to use on foot as it has been kept open by vehicular use. The tracks closer to Palmers Brook are boggy and overgrown so difficult to use. It is possible that people will make their way through Woodhouse Copse to Brickkiln Copse and Steps Copse, where they could reach Kings Quay. But the lagoon of Kings Quay is nearly 1km, and the spit around 1.4km, from the trail, most of which would be through wet woodland with thick vegetation and boggy ground. Therefore, it can be concluded that the

existing terrain is sufficient to limit the number of people accessing Kings Quay from the trail in this location.

After a new crossing over Palmers Brook, the trail crosses Brocks Copse Road and heads into a field. The route then takes the high ground round the edge of agricultural fields before joining Palmers Road (IOW-1-S052). For most of this route there are existing agricultural field boundaries that mean most people will stay on the path and not walk down to Kings Quay.

However, there is one point where an agricultural track leads down from Palmers Road, past Curlews Copse, to the lagoon. The previous landowner had created a grassy picnic area next to the water for his family's use, which has been subject to trespassers. As this creates a destination point for trail users, we have considered whether additional mitigation is needed here. However, the farm track is separated from the trail by a gate, which most walkers are unlikely to climb over, so additional measures to encourage walkers to stay on the trail are unnecessary. The new landowners will not be moving a picnic area, so the attractor will not longer exist, further reducing the likelihood that people will access this part of the margin.

From Lower Woodside Road, the trail heads past Wallishill Copse to Woodside Beach. There are several paths through Wallishill Copse to the beach, created by the landowners. As evidenced by the Strava heatmap shown on figure 8, there is currently very little access along these paths. Whilst some trail users may choose to explore the margin via Wallishill Copse, the most likely way that people would access Kings Quay is to walk back towards the estuary along Woodside Beach. This already happens to a certain extent, as shown on figure 8. The landowners of the beach in front of Curlews Copse and Wallishill Copse have erected signs saying the beach is private there is no public access. There is also a closeboarded fence with locked gate preventing people moving from the beach inland into Curlews Copse.

The S25A exclusion includes the beach at the edge of Curlews Copse and Wallishill Copse and extends to the edge of the woodland. This fits with the current management of the area (and ensures the current no access signs remain lawful). There is a risk that people arriving from the east will then pressing on further round the mouth of the estuary rather than retracing their steps, as the existing fencing means there is no route inland from the beach. To mitigate this, signage will be installed before people get to the exclusion, to advise people that there is no access to the mouth of the estuary and that there is no circular route available.

Overall, with the proposed exclusions and additional signage proposed, it can be concluded that there will be no adverse effect on the integrity of the SPA/Ramsar from disturbance to wintering birds from use of the margin. It is a statutory requirement for Natural England to review any restrictions or exclusions at least every 5 years. This gives an opportunity to review this conclusion and amend any Directions as necessary to address any unforeseen issues.

Additional disturbance to breeding birds

Shelduck nest in the woodland at Kings Quay (see figure 10) and then take the chicks to the lagoon. As the number of shelduck fledged potentially constitutes a significant proportion of the wintering population, disturbance that hinders their breeding could have an adverse impact on the designated population. The trail alignment avoids the designated woodland, so there will be no disturbance from walkers on the trail. But the woodland is within the

coastal margin, so people using the margin could potentially cause disturbance. As noted above, routes through the wetter parts of Woodhouse Copse, closer to Palmers Brook, and the SPA/Ramsar woodland are not easy due to the conditions underfoot and the thick vegetation. Therefore, we do not consider it likely that significant numbers of people will make use of the margin in this location, to the extent that breeding shelducks will be adversely affected.

The shingle spit and saltmarsh at the mouth of the estuary do not currently support breeding ringed plovers, terns or Mediterranean gulls, but oystercatchers have nested. The S25A exclusion of access from the saltmarsh and the S26 exclusion of access from the spit ensure that that waders, terns and gulls would not be deterred from nesting by the presence of people. As noted above, the spit is around 1.4km from the trail and not easily accessible by any paths through the margin. Therefore, it is not considered likely that many trail users will access the mouth of Kings Quay via the margin, and so no additional measures are necessary to mitigate any risk of disturbance.

Trampling of sensitive vegetation and supporting habitat

The Solent and Southampton Water Ramsar site is designated for its important wetland plant and invertebrate communities, and the Solent Maritime SAC is designated for its important habitats including saltmarsh and vegetated shingle. These habitats and communities may be damaged by trampling, causing erosion, where people regularly walk away from established paths.

Saltmarsh and vegetated shingle at Kings Quay will be protected from trampling pressure by being excluded from the coastal margin. Further consideration is given above, in the section on wintering birds, to the potential need for additional mitigation measures to prevent significant numbers of people from accessing these habitats.

In addition to the saltmarsh and vegetated shingle, the SAC and Ramsar are designated for their transitional habitats: reedbed and wet woodland. Reedbed habitat is not susceptible to trampling as the tall vegetation and wetness underfoot mean that people do not tend to walk through it. Therefore, no additional exclusions or measures are considered necessary to prevent trampling of reedbed. The wet woodland is similarly boggy with undergrowth that is difficult to walk through. Our view is that it is most likely that people will stick to the higher and drier ground in Woodhouse Copse, so an exclusion from the SAC/Ramsar wet woodland to prevent significant trampling is unnecessary.

D3.2C – Woodside Beach to Wootton Bridge

Key features of the access proposals

From Woodside Beach (or the optional alternative along Woodside Road), the trail uses the existing PROW to link to New Road. The alignment then follows New Road until the road bridge over Wootton Creek. The trail then links to the IOW2 stretch (Wootton to Culver Down). The route would be established and maintained to National Trail quality standards.

Coastal margin would be created by default seawards of the proposed route.

Local restriction or exclusion of CARs is proposed as follows:

- All year round exclusion over saltmarsh and mudflats that are unsuitable for public access (under S25A of CROW)
- All year round exclusion under S24 of CROW to land managed as a recreational activities centre.

The map in figure 12 shows the proposed route for the KCIIECP, together with the extent of the seaward Coastal Margin and areas from which CARs would be excluded.

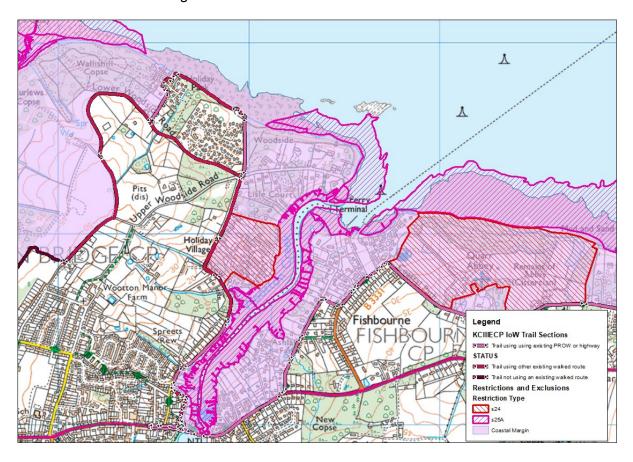


Figure 12: KCIIIECP proposals from Woodside Beach to Wootton Bridge

Current situation

Access baseline

The trail alignment along the western side of Wootton Creek follows an existing PROW and pavements alongside New Road to Wootton Bridge. The large village of Wootton Bridge has a population of 3,389 residents according to the 2021 census [32]. These numbers are swelled by visitors from the mainland arriving via the Fishbourne ferry terminal on the eastern side of Wootton Creek.

The Creek is well used by recreational watercraft and is lined by jetties. The PGL Little Canada centre offers water- and land-based activities for children and families.

Environmental baseline

This part of the assessment considers possible impacts on European sites with the project area between Woodside Beach and Wootton Bridge:

- Solent and Southampton Water SPA
- Solent and Southampton Water Ramsar site
- Solent and Dorset Coast SPA

The Solent Maritime SAC does not extend as far south as the habitats at Wootton Creek. There is a SAC inland of the trail: Briddlesford Copse, designated for bats, but as impacts were ruled out at the Likely Significant Effect stage, this is not considered any further.

The intertidal habitats of Woodside Beach and Wootton Creek are designated as part of the Solent and Southampton Water SPA and Ramsar site (see map of designations at figure 14). Wootton Creek is counted by WeBS and supports significant proportions of the populations of some SPA/Ramsar species: brent geese (1% of SPA population), gadwall (3% of SPA population), mallard (4% of SPA population), little egret (12% of SPA population), curlew (3% of SPA population) and redshank (3% of SPA population).

The subtidal channel in the centre of Wootton Creek forms part of the Solent and Dorset Coast SPA, designated for foraging terns.

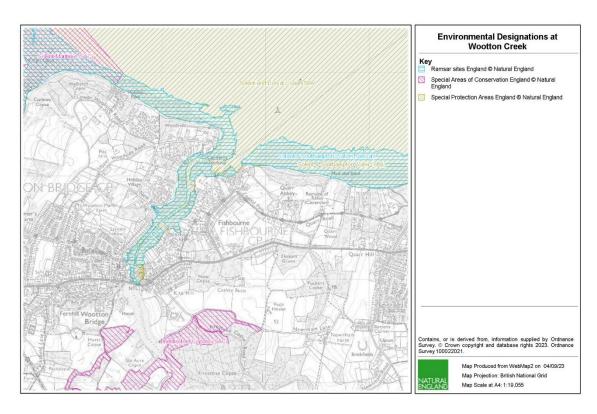


Figure 13: Nature conservation designations at Wootton Creek

The open coast to the west of Wootton Creek is not covered by WeBS, but was counted for the Non-Estuarine Waterbird survey (NEWS) in 2015/16. This survey found significant numbers of turnstones (around 8% of the SPA population) (see figure 14 below) and purple sandpipers using the rocky and shingle coastline.



Figure 14: Turnstones recorded by the Non-Estuarine Waterbird Survey in 2015/16. Purple sandpipers were also recorded at this location.

There are several Solent Wader and Brent Goose sites in Wootton Creek, as shown below in figure 15.



Figure 15: Solent Wader and Brent Goose (SWBGS) sites at Wootton Creek

SWBGS counts taken in Jan and Feb 2019

IOW56 – Brent geese (peak of 95), redshank (peak of 20)

<u>IOW57</u> – Brent geese (peak of 200), curlew (peak of 78), redshank (peak of 57)

<u>IOW93</u> – Brent geese (peak of 6), oystercatcher (peak of 20), curlew (peak of 9)

<u>IOW94</u> – Brent geese (peak of 95), curlew (peak of 81), oystercatcher (peak of 30), redshank (peak of 31)

Detailed design and assessment of possible risks to qualifying features

Possible impacts on European Sites are:

- Additional disturbance of feeding or roosting non-breeding waterbirds (Solent & Southampton Water SPA/Ramsar)
- Trampling of sensitive vegetation and supporting habitat (Solent and Southampton Water Ramsar)
- Disturbance to foraging terns (Solent and Dorset Coast SPA)

These risks are considered further below:

Additional disturbance of feeding or roosting non-breeding waterbirds

Alignment and creation of the King Charles III England Coast Path

The trail between Woodside Beach and Wootton Bridge follows existing PROW and pavements along the road. No new access is proposed and so the existing patterns of use are unlikely to change.

Looking at the trail alignment in detail:

From IOW-1-S062 to S067, the trail is set back from the edge of Wootton Creek meaning that walkers will not be visible to birds using the creek and will not cause any disturbance.

Further south, from IOW-1-S068 to S070, the trail continues along New Road, which in this location is adjacent to the creek. The SWBGS site IOW56 covers intertidal habitats close to the trail here (see figure 15). Existing trees, hedges, and boat infrastructure (storage etc) provide some screening between the road and the intertidal habitats, including IOW56. It is Natural England's view that this screening is sufficient to avoid any additional disturbance to waterbirds from the use of New Road as part of the KCIIIECP.

At IOW-1-S071, New Road continues through the village to Wootton Bridge, where this section of the KCIIIECP joins the Wootton Bridge to Culver Down section. As the trail passes through the village it is screened from the intertidal by houses, and so any use by walkers will not cause any disturbance to birds using the creek.

Landward of the bridge over Wootton Creek is the SWBGS site IOW57. The site is made up of the Old Mill Pond and adjacent fields, and supports large numbers of brent geese, curlews and redshanks. As it is landward of the trail it will not form part of the margin. As the trail uses the existing pavement on the road bridge, any additional users will not significantly add to any disturbance currently experienced at IOW57.

In conclusion, adoption of this route as part of the KCIIIECP is unlikely to make an appreciable difference to the way this route is used or lead to an increase in disturbance to wintering birds in this area.

Coastal access rights

Coastal margin will be created between the trail and Mean Low Water, as shown on figure 12. The habitats within the margin include the shingle at Woodside Beach and the saltmarsh and mudflats in Wootton Creek and the west of its mouth. These habitats are all within the Solent and Southampton Water SPA and Ramsar site.

A S25A exclusion is proposed on the intertidal saltmarsh and mudflats as they are unsuitable for access on foot. As no new access rights are created over these habitats, the creation of the margin will not add to disturbance of birds using them.

Woodside Beach is already used by people (local residents and visitors to the Woodside Bay Lodge Retreat) and the creation of CARs is unlikely to change this established pattern of recreational use or significantly increase the intensity. Therefore, it is not considered necessary (or practical) to exclude access from the beach.

For these reasons, Natural England concludes that the access proposals will not increase the level of background disturbance to wintering birds along this section of the coast.

Trampling of sensitive vegetation and supporting habitat

The Solent and Southampton Water Ramsar site is designated for its important wetland plant and invertebrate communities. These habitats and communities may be damaged by trampling, causing erosion, where people regularly walk away from established paths.

Saltmarsh plants are sensitive to trampling, but damage will be avoided by the exclusion of saltmarsh habitat from the coastal margin under S25A of CROW. At Woodside Beach the shingle forms part of the margin but due to the beach profile, this area does not currently support any more than a narrow band of pioneer vegetation. This vegetation is less susceptible to trampling as it colonises newly deposited shingle [19]. In any case, as described above, the introduction of the coastal margin in this location is unlikely to change the established pattern or intensity of use.

Therefore, it can be concluded that the proposals will not increase trampling of any sensitive habitats or communities and an adverse effect on the Ramsar site will be avoided.

Disturbance to foraging terns

The Solent and Dorset Coast SPA for foraging terns includes the subtidal channel of Wootton Creek. Where the trail is aligned near to enclosed areas where terns forage, there is a risk at users will disturb the birds and effectively reduce the area available to them for feeding. However, in this location, as described above regarding wintering birds, the trail is for the most part set back from the edge of Wootton Creek. In the section where the trail is adjacent to the creek, existing trees, hedges and infrastructure associated with boats provide some screening. Furthermore, as the trail follows New Road, its use as part of the KCIIIECP will not add a significant proportion of the existing pedestrian users.

Therefore, it can confidently be concluded that the establishment of the trail and margin will not add any significant disturbance to foraging terns.

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 part of the HRA we draw together our conclusions concerning the risks considered within this Appropriate Assessment, taking account of the detailed design of the access proposals and including any extra or additional 'mitigation measures' specifically intended to avoid or reduce the potential harmful effects of the plan or project and which might enable a conclusion of no adverse effect on the integrity of the European Sites to be reached. In reviewing the ability of any such measures to avoid harmful effects, NE 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.

Disturbance of non-breeding waterbirds from recreational activities

Risk to conservation objectives:

The access proposals modify how the site and surrounding areas are used for recreation, causing repeated disturbance to foraging or resting non-breeding waterbirds which may lead to reduced fitness and reduction in their population and/or distribution within the site.

Qualifying features affected:

Black-tailed godwit, dark-bellied brent goose, ringed plover, teal, waterbird assemblage (all non-breeding features of Solent and Southampton Water SPA/ Ramsar site).

Relevant design features of the access proposals:

The detailed design of the access proposals in relation to pressure from disturbance to nonbreeding waterbirds is considered in sections D3.2A to D3.2C of this assessment. In summary, relevant design features include:

Route Alignment and Coastal Margin: All Areas

- Aligning along Public Rights of Way (PRoW) or other existing walked routes wherever possible.
- Where new access is provided, the trail is aligned away from sensitive locations, principally the mouth of Kings Quay.
- Clear signage will ensure walkers find it easy to follow the trail and minimise the risk that they accidently access sensitive areas.
- Interpretation panels at appropriate locations, i.e. Woodside Beach, will inform people of restrictions, sensitive habitats/species, and encourage responsible behaviour to minimise disturbance.

- Under S25A of the Countryside and Rights of Way (CroW) Act 2000, access will be excluded to saltmarsh and mudflat as these areas are unsuitable for public access on foot
- Under S26 of CroW, a nature conservation exclusion will be applied to the shingle spit at Kings Quay.

Can 'no adverse effect' on site integrity be ascertained?

Yes.

Solent & Southampton Water SPA has site conservation objectives to reduce the frequency, duration and / or intensity of disturbance caused by human activity affecting its non-breeding waterbird qualifying features (black-tailed godwit, dark-bellied brent goose, ringed plover, teal and wintering waterbird assemblage).

Pressure from disturbance can be managed by on-site interventions that affect the distribution, intensity and type of recreational activities, such as by encouraging people to use certain routes and discouraging them from using others. The access proposals have been designed with this is mind and for the reasons explained in D3.2A to D3.2C, including the design features of the access proposals summarised above, we conclude they will not have an adverse effect on the integrity of the SPA, nor hinder the achievement of the target to reduce disturbance to non-breeding waterbirds from human activity.

Conservation objectives are not set individually for the Solent & Southampton Water Ramsar site but are covered by the SAC and SPA objectives. In respect of non-breeding waterbirds we consider that the same conclusions as for the SPA apply to the Ramsar site.

Are there residual effects?

For the reasons explained above, it is unlikely there will be any appreciable adverse effects from the access proposals. However, because there is a target to reduce disturbance to nonbreeding waterbirds from human activities in the Solent area, and because environmental conditions over the Solent as a whole, including within Solent & Southampton Water SPA and Ramsar site are dynamic and influenced by a number of human activities and because NE is aware of other plans and projects for which disturbance effects are currently being assessed by other competent authorities, we have carried out a further in-combination assessment - see D4.

Disturbance of breeding waterbirds from recreational activities

Risk to conservation objectives:

The access proposals modify how the site is used for recreation, causing repeated disturbance to waterbirds that leads to reduced breeding success of species that make a significant contribution to non-breeding SPA features.

Qualifying features affected:

Waterbird assemblage (Solent and Southampton Water SPA/ Ramsar site).

Relevant design features of the access proposals:

The detailed design of the access proposals in relation to pressure from disturbance to breeding waterbirds, which may impact on the non-breeding population, is considered in section D3.2B of this assessment. In summary, relevant design features include:

- Shelducks nest within the woodland coastal margin at Kings Quay. The trail is aligned on higher ground away from this woodland and we consider a significant increase in use unlikely due to the thick vegetation and boggy ground.
- Oystercatchers nest on the shingle spit at Kings Quay. Though they do not currently
 nest, the spit is potentially suitable habitat for ringed plovers. Disturbance will be avoided
 by excluding this area from the coastal margin.

Can 'no adverse effect' on site integrity be ascertained?

Yes.

Solent & Southampton Water SPA has site conservation objectives to reduce the frequency, duration and / or intensity of disturbance caused by human activity affecting its non-breeding waterbird qualifying features (including the waterbird assemblage, of which shelducks and oystercatchers are part).

For the reasons explained in D3.2B, including the design features of the access proposals summarised above, it is unlikely the access proposals could lead to adverse effects on breeding shelducks or oystercatchers, and less likely still there could be knock on consequences for the non-breeding population. Therefore it is unlikely the access proposals could lead to an adverse effect the diversity of the non-breeding waterbird assemblage.

Conservation objectives are not set individually for the Solent & Southampton Water Ramsar site but are covered by the SAC and SPA objectives. In respect of non-breeding waterbirds we consider that the same conclusions as for the SAC apply to the Ramsar site.

Are there residual effects?

No, the access proposals will not result in recreational activities that have appreciable adverse effects on the diversity of the non-breeding waterbird assemblage as a result of impacts on breeding success.

Disturbance of breeding terns and Mediterranean gull from recreational activities

Risk to conservation objectives:

The access proposals modify how the site is used for recreation, preventing potential colonisation by breeding terns or Mediterranean gull, and therefore hindering the objective to restore the populations.

Qualifying features affected:

Common tern, little tern, Mediterranean gull (all breeding features of Solent & Southampton Water SPA/ Ramsar site).

Relevant design features of the access proposals:

The detailed design of the access proposals in relation to pressure from disturbance to breeding terns and Mediterranean gull is considered in section D3.2B of this assessment. In summary, relevant design features include:

- Alignment of the trail to avoid the shingle spit and saltmarsh habitat at Kings Quay.
- Exclusion of intertidal habitats and the shingle spit at Kings Quay from the coastal margin.

Can 'no adverse effect' on site integrity be ascertained?

Yes.

Solent & Southampton Water SPA has site conservation objectives to reduce the frequency, duration and / or intensity of disturbance caused by human activity affecting its breeding tern and Mediterranean gull qualifying features (common tern, little tern, Roseate tern, sandwich tern and Mediterranean gull). There is also an objective to restore nesting terns to the Isle of Wight.

The access proposals have been designed with this is mind and for the reasons explained in D3.2B, including the design features of the access proposals summarised above, we conclude they will not have an adverse effect on the achievement of the target to reduce disturbance to breeding terns and Mediterranean gull from human activity, nor hinder the objective to restore nesting terns to the Isle of Wight.

Conservation objectives are not set individually for the Solent & Southampton Water Ramsar site, but are covered by the SAC and SPA objectives. In respect of breeding terns and Mediterranean gull we consider that the same conclusions as for the SPA apply to the Ramsar site.

Disturbance of foraging terns from recreational activities

Risk to conservation objectives:

Repeated disturbance to foraging terns following changes in recreational activities as a result of the access proposals, leads to reduced fitness and reduction in populations and/or contraction in the distribution of qualifying features within the site

Qualifying features affected:

Common tern, little tern, Sandwich tern (Solent and Dorset Coast SPA).

Relevant design features of the access proposals:

Where terns forage in subtidal waters there is sufficient separation between the trail/margin and the birds so that significant disturbance is avoided. However, in certain locations, particularly lagoons and harbours, foraging terns are brought closer to the trail. Therefore, we have focussed on these areas for the assessment. The detailed design of the access proposals in relation to pressure from disturbance to foraging terns is considered in section D3.2C of this assessment. In summary, relevant design features include:

 At Wootton Creek the trail is aligned along existing highways, and for the most part is set back from the edge of the creek. The section adjacent to the creek is partially screened by existing trees, hedges, and infrastructure associated with boats.

Can 'no adverse effect' on site integrity be ascertained?

Yes.

The Solent and Dorset Coast SPA has an objective to restrict the frequency, duration and / or intensity of disturbance affecting foraging birds so that they are not significantly disturbed. The access proposals have been designed with this is mind and for the reasons explained in D3.2C including the design features of the access proposals summarised above, we conclude they support the objective to restrict disturbance to foraging terns, and as such will not have an adverse effect on the integrity of the SPA.

Are there residual effects?

No, the access proposals will not result in recreational activities that have appreciable adverse effects on the foraging success of terns.

Damage to coastal habitats and associated rare wetland invertebrate or plant species following changes in access

Risk to conservation objectives:

Changes in type, pattern and/or intensity of recreational activities as a result of the access proposal causes damage to, or a reduction in the extent and distribution of, qualifying natural habitats and/or associated assemblages of rare, vulnerable or endangered invertebrate or plants such as by trampling.

Qualifying features affected:

Mudflats and sandflats not covered by seawater at low tide, Salicornia and other annuals colonising mud and sand, Spartina swards, Atlantic salt meadows, annual vegetation of drift lines, perennial vegetation of stony banks, estuaries (all qualifying features of Solent Maritime SAC).

Estuary, wetland invertebrate assemblage, wetland plant assemblage (Solent & Southampton Water Ramsar site features).

Relevant design features of the access proposals:

The detailed design of the access proposals in relation to pressure from damage to coastal habitats and associated rare wetland invertebrate or plant species is considered in sections D3.2B and C this assessment. In summary, relevant design features include:

Vegetated shingle:

Alignment of trail avoiding spit, and S26 nature conservation exclusion, at Kings Quay.

Saltmarsh, including transitional habitats

 Under S25A of CroW, access will be excluded to saltmarsh and mudflat as these areas are unsuitable for public access on foot.

Wetland invertebrate and plant assemblage

- A carefully aligned and well-maintained path that is easy to follow and avoids areas of sensitive wetland habitats.
- S25 directions to exclude access from saltmarsh and mudflats as they are unsuitable for public access on foot.
- Trail aligned on higher ground and away from transitional wetland habitats that form part of the Solent and Southampton Water Ramsar site at Kings Quay.

Can 'no adverse effect' on site integrity be ascertained?

Yes.

Solent Maritime SAC has site conservation objectives to:

- Maintain the presence, total extent and spatial distribution of intertidal mudflats and sandflats not covered by seawater at low tide.
- Restore the range of Spartina swards including natural transitions with other saltmarsh types.
- Maintain the range and continuity of 'Salicornia and other annuals colonising mud and sand' and 'Atlantic salt meadows' habitats and their natural transitions within saltmarsh types and to other habitats seaward and landward.
- Restore the total extent of saltmarsh features (Salicornia and other annuals colonising mud and sand, Spartina swards, Atlantic salt meadows) to at least 1,095 hectares.
- Maintain the total extent of the annual vegetation of drift lines and perennial vegetation of stony banks features.

The restore target is set to address long-term losses in the area of saltmarsh within the Solent that are thought to be due to a combination of sea level rise and associated coastal squeeze, a depleted sediment budget leading to a narrowing and lowering of the intertidal zone, together with die-back of Spartina anglica [6].

Damage to habitats because of trampling in sensitive areas can be managed by on site interventions that limit or reduce footfall from recreational activities away from established paths. The access proposals have been designed with this is mind and for the reasons explained in D3.2B, including the design features of the access proposals summarised above, we conclude they will not have an adverse effect the achievement of the target to restore the extent of saltmarsh features. In addition, for the reasons set out in D3.2B and C, and summarised above, the access proposals will not have an adverse effect on the objective to maintain the extent of vegetated shingle within the SAC.

Conservation objectives are not set individually for the Solent & Southampton Water Ramsar site, but are covered by the Solent Maritime SAC and Solent & Southampton Water SPA objectives. In respect of coastal habitats and associated rare wetland invertebrate or plant species we consider that the same conclusions as for the SAC apply to the Ramsar site.

Are there residual effects?

No, the access proposals will not result in trampling from recreational activities that has appreciable adverse effects on the extent or distribution of, qualifying natural habitats and/or associated assemblages of rare, vulnerable or endangered invertebrate or plants.

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:

- Trampling of habitat and species following changes in recreational activities as a result of the access proposals leads to the reduction in the extent and distribution of qualifying and supporting habitats.
- Disturbance to tern foraging behaviours, following changes in recreational activities as a result of the access proposal, leads to reduction in the abundance and distribution of the qualifying features within the site.
- Disturbance to breeding birds at their nesting site, following changes in recreational activities as a result of the access proposal, leads to reduction in the abundance and distribution of the qualifying features within the site.
- Disturbance to non-breeding waterbirds with a breeding population, which following changes in recreational activities as a result of the access proposal, leads to reduced fitness and reduction in population and/or contraction in the distribution of qualifying feature within the site.

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 to feeding and roosting non-breeding waterbirds, following changes in recreational activities as a result of the access proposal, leads to reduced fitness and reduction in population and/or contraction in the distribution of qualifying feature within the site.

D4 Assessment of potentially adverse effects considering the project 'incombination' 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 are:

Table 8. Residual risk of insignificant impacts from the access proposals

Residual risk	Qualifying features affected (nb = non- breeding)
The access proposals modify how the site and surrounding areas are used for recreation, causing repeated disturbance to foraging or resting non-breeding waterbirds which may lead to reduced fitness and reduction in their population and/or distribution within the site.	Solent and Southampton Water SPA/ Ramsar site Dark-bellied brent geese (nb) Teal (nb) Black tailed godwit (nb) Ringed plover (nb) Waterbird assemblage (nb)

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.

Review of other live plans and projects Table 9.

Competent Authority	Plan or project	Have any insignificant and combinable effects been identified?
Isle of Wight Council	Isle of Wight local Plan 2012 – 2027	No. The Appropriate Assessment associated with the plan considers the risk of recreational pressure to qualifying features of all European sites. The plan concludes that is avoidance and mitigation measures are implemented successfully there will be no likely significant effects on the European sites. There is a Strategic Access Management and Monitoring (SAMM) Strategy which has developed into the Bird Aware Solent project. As a result, the Appropriate Assessment concludes no adverse effect alone or in combination.
Isle of Wight Council	Draft Island Planning Strategy (submission version July 24).	No This is an update to the Local Plan described above. The proposal is to make provision for 6795 additional dwellings over the plan period (2022-37). Those within the zone of influence of the Solent & Southampton Water SPA will add to the recreational pressure at this site if not mitigated. The housing is distributed proportionally according to the current size of the settlement, ie the bulk of the housing allocations are in Newport and Ryde, with smaller allocations in Cowes, East Cowes, Freshwater and Sandown. This means that the predicted visitor distribution pattern, modelled for Bird Aware Solent, is unlikely to change significantly. Within the draft plan are two key priority sites: Camp Hill (750 dwellings next to Parkhurst Forest) and Newport Harbour (250 dwellings). Camp Hill is within easy driving distance of Newtown Harbour, and Newport Harbour is on the Medina. A draft HRA has been produced which concludes no adverse effect on the integrity of European sites due to mitigation measures to minimise recreational disturbance. The primary mitigation is via Bird Aware Solent. However, the policy for Camp Hill requires additional bespoke mitigation in the form of onsite greenspace to provide alternative recreational opportunities for residents. The allocation sites are sufficiently distant from the IOW1 section of the trail so that there are unlikely to be any additional effects in combination.
Isle of Wight Council	Outline application for 40 dwellings at Palmers Farm,	Yes. Outline permission has been given for 40 dwellings at Palmers Farm, subject to a contribution being made to the Bird Aware Solent mitigation

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	Brocks Copse Road (P/00741/18)	strategy. This enabled the Council to conclude no adverse effects on the integrity of the SPA and no residual effects were predicted. However, this conclusion was in advance of any published plans for the KCIIIECP for this part of the Isle of Wight, and was based on the access arrangements at that time. The trail is proposed adjacent to the red-line boundary of the application, giving immediate access to new residents. This proximity means the potential for in combination effects should be considered whereas impacts from the draft Local Plan allocations can be ruled out.
Environment Agency	Shoreline Management Plan (2010)	No. Findings determined the IOW SMP2 will have an adverse effect of integrity within the Solent and Southampton Water SPA and Ramsar Site at Yarmouth Mill and Thorley of 31 ha in total. Compensatory habitat creation was necessary to comply with the Habitats Regulations delivered via the Environment Agency's Regional Habitat Creation Programme. In light of this, no significant or combinable effects from the plan have been identified.
	Implementation of coastal access from Wootton Bridge to East Cowes	Yes. The HRA for stretches 2 to 10 on the Isle of Wight has identified the following insignificant and combinable risks: • Possible small increase in disturbance to non-breeding water birds.
Notural England	Implementation of coastal access from Highcliffe to Calshot	Yes. The HRA for this stretch has identified the following insignificant and combinable risks: • Possible small increase in disturbance to non-breeding water birds.
Natural England	Implementation of coastal access from Calshot to Gosport	Yes. The HRA for this stretch has identified the following insignificant and combinable risks: Possible small increase in disturbance to non-breeding water birds.
	Implementation of coastal access from Gosport to Portsmouth	No. Our proposals for coastal access between Gosport and Portsmouth may also affect designated sites on this stretch. We have previously made an assessment of our proposals for this stretch and no significant and combinable risks were identified in that assessment.
	Implementation of coastal access from Portsmouth to South Hayling	Yes. Natural England's HRA (published as part of the Access and Sensitive Features Appraisal) of coastal access proposal for Portsmouth to South Hayling recognised that parts of this stretch may be used by bird features of Solent and Southampton Water SPA. It was concluded that a small increase in disturbance to breeding terns & gulls and non-breeding waterbirds from recreational activities was possible as a result of

	these proposals, and that this could have residual and appreciable effects on site conservation objectives for Solent and Southampton Water SPA.
Implementation of coastal access from South Hayling to East Head	No. There is no overlap with designated sites between this stretch and the Isle of Wight proposals. The SPA/Ramsar is not mentioned in the HRA. As a result no in-combination impacts have been identified.

In light of this review, we have identified insignificant and combinable effects are likely to arise from the following projects that have the potential to act in-combination with the access proposals:

Insignificant and combinable effects from other projects Table 10.

Risk	Qualifying features affected (nb = non-breeding)
Planning permission for 40 dwellings at Palmers Farm, Wootton Bridge	Solent and Southampton Water SPA/ Ramsar site
The following combinable effects were identified: The installation of the KCIIIECP adjacent to this development site could result in additional disturbance to non-breeding waterbirds that is not mitigated by the Solent Birds strategy.	 Black-tailed godwit (nb) Dark-bellied brent goose (nb) Ringed plover (nb) Teal (nb) Waterbird assemblage (nb)
ECP implementation – Wootton Bridge to East Cowes	Solent and Southampton Water SPA/ Ramsar site
The following combinable effects were identified: The access proposals modify how the site and surrounding areas are used for recreation, causing repeated disturbance to foraging or resting non-breeding waterbirds which may lead to reduced fitness and reduction in their population and/or distribution within the site.	 Black-tailed godwit (nb) Dark-bellied brent goose (nb) Ringed plover (nb) Teal (nb) Waterbird assemblage (nb)
ECP implementation – Highcliffe to Calshot The following combinable effects were identified: The access proposals modify how the site and surrounding areas are used for recreation, causing repeated disturbance to foraging or resting non-breeding waterbirds which may lead	Solent and Southampton Water SPA/ Ramsar site Black-tailed godwit (nb) Dark-bellied brent goose (nb) Ringed plover (nb) Teal (nb) Waterbird assemblage (nb)

to reduced fitness and reduction in their population and/or distribution within the site.	
ECP implementation – Calshot to Gosport The following insignificant and combinable effects were identified: ■ Possible small increase in disturbance to non-breeding water birds.	Solent and Southampton Water SPA/ Ramsar site Black-tailed godwit (nb) Dark-bellied brent goose (nb) Ringed plover (nb) Teal (nb) Waterbird assemblage (nb)
ECP implementation – Portsmouth to Hayling The following combinable effects were identified: Possible small increase in disturbance to non-breeding water birds.	Solent and Southampton Water SPA/ Ramsar site Waterbird assemblage (nb) Dark-bellied brent geese (nb) Black-tailed godwit (nb) Teal (nb) Ringed plover (nb)

Assessment of in-combination effects

In light of the conclusions above, we have made an assessment of the risk of in combination effects. The results of this risk assessment, taking account of each qualifying feature of each site and in view of each site's Conservation Objectives, are as follows:

Risk of in-combination effects Table 11.

Qualifying Feature affected	In-combination pressure	Assessment of risk to site conservation objectives	Adverse effect in-comb?
Solent and Southampton Water SPA/ Ramsar site Black-tailed godwit (nb) Dark-bellied brent goose (nb) Ringed plover (nb) Teal (nb)	The combined effect of access proposals for Highcliffe to Calshot, Isle of Wight, Portsmouth to South Hayling and Calshot to Gosport modify how the site and surrounding areas are used for recreation, causing repeated disturbance to foraging or resting non-breeding waterbirds which may lead to reduced fitness and reduction in their population and/or distribution within the site.	Proposals for the ECP are divided into stretches and at earlier stages of the programme there was some uncertainty about the details of unmade proposals for the Solent region. Because the proposals have now been made, it is possible to confirm that a full suite of access management measures have been incorporated into the detailed designs to avoid or mitigate possible impacts. To help ensure a consistent approach to establishment works across the Solent region, NE has commissioned Bird Aware Solent to advise on the	No

Waterbird assemblage (nb)		design and placement of new information panels at key access points.	
Solent and Southampton Water SPA/ Ramsar site Black-tailed godwit (nb) Dark-bellied brent goose (nb) Ringed plover (nb) Teal (nb) Waterbird assemblage (nb)	Outline permission has been given to 40 dwellings at Palmers Farm, Wootton Bridge. This development will be adjacent to the trail. The developer will contribute to the Bird Aware Solent mitigation strategy. This addresses the recreational disturbance impacts of the development in combination with other planned housing in the Solent. However, the addition of the trail adjacent to the new housing will give new access route that was not considered in the development of the Bird Aware work plan. It is important to consider whether the addition of the trail and margin will change the current pattern of access to the coast on the Isle of Wight. This is so that the current work programme of Bird Aware Solent continues to be effective in mitigating recreational disturbance from housing.	Palmers Farm is shown on figure 7, adjacent to the trail. The new housing will add to the local population that may make use of the trail in this location. However, as the new housing is adjacent to existing housing, the pattern of access does not change. That is to say the trail and new house combine to increase the local population using the trail, it does not introduce new people into an area where there are currently none. Section D3.2B concluded that the trail at Palmers Farm will not result in additional disturbance to birds at Kings Quay due to the distance from the SPA. This conclusion does not change with the addition of 40 dwellings. Section D3.2B further concluded that people are unlikely to explore the margin and reach Kings Quay from Palmers Farm due to the existing fencing and hedges that would deter most walkers. Again, this conclusion does not change with the addition of 40 dwellings. It is a statutory requirement for Natural England to review any restrictions or exclusions at least every 5 years. This gives an opportunity to review this conclusion and amend any Directions as necessary to address any unforeseen issues.	No No

The possibility of adverse effects arising in combination with other plans and projects is thus ruled out.

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 Solent and Southampton Water SPA and Ramsar, Solent Maritime SAC; Briddlesford Copses SAC or Solent and Dorset Coast SPA either alone or in combination with other plans and projects.

Assessment of Coastal Access proposals under regulation 63 of the Habitats Regulations 2017 (as amended) ('Habitats Regulations Assessment')

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 East Cowes and Wootton Creek 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.

References

- [1] Natural England, "Coastal Access Natural England's Approved Scheme 2013. Catalogue Code: NE446," 2013. [Online]. Available: http://publications.naturalengland.org.uk/publication/5327964912746496?cat egory=50007.
- [2] Baynham-Herd, Z.J., Barker, J. & Park, T., "Responsible Recreation - Rapid Literature Review.," The Behavioural Insights Team, 2021.
- [3] Jenkinson S., "Mitigation options for influencing the behaviour of walkers with dogs in the Solent area. Report to Solent Recreation and Mitigation Partnership.," Access and Countryside Management Ltd, 2016.
- JNCC, "Ramsar Information Sheet Solent and Southampton Water Ramsar [4] Site," 2007. [Online]. Available: https://rsis.ramsar.org/RISapp/files/RISrep/GB965RIS.pdf
- European Commission DG Environment, "Interpretation Manual of European [5] Union Habitats (EUR27)," 2007.
- [6] Natural England, "Supplementary Advice on Conservation Objectives for Solent Maritime SAC," 2020. [Online]. Available: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?

- SiteCode=UK0030059&SiteName=solent&SiteNameDisplay=Solent%20Marit ime%20SAC&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&N umMarineSeasonality=&HasCA=1.
- M. J. Willing, "Monitoring of Desmoulin's whorl snail, Vertigo moulinsiana, [7] Fishbourne millpond & Fishbourne fen.," Chichester Harbour Conservancy, 2010.
- [8] Natural England, "Supplementary Advice on Conservation Objectives for Solent and Isle of Wight Lagoons SAC," 2018.
- Natural England, "Supplementary Advice on the Conservation Objectives for [9] the Solent and Southampton Water SPA," 2023.
- D. Whitfield, "Solent Wader and Brent Goose Strategy.," 2020. [Online]. [10] Available: https://solentwbgs.files.wordpress.com/2021/03/solent-wadersbrent-goose-strategy-2020.pdf.
- Woodward, I.D., Calbrade, N.A., Birtles, A., Feather, G.A., Peck, K., Wotton, [11] S.R., Shaw, J.M., Balmer, D.E. and Frost, T.M., "Waterbirds in the UK 2022/23: The Wetland Bird Survey and Goose and Swan Monitoring Programme," BTO/RSPB/NatureScot/JNCC, Thetford, 2024.
- E. F. A. S. J. F. T. &. W. I. Caulfield, "Wetland Bird Survey Alerts 2021/2022: [12] Changes in numbers of wintering waterbirds in the Constituent Countries of the United Kingdom, Special Protection Areas (SPAs), Sites of Special Scientific Interest (SSSIs) and Areas of Special Scientific interest (AS," BTO, Thetford, 2025.
- [13] H. Rowell and J. Robinson, "Feeding areas for dark-bellied brent geese, Branta bernicla bernicla, around SPAs in the UK," WWT, 2004.
- Austin, G., Frost, T., Mellan, H. & Balmer, D., "Results of the third Non-[14] Estuarine Waterbird Survey, including Population Estimates for Key Waterbird Species. Research Report No. 697.," BTO, Thetford, 2017.
- [15] Bird Aware Solent, "Solent Recreation Mitigation Strategy," 2017. [Online]. Available: https://birdaware.org/solent/wpcontent/uploads/sites/2/2021/10/Solent Recreation Mitigation Strategy.pdf.
- Solent Wader and Brent Goose Strategy Steering Group, "Guidance on [16] mitigation and off-setting requirements," 2018. [Online]. Available: https://solentwbgs.files.wordpress.com/2021/03/swbgs-mitigation-guidanceoct-2018.pdf.
- Burnell, D. et al, Seabirds Count. A census of breeding seabirds in Britain [17] and Ireland (2015-2021), Lynx Nature Books, 2023.
- Natural England, "Supplementary Advice on Conservation Objectives for the [18] Solent and Dorset Coast SPA," [Online]. Available: https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCo de=UK9020330&SiteName=solent&SiteNameDisplay=Solent+and+Dorset+C oast+SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&Num MarineSeasonality=3.
- P. Doody and R. Randall, "A guide to the management and restoration of [19] coastal vegetated shingle," Report to English Nature, 2003.
- Isle of Wight Council, "Draft Island Planning Strategy. Reg 18 Consultation," [20] 2021. [Online]. Available:

- https://www.iow.gov.uk/azservices/documents/2981-Draft-Island-Planning-Strategy-July-2021.pdf.
- Fearnley, H., Clarke, R. T. & Liley, D., "The Solent Disturbance & Mitigation [21] Project. Phase II – results of the Solent household survey. ©Solent Forum / Footprint Ecology," 2011. [Online]. Available: http://www.solentems.org.uk/natural_environment_group/SRMP/SDMP/Repo rtphase2HouseholdSurvey.pdf.
- Visit Britain, "Destination Specific Research," [Online]. Available: [22] https://www.visitbritain.org/destination-specific-research.
- Visit Isle of Wight, "Tourism Statistics for the Isle of Wight," 2022. [Online]. [23] Available: https://visitwightpro.com/2022/08/18/first-quarterly-tourismstatistics-in-for-the-isle-of-wight-since-2019/
- Caals, Z., Saunders, P., & Panter, C., "Solent Visitor Surveys: Winter [24] 2019/20," 2020. [Online]. Available: https://solent.birdaware.org/media/33629/Coastal-Visitor-Survey-2019-20report/pdf/Coastal Visitor Survey 2019-20 report.pdf.
- GL Hearn, "Housing Needs Assessment for Isle of Wight Council," 2022. [25]
- [26] Land Use Consultants, "Isle of Wight Island Planning Strategy Habitats Regulations Assessment," 2021.
- [27] D. Liley, R. Stillman and H. Fearnley, "The Solent Disturbance and Mitigation Project Phase II. Results of Bird Disturbance Fieldwork 2009/10. Footprint Ecology Report to Solent Forum.," 2011. [Online]. Available: https://www.footprint-ecology.co.uk/reports/Liley%20et%20al.%20-%202010%20-%20The%20Solent%20Disturbance%20and%20Mitigation%20Project%20Ph as.pdf.
- Natural England, "Monitor of Engagement with the Natural Environment [28] (MENE)," 2016. [Online]. Available: https://www.gov.uk/government/collections/monitor-of-engagement-with-thenatural-environment-survey-purpose-and-results.
- Liley, D. & Tyldesley, D., "Solent Disturbance and Mitigation Project: Phase [29] III. Towards an Avoidance and Mitigation Strategy.," 2013. [Online]. Available: http://www.solentems.org.uk/natural environment group/SRMP/SDMP/Phas e3 Avoidance and Mitigation Strategy.pdf.
- D. Liley and C. Panter, "Solent visitor surveys winter 2017-18," Unpublished [30] report by Footprint Ecology for Bird Aware Solent, 2018.
- Johnson, C. et al, "Countryside and Rights of Way (CROW) Act 2000 (Part [31] 1): National Open Access Visitor Survey (2006-08)," Natural England commissioned report NECR036a, 2009.
- City Population, "Population information for East Cowes and Wootton [32] Bridge," [Online]. Available: https://citypopulation.de/en/uk/southeastengland/admin/isle_of_wight/.
- Historic England, "National Heritage List for England Norris Castle," [33] [Online]. Available: https://historicengland.org.uk/listing/the-list/listentry/1000927?section=official-list-entry

- King, M., Lake, S., Day, J. McGibbon, R. & White, J., "Solent Vegetation [34] Survey 2013, Final Report," Footprint Ecology/Natural England, 2014.
- s. WeBS, Interviewee, Interview with local birders. [Interview]. 2019. [35]