

Access and Sensitive Features Appraisal: England Coast Path between Gretna and Allonby

Programme	<i>Coastal Access</i>
Proposal title	<i>Gretna to Allonby (Cumbria)</i>
Aim and location	<p><i>This appraisal presents Natural England’s assessment of the proposals to establish the England Coast Path, between Gretna and Allonby, as necessary under the relevant legislation including:</i></p> <ul style="list-style-type: none"> • <i>Assessment of impacts on SSSIs and the requirement to fulfil Natural England’s duties under S28G of the 1981 Wildlife and Countryside Act 1981 (as amended) to take reasonable steps, consistent with the proper exercise of our functions, to further the conservation and enhancement of the SSSI;</i> • <i>Assessment of impacts on European designated sites (SPA, SAC, RAMSAR) under the Conservation of Habitats and Species Regulations 2010 (the “Habitats Regulations”);</i> • <i>Assessment of impacts on Marine Conservation Zones under Section 125 and 126 of the Marine and Coastal Access Act (MCAA) (2009).</i> • <i>Species protected under the Wildlife and Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2010.</i> <p><i>This appraisal should be read in conjunction with Natural England’s Coastal Access Report – Gretna to Allonby, which sets out for approval by the Secretary of State our proposals for the England Coast Path and associated Coastal Margin on this stretch of coast.</i></p>
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Section 1: SITE MAP(S) AND OVERVIEW OF NEW ACCESS PROPOSAL

Note on maps for reference

Please refer to maps E to R in the Overview attached to Natural England’s published coastal access report for the coast between Gretna and Allonby to the Secretary of State, in addition to the maps annexed to each of the five chapters, and map i annexed this report (Additional maps, showing locations of key sensitive features may also be annexed, subject to appropriate data licenses for reproduction being secured).

This appraisal is published alongside Natural England’s report to the Secretary of State, which includes more detailed maps illustrating each chapter of the report. The detailed maps that accompany each chapter are those to which the text in the appraisal refers. They are numbered according to the chapter of the report to which they relate. For example, map 1b is the second map in the series relating to chapter 1 of the formal proposals.

Where this document refers to trail sections (eg GAL-1-S047), please refer to the maps in the chapters of the published coastal access report for the locations of these trail sections.

The maps in the annex to this document illustrate the extent of the various protected sites listed in Section 3 of this document, and the geographic locations of the sensitive features related to those sites or protected in their own right, where relevant and appropriate.

A further series of maps is included in the Overview of Natural England’s published coastal access report,

detailing the location and extent of various restrictions and exclusions that have been proposed, often in connection with the conclusions of this appraisal.

Proposed new access provisions

Natural England proposes the new access provisions described below. The proposals have 7 components of which the first 4 are subject to Secretary of State approval:

1. A long-distance walking route to form part of the England Coast Path;
2. A coastal margin – land mostly between the route and the seaward extent of the foreshore (often with public access rights attached);
3. Powers to exclude or restrict access (see Part 9 of the Overview report and Chapters 1 to 4);
4. A winter route diversion (Drumburgh Marsh) (see Part 9 of the Overview report and Chapter 2);
5. Physical barriers to discourage access to land adjoining the route / coastal margin in certain places (see maps 1d, 1e & 4m);
6. Other measures (not shown on maps); and
7. Public information boards and / or notices in certain places (not shown on maps).

This stretch of the England Coast Path will move from a planning phase to an establishment phase only after the proposals have been approved by the Secretary of State. Following completion of establishment works and commencement of new access rights, the stretch will move to a 'Business as Usual' management and maintenance phase.

The England Coast Path and its associated coastal margin will be displayed on Ordnance Survey maps, on their republication, following commencement of new rights. Information will also be provided on web sites and by printed material from third parties. Information on access restrictions or exclusions will be posted locally and will also be provided on web sites.

The coastal access proposals are summarised below (refer to Natural England's published coastal access report for full details):

1. Route proposal (England Coast Path)

Natural England proposes that the centre of the line shown on the relevant maps within Natural England's published coastal access report should be the England Coast Path for this length of coast (or the initial route, where roll-back is approved and required – see below). This proposal includes optional alternative routes to ensure continuity of the England Coast Path at times of high tide:

- Between Beaumont and Easton Marsh (trail sections GAL-2-S042 to GAL-2-S071). The optional alternative route is to be at the centre of the line shown as trail sections GAL-2-A001 to GAL-2-A010 on maps 2n to 2r;
- Between Longcroft and Whitrigg Marshes (trail sections GAL-3-S028 to GAL-3-S036). The optional alternative route is to be at the centre of the line shown as route sections GAL-3-A001 to GAL-3-A003 on maps 3g and 3h.
- Between Whitrigg Road Bridge to Salt Cotes (trail sections GAL-4-S001 to GAL-4-S015). The optional alternative route is to be at the centre of the line shown as route sections GAL-4-A001 to GAL-4-A004 on maps 4a to 4e.
- Around Grune Point (trail sections GAL-4-S044 to GAL-4-S072). The optional alternative route is to be at the centre of the line shown as route section GAL-4-A005 on map 4m.
- At Dubmill Point (trail sections GAL-5-S037 and GAL-5-S053). The optional alternative route is to be at the centre of the line shown as route sections GAL-5-A001 to GAL-5-A006 on maps 5i to 5k.

In places the proposed route would in the future be able to roll back to a new alignment in response to coastal erosion and other geomorphological processes. If this is necessary, a new route would be identified by Natural England after detailed discussions with the relevant experts and with any potentially affected owners or occupiers. This appraisal does not assess the potential impacts on the designated sites of such future route

options; Natural England will assess future changes, and the risk of impact arising from them according to the circumstances at the time and subject them to the same tests as these proposals. However, Secretary of State approval is not required for changes made using roll-back powers, providing that such powers have previously been approved in the affected area. Much of the coast covered between Gretna and Allonby is low-lying and subject to ongoing natural change; for this reason, we have proposed roll-back provision over significant parts of the stretch. Refer to the section details table in each of the five chapters for more information.

Any other future changes to the route would require approval from the Secretary of State – see part 8 of the Overview to Natural England's report to the Secretary of State.

Physical works - design, funding and maintenance

There will be new access infrastructure to facilitate public access along the route, as indicated on the maps in Chapters 1-5 of the published report. There will also be some limited physical improvements to the existing Hadrian's Wall Path National Trail in various locations, where the two routes are likely to be coincident with each other.

The initial purchase and installation costs for signs and infrastructure required will be met by Natural England as part of the establishment works to prepare the route for use (except the fencing and screening at Rockcliffe Marsh). The local authority will maintain them in line with national standards that apply to all National Trails.

Final determination of infrastructure design and installation will be carried out at the time of installation and will be subject to a separate appraisal of the potential impacts on nature conservation interests of the site once final details are known. However, at this stage a set of provisional designs and an outline installation methodology have been identified to allow as complete an appraisal as possible of the anticipated infrastructure component of the ECP proposal. This provides a baseline and acts a reference document against which the significance of variations from the plan can be considered. Installation of all infrastructure items associated with the establishment of the approved coastal access proposals will be governed by method statements, which will themselves be subject to further environmental appraisal. Method statements will cover the following, as a minimum:

- Timing of works to avoid seasonal sensitivities;
- Means of access, minimising vehicular access and including use of low ground-pressure vehicles on soft terrain;
- Storage of plant and materials;
- Pollution prevention and control;
- Biosecurity.

2. Coastal Margin

Under the legislation the following land would become part of the coastal margin by default as a consequence of the route proposal:

- Land within 2 metres of the route to either side; and
- All other land seaward of the route as far as the furthest extremity of the foreshore (mean low water on the seaward side).

In places, Natural England proposes that a suitable physical feature should form the landward boundary of the coastal margin instead of the default boundary 2m landward of the route. This is in order to provide clarity where practicable about the extent of access rights. Typically the boundary in such cases would be a fence, wall, hedge or ditch adjacent to the route.

In a few locations along this part of the coast, additional land on the landward side of the trail would also form part of the margin, either by default (as it is a recognised coastal land type) or because specific proposals have been made to add it to the coastal margin (with the consent of the owner). Such effects are often not visible on the appended maps, but are detailed in the relevant chapter of Natural England's coastal access report.

Unless Natural England proposes access restrictions or exclusions (see part 3 below), the coastal margin described above would be subject to public rights of access on foot, other than any parts of it that fall into categories of land excepted from new access rights, as defined by the legislation (refer to Figure 1 in the approved Coastal Access Scheme). These would include:

- Any land covered by buildings or the curtilage of buildings;
- Any land used as a park or garden; and

- Arable land that is cultivated or otherwise disturbed at least every 12 months.

The coastal margin also includes areas of land mapped as open country under the Countryside and Rights of Way Act 2000 (CROW) and/or land that is registered common land which has open access rights. On commencement of coastal access rights, any existing CROW access rights in the coastal margin will be replaced by coastal access rights. This will include the removal of the national CROW restriction requiring that dogs must be kept on leads between March 1st and July 31st.

3. Powers to exclude / restrict access

Natural England has powers to put in place local access restrictions or exclusions (The Secretary of State may also exercise powers in relation to national security and defence). These powers are more fully described at part 6 of the approved Coastal Access Scheme. Such access restrictions may be made at any time in the future, in response to changing circumstances or new requirements.

Natural England has identified some areas that require some form of intervention and it therefore proposes that public access rights to parts of the coastal margin are excluded by direction:

- Under s24 of CROW, for the purposes of management of the land in question;
- Under s25A of CROW, for the purposes of avoiding danger to the public; and
- Under s26 of CROW, for the purpose of conserving nature conservation interests of the land in question.

Details (including maps) of the proposed directions to exclude and restrict access are provided in both the Overview and relevant chapters of Natural England's coastal access report for this stretch of coast.

Under the terms of the s24 direction there would be no new access rights:

- To the seaward margin adjacent to trail section GAL-1-S047. This exclusion would operate all year.

Under the terms of the s25A directions there would be no new access rights to parts of the saltmarsh and intertidal flat in the seaward margin:

- Adjacent to trail sections GAL-1-S006 to GAL-1-S022 and GAL-1-S032 to GAL-1-S049;
- Between trail sections GAL-2-S055 and GAL-2-S102;
- Between trail sections GAL-3-S001 and GAL-3-S033; and
- Adjacent to trail sections GAL-4-S011 to GAL-4-S058.

These exclusions would operate all year.

Under the terms of the s26 directions there would be no new access rights:

- To the sea defence bank at Mossband Hall Marsh adjacent to trail sections GAL-1-S006 to GAL-1-S020. This exclusion would operate all year.
- To the sea defence bank at Garriestown / Esk Boathouse adjacent to trail sections GAL-1-S033 to GAL-1-S048. This exclusion would operate all year.
- To part of the seaward margin adjacent to trail sections GAL-1-S043 to GAL-1-S046. This exclusion would operate all year.
- To the seaward and landward margins adjacent to trail sections GAL-2-S067 to GAL-2-S071, to people who bring a dog, unless the dog is kept on a lead. This restriction would operate all year.
- To part of the seaward margin, to the landward edge of Cardurnock and Anthorn Marshes, not covered by the S25A exclusion, adjacent to trail sections GAL-3-S005 through to GAL-3-S013. This exclusion would operate all year.
- To part of the seaward margin, landward of Cardurnock and Anthorn Marsh, adjacent to trail section GAL-3-S005. This exclusion would operate between September 1st and April 30th each year.
- To part of the seaward margin adjacent to trail sections GAL-3-S034 to GAL-3-S038. This exclusion would operate all year.
- To the seaward and landward margins adjacent to trail sections GAL-4-S001 to GAL-4-S010. This exclusion would operate all year.
- To the seaward and landward margins adjacent to trail sections GAL-4-S013 to GAL-4-S015, not covered by the S25A exclusion. This exclusion would operate all year.
- To the seaward and landward margins adjacent to trail sections GAL-4-S027 to GAL-4-S042, to

people who bring a dog, unless the dog is kept on a lead. This restriction would operate all year.

- To people who bring a dog, unless the dog is kept on a lead along the following trail sections:
 - GAL-1-S049;
 - GAL-2-S068 to GAL-2-S071;
 - GAL-3-S028 to GAL-3-S036;
 - GAL-4-S001 to GAL-4-S015;
 - GAL-4-S017 to GAL-4-S020; and
 - GAL-4-S028 to GAL-4-S035.

These restrictions would operate all year

Natural England has identified other areas that require some form of intervention for the purpose of protecting and conserving the nature conservation interests of the designated land in question. However, the proposed exclusions under s25A meet this need and therefore no further intervention is required. If during a future review, any of the proposed s25A exclusions are deemed to be unnecessary, Natural England will undertake a further assessment to ascertain if some form of intervention is still required for the nature conservation purpose above.

The restrictions and exclusions described above are considered necessary to ensure continued protection of sensitive features, and consistent with the precautionary principle. All such restrictions and exclusions are subject to periodic review, including consideration of any new evidence available. Review is a statutory requirement for all directions that would exclude access annually for any period of more than five years.

4. Winter route diversion (Drumburgh Marsh)

At Drumburgh Marsh, Natural England proposes to exclude access to part of the ordinary route during the winter to reduce the risk of disturbance to assemblages of waders and wildfowl wintering on the marsh. This is necessary because of the presence of a roost site that supports significant numbers of birds during the winter, close to the ordinary route, which is along the top of a floodbank thereby presenting a high risk of disturbance. This exclusion would operate between September 1st and March 31st each year (the months when records show that assemblages of waders and wildfowl are present in significant numbers). See Map L in the Overview to National England's published coastal access report.

The exclusion would affect trail sections GAL-2-S076 to GAL-2-S084 as shown on report map 2k.

When this exclusion is in operation, an alternative route (trail sections GAL-2-A011 to GAL-2-A023), will be provided as indicated by the orange line on report maps 2s and 2t. Appropriate signage and on-site interpretation media will advise and direct people along the alternative route. The initial purchase and installation costs for these would be met by Natural England as part of the establishment works to prepare the route for use. The local access authority would maintain them in line with national standards that apply to all National Trails.

To ensure that the winter route diversion is being complied with and that the risk of disturbance to the non-breeding bird roost is avoided or minimised, Natural England will arrange for gates near to either end of the excluded path sections (proposed as part of the establishment works, following approval) to be securely fastened during the proposed access exclusion period. Notices, advising walkers of the seasonal alternative route and the reasons for the exclusion, will be posted at either end of the excluded sections and at the entrances from the public road of the two tracks that lead down towards the marsh. Natural England is also considering the installation of monitoring equipment ('people-counters') in this general area, data from which will help to inform access management in similar areas.

Additional management actions to secure the safeguard of the bird roost include interpretation, enforcement or changes to the ordinary route in response to any future changes. Furthermore, Natural England will look for opportunities to work with landowners and partners towards further access management, engagement and interpretation enhancements in this area.

5. Physical barriers to access

The route described at (1) above is often already separated from the adjacent coastal margin on the seaward side of the trail by existing barriers, such as hedges and fences, which will tend to discourage walkers from visiting sensitive areas and consequently causing a disturbance to birds. If in the future, the hedges and fences no longer provide this level of protection to the sensitive areas Natural England will undertake a further assessment to ascertain if some form of intervention is still required. Monitoring of these existing barriers in critical locations will be undertaken as part of the periodic inspection undertaken by the local access authority, as part of the standard maintenance procedures.

Where no such barriers are present to discourage walkers from accessing sensitive areas, and where there would be risk of significant effect to features of interest from increased disturbance, Natural England proposes to erect new fences and / or strengthen existing boundaries designed to discourage people leaving the proposed route. This solution is proposed at:

- Grune Point, where a new post and wire fence will be installed. This is shown on report map 4m.

6. Other Measures

Due to the nature of the terrain at various marshes, Natural England proposes to install a large number of new sleeper bridges along the following trail sections:

- GAL-2-S068 to GAL-2-S069;
- GAL-4-S011 to GAL-4-S015; and
- GAL-4-S028 to GAL-4-S035.

The provision of these sleeper bridges, in conjunction with way marking, will help to create a more defined route across the respective marshes. This will encourage more people to follow the England Coast Path itself and will have the effect of channelling / managing existing users of the marsh as opposed to attracting large numbers of new visitors to the site. The installation of these bridges, which will be suitable for the passage of small all-terrain vehicles where appropriate, will also assist in reducing existing levels of damage to the SAC from authorised use of vehicles by providing a suitable crossing point for land managers / commoners over the creeks.

Each of the 146 sleeper bridges will have an abutment area of approximately 1m², combining to give a direct total loss of SAC saltmarsh habitat of 146 square metres (representing less than 0.0003% of saltmarsh area within the SAC). The area beneath each bridge span will not be significantly impacted by the installation of the bridges, given their design, and is not regarded as representing any loss of habitat. This figure represents a maximum loss as the installation of the bridges will result in remediation of current creek crossings for the reasons mentioned above; it is likely that the installation of these bridges will lead to an overall increase in functioning salt-marsh habitat in other parts of the SAC.

The proposals include the provision of a new bridge over the River Waver, in the vicinity of Abbeytown. This has been considered as part of the appraisal but falls outside of the sites listed above. Subject to suitable method statements, it will not impact on protected species. The bridge will require consent from the Environment Agency.

In accordance with our Outcomes approach, Natural England will continue to look for other opportunities to enhance and improve nature conservation along the coast, alongside public access measures, even when not specifically identified as a mitigation requirement in relation to the main published coastal access proposals.

The RSPB have agreed to assist Natural England with site monitoring at Campfield Marsh to ascertain the levels of access onto the marsh, prior to and after the introduction of the Coastal Access rights.

The purpose of the monitoring would be to:

- Make a baseline assessment of access to the land adjoining the route to seaward before access rights are introduced;
- Identify changes in levels or patterns of use, following the introduction of rights, and any risks to features of nature conservation importance arising from these changes in use; and
- Identify and secure any additional access management requirements, in particular any need to vary proposed provisions for access to the Coastal Margin in this area which currently has low levels of existing access, to avoid the risk of significant effect to these features of nature conservation importance.

The best locations and timing of observations would be decided in discussion with representatives of the RSPB locally.

7. Public information

People are more likely to support and observe the new access arrangements if they are clearly explained and justified. To this end Natural England proposes that there should be information boards in places along the route where people join the trail and/or arrive at key locations, to make them aware of the extent of their rights and responsibilities, the nature conservation interests and how to further the conservation effort. Where existing information boards are satisfactory for this purpose they would be retained. Where they are not, new ones would be provided as part of the England Coast Path establishment works. Wherever possible, Natural England will coordinate such interpretation measures with other stakeholders locally, both to simplify and enhance the messages and to reduce proliferation of such infrastructure.

Some information at other key points in the wider coastal margin may also be beneficial for the same reason – for example to explain access arrangements or the likely effects of the tide at specific locations.

The initial purchase and installation costs for signs and notices would be met by Natural England as part of the establishment works to prepare the route for use. The local access authority would maintain them in line with national standards that apply to all National Trails. Refer to Natural England's published coastal access report for full details.

Section 2: PREDICTED CHANGE IN PUBLIC USE OF AREA

[For completion only if the Responsible Officer has initial concerns about the potential impact of the new access proposal on the conservation objectives for the designated sites.]

How do visitors already use the site (or sites)?

In terms of current recreational activity this part of the appraisal divides the site into five sectors (these correspond with the chapters of the report):

- Gretna to Carlisle;
- Carlisle to Bowness-on-Solway;
- Bowness-on-Solway to Whitrigg Bridge;
- Whitrigg Bridge to Silloth; and
- Silloth to Allonby.

Gretna to Carlisle

Between Gretna and Metal Bridge (Mossband Marsh) there are no existing Public Rights of Way or any other areas that are open for the public to access. The road that runs parallel to the M6 and links Gretna to Metal Bridge is fast and unsafe to walk along its entire route as there is no pavement provided. At Metal Bridge, the proposed route is aligned on a wide hard shoulder over the bridge, allowing adequate separation between walkers and passing traffic.

After crossing Metal Bridge, there is a limited network of Public Rights of Way that people can use to walk to Rockcliffe Cross and Rockcliffe, to the rear of Rockcliffe Marsh. There are no existing public access rights over Rockcliffe Marsh itself or around the majority of its landward edge. All access is currently managed by Castletown Estate and a permit system is in operation.

It appears that the most popular parts of this particular sector, currently visited by walkers, are between Demesne Marsh and Carr Beds to the south of Rockcliffe. Demesne Marsh and the banks of the river Eden, to the north of Rockcliffe, have a few existing Public Rights of Way and other tracks with some access rights. These seem to be popular, particularly for residents of local villages, often with dogs present.

Running south from Rockcliffe, and following the bank of the River Eden (which is internationally designated as a Special Area of Conservation or SAC), is an existing Public Right of Way. As to be expected, the route along the river bank seems, for the first few kilometres at least, to be well used. After that, use seems to 'thin' out but it is clear that people do use this route for leisurely walks along the river. Use of this path seems to decline further between Cargo and the new road bridge at Knockupworth but there is evidence that this is a popular stretch of river for fishing.

There is a small area of registered common land, designated as CROW access land, to the south of Rockcliffe. There are several walked lines through this particular area and it appears as if, for many walking out from Rockcliffe, this could be the return point for their walk.

Carlisle to Bowness-on-Solway

Heading north from Knockupworth Bridge along the west side of the River Eden SAC is the popular Hadrian's Wall Path National Trail. In some locations the proposed line of the England Coast Path will be co-aligned with the existing National Trail (Knockupworth Bridge to Grinsdale; at the back edge of Burgh Marsh; and from Westfield Marsh to Bowness-on-Solway). Between Beaumont and the western end of Burgh Marsh, the optional alternative route to the England Coast Path will follow the line of the Hadrian's Wall Path National Trail.

There is a good network of Public Rights of Way within this sector of the coast. Public Rights of Way extend all the way along the bank of the River Eden SAC from Knockupworth Bridge to Sandsfield. The Public Rights of Way are less well used between Beaumont and Kirkandrews on Eden and to the north of Grinsdale – possibly because so many walkers follow the line of the Hadrian's Wall Path National Trail at this point.

Burgh Marsh, an area already designated as CROW access land by virtue of being registered common land,

and Easton Marsh are well used by walkers often with dogs present. There are several informal lay-bys close to both marshes that provide direct access onto and across the marsh. However, it is unlikely that the majority of those using the marsh walk too far, due primarily to the nature of the terrain and difficulty in crossing drainage channels without bridges in place.

There is currently no formal public access along the coast from the western end of Easton Marsh, across Drumburgh Marsh, although there is evidence of informal public access in this area, both across and inland of the marsh itself. Once around the headland at Glasson, an existing walked line across Westfield Marsh is well used by people, often with dogs present. The Hadrian's Wall Path National Trail provides an existing popular walked route from Port Carlisle to Bowness-on-Solway.

Bowness-on-Solway to Whitrigg Bridge

Other than the coastal road, there are very limited existing opportunities to walk along the coast around the entire Cardurnock peninsula.

The Sustrans National Cycle Network (NCN) Route 72 follows the coast road, and from Bowness-on-Solway to Pasture House the road passes on the landward side of the marsh, providing good views over the estuary. From Pasture House south and all the way to Anthorn, the road is set back somewhat from the coast and is separated from the outer marsh by agricultural land. There are no existing Public Rights of Way that allow people to cross the marshes or agricultural land. A single Public Right of Way does provide a link from the coastal road at Cardurnock onto Anthorn and Cardurnock Marsh but it does not then extend out across the marsh in any direction, and there is not much evidence to suggest that this is a particularly well used path.

Several informal car parking areas along the coastal road adjacent to Campfield Marsh provide good opportunities for those wishing to take in the views or bird watch. The location of these parking areas (some of which contain formal information and interpretation boards) means that some limited access onto Campfield Marsh does take place – often to bird watch. The area of marsh immediately seaward of the road, along much of this part of the coast, is very wet for much of the year; this probably provides an effective deterrent to more widespread access on foot.

There is a good network of Public Rights of Way that run inland from Bowness-on-Solway and across Bowness Common. Some of these form part of a locally promoted route, 'Solway Coast Rambles', published by the Solway Coast Area of Outstanding Natural Beauty (AONB). Apart from a short section of this route which runs along the road near Anthorn and Campfield Marsh, this locally promoted 'ramble' avoids any coastal walking routes.

East of the village of Anthorn, there are no other existing formal access rights on any of the marshes (Anthorn Longcroft and Whitrigg) although there is evidence of informal access on Anthorn Marsh (the small strip of marsh between the road and the river). This area is reportedly well used by locals, again often with dogs present.

There is also some evidence on the ground of an informal walked route on Anthorn Marsh along the northern bank of the River Wampool.

There is a small parcel of CROW access land (registered common land) located between Whitrigg and Longcroft Marsh, on the northern side of the River Wampool; however, this is effectively an access island site currently, with no legal means of access to it, and is consequently unlikely to be well used.

Whitrigg Bridge to Silloth

There are few existing Public Rights of Way on the coast between Whitrigg Bridge and Skinburness, although from Skinburness through to Silloth there is a good network of Public Rights of Way and existing access arrangements that appear to be well used, particularly around Grune Point and all the way through to the promenade and lifeboat station in Silloth Town.

There is currently no formal access on Newton and Saltcoates Marsh or Rabycote Marsh other than by wildfowling, although it is understood that locals do sometimes access Newton and Saltcoates Marsh.

The whole of Skinburness and Calvo Marsh is currently designated as CROW access land and there are no local restrictions or exclusions in place. There are few obvious established routes or desire lines across the marsh but one route running approximately along the line of the Cumbria Coastal Way is occasionally visible on the ground. There are some old waymark signs along this route and stiles in existing fences but it does not appear as if the route is well used throughout the year.

Grune Point is a particularly popular and much-visited area, and attracts both locals and visitors alike. The area is included on several websites promoting access and wildlife in the AONB. There appears to be some de facto access occurring on the outside edge of Grune Point, with visitors walking onto or around the point on the shingle beach. A few other desire lines are evident on the ground that suggest visitors are walking on routes that are some way off the definitive line of the existing Public Right of Way.

The line of the former Cumbria Coastal Way runs around the edge of Grune Point using the existing Public Right of Way and then continues south to Silloth at the back of the sea defence wall using a combination of de-facto access and Public Rights of Way.

Silloth to Allonby

Aside from people using the beaches at Silloth and Allonby (both very popular locations in summer months), the main way in which people access this length of the coast is by short or long walks along the coast and through the dunes. These walks tend to radiate out from key locations such as Silloth town centre, Mawbray, Allonby and from the numerous informal lay-bys and car parks that are located along the coast road. There is de-facto access on and across the beach and dunes along this entire length of coast.

The line of the former Cumbria Coastal Way runs south from Silloth, along the seaward edge of Silloth Golf Course and then all the way through to Allonby, on the seaward side of the B5300, at the top of or just above the foreshore. Historically this has been a very popular and well used route and, even though it is no longer formally recognised by Cumbria County Council, it is still used by locals and by those wishing to walk longer distances. When the tide is out many people simply opt to walk along the beach rather than follow the waymarked line through the dunes.

There is an area of existing CROW access land that stretches from Beckfoot through to Mawbray and onward to Dubmill Point. Within this area there are several existing walked lines that have developed close to the seaward edge of the dunes. A separate section of CROW access land between Mawbray Yard and Dubmill Point is currently fenced off and receives few, if any, visitors.

Large areas of the dune habitat from just north of Dubmill Point through to Allonby have suffered from significant erosion over the last few years, which has meant in some places there is no longer anywhere for people to walk on the seaward side of the coastal road, other than on the beach itself.

How is the new access proposal likely to affect use of this site (or sites) by the public?

The following section identifies anticipated changes in access along the following stretches of the new England Coast Path and over its associated coastal margin by both people and dogs, with particular reference to potential impacts on nature conservation interests:

The views expressed are those of Natural England's coastal access delivery team and Open Access casework officer, in consultation with officers from Cumbria County Council. With regards to estimates of changes in levels or patterns of use, particularly relating to national access programmes, these officers have a great deal of knowledge and experience, which underpins the predictions below.

Gretna to Carlisle (Chapter 1)

Gretna to Metal Bridge

Expected significant increase: There is very little current access provision available. Access by private agreement or right is likely to continue unchanged.

Signage and waymarking will help to encourage people, including those with dogs, to remain on the trail in this area which offers good views over the Solway Firth. The project team would not expect to see any additional use of the coastal margin in this area due to the difficult terrain, the lack of any obvious features that might attract users and the restrictions proposed under s25A and s26.

Metal Bridge to Esk Boathouse

Expected slight increase: The line of the England Coast Path will utilise the existing Public Right of Way to link the England Coast Path from Metal Bridge with Esk Boathouse. The existing Public Right of Way is not well used at present but an improved link with better furniture and signage is likely to provide more confidence to those wishing to use the route.

This proposed route alignment would create a larger area of coastal margin that includes several agricultural fields between the line of the trail and the river Esk. There are very limited incentives to leave the line of the proposed trail in this area and this will be reinforced by s25A and s26 restrictions on areas with nature conservation sensitivities.

Esk Boathouse to Demesne Marsh

Expected significant increase on trail only: There is currently no public access in this location or across Rockcliffe Marsh. The creation of the England Coast Path would not only appeal to long distance walkers but it would also provide a useful link for local residents and visitors (mainly walkers and bird watchers) from Rockcliffe and would allow those currently accessing Demesne Marsh to extend their walk further north along the flood bank. There is ongoing work to improve the nature conservation status of the marsh and some of the measures, such as stock fencing and gapping up of hedge lines, will support management of Coastal Access

in a way that limits risk of disturbance from the ECP of birds on the marsh itself.

Due to the importance of Rockcliffe Marsh for breeding and wintering birds, and the very fact that general access to the public is not currently allowed, it is distinctly possible that use of the coastal margin here would see a large increase in levels of access, if new access rights are not restricted. The vast area of the marsh and the nature of the terrain would not make it easy for people and their dogs to access but, nonetheless, numbers wishing to access the marsh could increase significantly. However, Natural England has proposed that new access rights will be excluded from the marsh under s25A of CROW. Hence, it is not anticipated that there will be increased access to Rockcliffe Marsh.

Demesne Marsh to Rockcliffe

Expected slight increase: Good provision of existing access which appears to be reasonably well used by local residents.

The project team considers that there is likely to be a small increase in numbers of people walking on the proposed line of the England Coast Path at Demesne Marsh, so as to gain access to the newly accessible flood bank leading to Esk Boathouse.

Rockcliffe to Cargo

Expected slight increase: The line of the England Coast Path would follow the line of the existing Public Right of Way (or the existing walked route, where the right of way has been lost to erosion) on the edge of the river and, as such, the project team are not envisaging a significant increase in people using the path in this location. This path is already well used by walkers (mainly by local residents for short walks out of Rockcliffe and Cargo) and for access to the river bank by local fishermen.

Cargo to Knockupworth Road bridge

Expected slight increase: The line of the England Coast Path would follow the line of the existing Public Right of Way that runs on the bank of the River Eden. Consequently, the project team do not expect a significant increase in the numbers of people using this path from current levels.

In order to gain access across the new Carlisle northern by-pass road bridge over the river at Knockupworth, a new access link will be created inland and across the fields to enable people to leave the river bank and get to Holme Lane, prior to accessing the pavement on the bridge itself.

Carlisle to Bowness-on-Solway (Chapter 2)

Knockupworth Road Bridge to Grinsdale

Expected very low increase: The proposed line of the England Coast Path would head north, following the bank of the river and using the line of the existing Hadrian's Wall Path National Trail. As a result the project team consider that there would not be any noticeable increase in use along this part of the route.

Grinsdale to Beaumont

Expected moderate increase: After following the river for some distance, the Hadrian's Wall Path National Trail then moves inland from Grinsdale. At this point, the line of the England Coast Path would continue to follow the existing Public Right of way along the edge of the river.

This route doesn't appear to be particularly well used at the present time; therefore the project team consider that the levels of access along the Public Right of Way may increase following the introduction of coastal access rights.

Beaumont to New Sandsfield

Expected slight increase: To the north of Beaumont, the route would follow the existing Public Right of Way (or at least the walked line that currently exists on the ground). The further away from Beaumont, the less well used the path seems to become although there is some evidence of walkers and fishermen using this riverside route all the way through to the marsh at New Sandsfield.

The project team are expecting to see a limited increase in use here, due to the creation of coastal access rights to parts of the river bank (near Beaumont) that have been inaccessible for some time. If the proposals are approved, it will be possible to complete a short circular walk using both the line of the England Coast Path and Hadrian's Wall Path National Trail.

In aligning the England Coast Path from Beaumont to Dykesfield the project team are aware that some sections of the route may at times be affected by high tides and flooding. To counter this, the project team are proposing an optional alternative route that would follow the line of the existing Hadrian's Wall Path National Trail. This route would reduce people's journey from Beaumont to Dykesfield by approximately 5km. It is reasonable to assume that many users may actually use this as a short cut at other times of the year. As a result, any increase in numbers of people using the route of the new England Coast Path in this area might not

be as much as would otherwise be expected.

New Sandsfield to Old Sandsfield

Expected very low increase: The England Coast Path will then move inland from New Sandsfield Marsh and follow a short section of existing highway before returning to the river bank near New Sandsfield and Holmesmill. The route will continue along the edge of the river to meet up with the Public Right of Way that leads onto the eastern corner of Burgh Marsh at Old Sandsfield. As there will be no route linking New and Old Sandsfield in the Coastal Margin it is not anticipated that there will be any increase in access to the margin from people or dogs.

Old Sandsfield to Easton Marsh (includes Burgh Marsh)

Expected slight increase on trail/little change in coastal margin: Burgh Marsh is already designated as CROW access land, by virtue of being registered common land, and although there are some Public Rights of Way that allow people to gain access out onto the marsh, there are no Public Rights of Way or clearly defined routes or lines that run laterally across the main body of the marsh itself.

It would appear that most visitors to the marsh don't walk too far away from the road, although it has been observed that some do take their dogs from car parking areas onto the outer parts of the marsh, where there is less vegetation and where the terrain makes walking easier.

The provision of the England Coast Path across the marsh is likely to encourage more people to follow the route itself and, as a result, could have the effect of channelling and managing existing users of the marsh, as opposed to attracting large numbers of new visitors to the site.

Due to the nature of the terrain, and the already existing limited number of access points, the project team does not envisage that there would be a significant increase in people accessing the coastal margin at this point. The existing national restrictions requiring owners to keep their dogs on leads, in connection with current CROW access arrangements, will be replicated by a similar restriction on new coastal access rights.

Easton Marsh to Drumburgh (Milecastle 76)

Expected little or no change: The existing line of the Hadrian's Wall Path National Trail runs along the edge of the road at the rear of the marsh. The project team propose to align the England Coast Path along the top of the flood embankment at the rear of Easton Marsh.

The embankment is already used by some walkers as it affords better views over the marsh and in part is screened by various trees and shrubs that grow on its southern bank.

Easton Marsh has no formal access rights but is well visited by walkers. The informal car park on the western edge of Easton Marsh, just outside Drumburgh, is a popular place for people to start their walk over the marsh.

Due to the nature of the terrain, the project team consider that many visitors do not walk out too far across the marsh, with most limiting their visits to areas in relatively close proximity to their car and the road. The project team do not consider that the current use of the immediate area is likely to change significantly following the introduction of coastal access rights.

Drumburgh (Milecastle 76) to Port Carlisle

Expected significant increase on trail only/no change on coastal margin: There is currently no formal access around the small headland at the western end of Easton Marsh. New access would be created here which, due to the location of the existing car park and levels of use of people visiting Easton Marsh, may well lead to a significant increase in use once coastal access rights commence. There is already some limited informal access taking place, but given the creation of a new formal route for the England Coast Path, and due to the location of the existing car park and levels of use of people visiting Easton Marsh, the Project Team consider a significant increase in use of this area to be likely, along the line of the trail itself, once coastal access rights commence. The provision of seasonal restriction on path usage here will limit access during the more sensitive winter months when the marshes in front of the ECP are used by non-breeding birds. This reflects the approach described at part 4 of Section 1, above.

The project team consider it is unlikely that the coastal margin would see any significant increase in use in this area, due to the uninviting terrain. In some areas, like Westfield Marsh, there is already permissive use of the marsh by local residents. The coastal margin from Milecastle 76 to 77 is one large mudflat and it is not easy to access or walk over so any increase in use of this area is anticipated to be negligible.

Port Carlisle to Bowness-on-Solway

Expected slight increase: The line of the England Coast Path would follow the line of the existing Hadrian's Wall Path National Trail along the edge of the road, Bowness Marsh and onwards to Bowness-on-Solway. Given the popularity of this existing national trail, a significant increase in numbers of visitors is unlikely,

following the introduction of coastal access rights.

Bowness Marsh would form part of the coastal margin but this appears to be already well used by local dog walkers, although some recently installed fencing on the marsh has restricted the movement of walkers somewhat. The project team consider it is unlikely there would be any significant increase in use of the marsh following introduction of coastal access rights.

Bowness–on-Solway to Whitrigg Bridge (Chapter 3)

Bowness on Solway to Scargavel Point

Expected slight increase: The line of the England Coast Path will run along the edge of the coastal road at the rear of Campfield Marsh.

The project team would expect most people walking the England Coast Path to follow this direct line and would not expect many to move away from the path and into the coastal margin (Campfield Marsh).

Some people already do this, perhaps to bird-watch or to take in views across the estuary to Scotland but the terrain isn't that easy for walking, in addition access to the marsh west of Bowness viaduct is warded by the RSPB to prevent disturbance to feeding and roosting birds. This wardening of the RSPB reserve will continue. Taking these factors into account, the project team are not expecting any significant change after the introduction of coastal access rights, particularly within the coastal margin.

Scargavel Point to Cardurnock

Expected slight increase: The line of the England Coast Path will follow the coastal road all the way around the peninsula through to Cardurnock.

By proposing this route rather than creating a new route on the marsh, it would mean that the coastal margin would include agricultural land and Cardurnock Marsh itself.

Access opportunities to the marsh are likely to be limited to the western edge of Campfield Marsh or via the existing Public Right of Way from Cardurnock. Because of its importance to breeding and wintering birds access to the coastal margin will be subject to s26 restrictions in areas not covered by the proposed s25A exclusion.

The project team consider that the relatively remote location of the marsh from any nearby large settlements, the nature of the terrain (on the marsh and in the adjacent agricultural fields), and the access restrictions make it unlikely that there would be a significant increase in people or dogs wishing to access these parts of the coastal margin.

Cardurnock to Anthorn

Expected very low increase: The line of the England Coast Path would continue to follow the coastal road all the way into Anthorn. It is not a well utilised route for walkers (perhaps due to its relatively remote location) access to the margin will be restricted under s26. As a consequence the project team are not envisaging that there would be a significant increase in numbers of people using the route and coastal margin after the introduction of coastal access rights.

Anthorn to Whitrigg Bridge (River Wampool)

Expected slight increase: The line of the England Coast Path will cross Anthorn Marsh using the existing walked line before following a new route at the back edge of Longcroft Marsh. The line of the trail will remain at the back of the marsh until it joins the road near Beckbrow Cottage where, meeting with the optional alternative route, the route will continue along the road until it meets the Whitrigg Road Bridge.

There are no existing public access rights along Anthorn Marsh and onto Longcroft Marsh, although evidence of de facto use by walkers. The project team believe there is likely to be a small increase in people using the general route of the England Coast Path in this area. The existing Cumbria Coastal Way cuts across the neck of the peninsula, between Drumburgh and Whitrigg bridge, avoiding a lengthy walk around the peninsula. It seems likely that some long-distance walkers will continue to choose this option, even after the creation of the England Coast Path. Due to nature conservation sensitivities and concerns over lack of suitability for access there will be restrictions over access to the coastal margin as a result of which no increase in access by people or dogs to the margin is expected.

Whitrigg Bridge to Silloth (Chapter 4)

Angerton Marsh and Newton and Saltcoates Marsh (Newton Arlosh)

Expected significant increase on trail only: The line of the England Coast Path will follow a new route along the inland edge of Angerton and Newton and Saltcoates marsh – as this usually provides a slightly higher and drier line for the trail. The project team does expect there to be an increase in walkers on the line proposed for the England Coast Path in this area given that there is currently no existing Public Rights of Way or other

access rights available along this section of the coast.

However, the project team envisage that signage and waymarking will ensure most walkers will stay on the line of the trail, and are therefore not expecting a significant increase in use of the marshland within the coastal margin, which will be subject to restrictions, in this area following introduction of coastal access rights. From a nature conservation perspective the most sensitive areas of this marsh are considered to be well-removed from the line of the path and in many areas vegetation will provide additional screening.

Between Whitrigg Bridge and Newton Arlosh, parts of the proposed England Coast Path will be flooded by high tides. In order to give people an opportunity to continue their journey whilst avoiding this area, an optional alternative route, via Angerton is being proposed. This route would follow existing roads and not affect nature conservation interests.

Newton and Saltcoats Marsh (Newton Arlosh), Rabycote Marsh and Rumbling Bridge

Expected moderate increase: The line of the England Coast Path will follow a new route along the inland edge of Newton and Saltcoates marsh – as this usually provides a slightly higher and drier line for the trail.

The project team does expect an increase in numbers of walkers using this area, mainly along the route of the trail, given that there is currently no existing Public Rights of Way or other access rights available along this section of the coast. The alignment of the ECP across the marsh follows a route considered to be removed from the areas of higher nature conservation sensitivity. The project team does not expect to see a large number of people wishing to access the coastal margin along the marsh section due to the restrictions being placed on the margin (including the need to keep dogs on a lead while crossing the marsh), the nature of the terrain, the lack of any obvious attractors, and its remote location (i.e. no nearby settlements, few car parking areas etc.). Appropriate signage, waymarking and the installation of several sleeper bridges will encourage walkers to stay on the line of the trail. As a consequence we do not expect to see a significant increase in use of the marsh within the coastal margin in this area, following introduction of coastal access rights.

At the southern end of Newton and Saltcoates Marsh, the proposed alignment of the ordinary route will initially be along the road and then along the existing disused railway line. The route will then cross the river Waver via a new footbridge. The project team thinks that this section of the trail will see more people wanting to use this section of the trail, as it is closer to Abbeytown and to existing riverside PROW which people already use for short walks. A short section of the existing PROW on the southern bank of the river Waver (close to Rumbling Bridge) has been affected during the recent (2015/16) winter storms. A new section of trail, inland of the eroding river bank, is being proposed that will allow users of the trail to walk past the affected area. However, the project team do not envisage there will be access to the coastal margin between Rabycote and Rumbling Bridge (due to river bank, fences, hedges, excepted land etc.)

At certain times between Newton Arlosh and Salt Coates, parts of the proposed England Coast Path will be flooded by high tides. In order to give people an opportunity to continue their journey whilst avoiding this area, an optional alternative route is being proposed. This route would follow existing roads and not affect nature conservation interests.

Skinburness and Calvo Marsh

Expected slight increase: The whole of Skinburness and Calvo Marsh is already designated as CROW access land, by virtue of being registered common land. The project team, based on information from the access authority, estimate that current levels of access are low, despite the Cumbria Coastal Way being aligned across it.

The project team expect a slight increase in those accessing the marsh following the introduction of coastal access rights, partly because new infrastructure and signage will help to give people confidence to cross the marsh. Given the nature of the surrounding terrain, they envisage that this increase would, in the most part, be limited to the waymarked 'line' of the England Coast Path. The project team consider that it is unlikely that many walkers would wish to access the coastal margin mainly due to the nature of the terrain and the difficulties in crossing drainage channels without bridges and this will be reinforced by access restrictions including the requirement to keep dogs on leads.

Grune Point

Expected slight increase: There is an existing Public Right of Way around Grune Point, and although it is not always clear on the ground, there is an obvious route that people do follow around the Point.

Given its proximity to Silloth and Skinburness, the route around Grune Point is already popular, often with dog-walkers, as it offers a short, attractive circular walk. Part of the Public Right of Way, on the western side of Grune Point has been lost to coastal erosion and, in order to avoid aligning the England Coast Path on the eroding shingle beach, a new section of route is proposed within the adjacent field(s).

The project team are not expecting to see a significant increase in use of this area over and above existing levels, either along the line of the England Coast Path or within the coastal margin, and they envisage that

new signage, waymarking and improved route management will help to manage access more effectively in this area, reducing risk to designated site features.

At Grune Point, part of the proposed England Coast Path might be flooded by high tides, therefore in order to give people an opportunity to continue their journey and avoid this area, an optional alternative route is being proposed that can be used when the main route is flooded. The route would follow an existing Public Right of Way near Marsh Farm.

Grune Point to Silloth Docks

Expected slight increase: The project team consider that this is already a popular route, following existing Public Rights of Way, promenade and sea defences that allow visitors to walk along the coast with good views of the sea and Scotland, across the Firth. It also provides good access out onto Grune Point where a short circular route is also well used.

The project team are not expecting to see a significant increase in use of this area, following introduction of coastal access rights, either along the line of the England Coast Path or within the coastal margin.

Silloth to Allonby (Chapter 5)

Silloth to Beckfoot

Expected slight increase: There are several existing walked routes through the dunes in this area and, probably due to its proximity to Silloth town centre; they are all very well used.

The line of the England Coast Path would follow an existing walked line situated at the landward edge of the dunes (seaward of the golf course and Wolsty Bank). The project team consider there may be a slight increase in use of this existing walked line following introduction of coastal access rights given the proximity to Silloth

The current levels of de facto access to the beach are reasonably high, given its proximity to the town and the project team are not expecting this situation to change significantly after the introduction of coastal access rights.

Beckfoot to Mawbray Yard

Expected slight increase: The project team are anticipating a slight increase in numbers of people accessing the coast between Beckfoot and Mawbray, on the basis that the England Coast Path would offer a much clearer and recognisable route for people who may wish to start or end their walk at Silloth.

Current levels of de facto access to the foreshore are moderate (to high), with many choosing to park and walk to the beach (often with dogs present) from car parks along this section of coast, including the car park at Mawbray Yard – one of the main Solway Coast Area of Outstanding Natural Beauty (AONB) promoted car parks. The project team does not expect levels of access to the beach to change significantly; it is possible that the provision of a new route above the foreshore may in fact decrease levels of use along the beach itself.

Mawbray Yard to Dubmill Point

Expected slight increase: The proposed line of the England Coast Path follows the existing walked route (previously the line of the Cumbria Coastal Way) that is located on the seaward side of the fence line.

There are no other walked lines through this area of dunes and the project team are not expecting to see any new lines develop. The project team might expect to see a small increase in numbers of those using this path here as the England Coast Path would provide a better, longer distance route compared to what is there at the moment (and particularly because the route from Allonby to Silloth would be an attractive day walk). However, the project team do not expect the increase to be significant.

The project team envisage that the levels of de facto access to the beach along this entire section are unlikely to change significantly following introduction of coastal access rights.

Dubmill Point to Allonby

Expected slight increase: – particularly by those wishing to make the trip from Allonby through to Silloth, or from those staying at the several camping and caravan sites nearby. Due to the loss of dune habitat because of recent coastal erosion, the proposed route between Dubmill Point and Allonby will, for part of its length, be on the landward side of the road. This will be a completely new route and will allow people to walk along this section of the coast without having to walk on the top of the foreshore. Having a passable route along the roadside will reduce access pressure on the foreshore and walkers with dogs are likely to keep them on a lead on or near to the road. It is possible that many walkers will continue to use the foreshore in this area, whilst perhaps those wishing to walk longer distances are likely to use the new route. In addition the foreshore here is subject to significant erosion and is likely to be more difficult to access as this continues.

The coastal margin in this area will largely be limited to the foreshore. Given the popularity of Allonby Bay already for recreational activities on the coast, such as kite surfing and horse riding, the project team feel it is

unlikely that there will be any significant change in levels or patterns of access over this area, after the introduction of coastal access rights.

Between Mawbray Yard and Old Kiln Farm, parts of the proposed England Coast Path will at certain times be flooded due to high tides. In order to give people an opportunity to continue their journey whilst avoiding this area, an optional alternative route, via Edderside is proposed. This route would follow existing roads and Public Rights of Ways.

Access case officer

Signed:



Name:

Kevin Vigars

Date:

21st July 2016

Section 3: POTENTIAL IMPACTS ON SENSITIVE FEATURES RESULTING FROM THE NEW COASTAL ACCESS PROPOSALS

3.1 Scope of and approach to the appraisal of sensitive interest features

Scope of and approach to the appraisal of sensitive features

Natural England has determined that the proposed line of the England Coast Path and its associated Coastal Margin is located within or adjacent to, and has the potential to affect, a number of sites designated under national and international legislation for their nature conservation interest. These sites are:

- **Upper Solway Flats and Marshes SPA**
- **Upper Solway Flats and Marshes RAMSAR**
- **Solway Firth SAC**
- **Upper Solway Flats and Marshes SSSI**
- **River Eden SAC**
- **River Eden and tributaries SSSI**
- **Silloth Dunes & Mawbray Bank SSSI**
- **Allonby Bay MCZ**

The proposed England Coast Path is also located within or adjacent to the **Solway Firth draft (d)SPA**, which is being considered for future designation. Additional features relevant to this site have also been assessed.

This appraisal represents Natural England's assessment of the proposals as necessary under the relevant legislation including:

- *Assessment of impacts on SSSIs and the requirement to fulfil Natural England's duties under S28G of the 1981 Wildlife and Countryside Act 1981 (as amended) to take reasonable steps, consistent with the proper exercise of your functions, to further the conservation and enhancement of the SSSI.*
- *Assessment of impacts on European designated sites (SPA, SAC, RAMSAR) under the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations");*
- *Assessment of impacts on Marine Conservation Zones under Section 125 and 126 of the Marine and Coastal Access Act (MCAA) (2009).*
- *Species protected under the Wildlife and Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2010*

In each case the assessment has been conducted in relation to the conservation objectives for the designated site. (<http://publications.naturalengland.org.uk/category/6490068894089216>)

The interest features of the relevant sites and their sensitivity to the Coastal Access proposals are discussed in this Section.

Mitigation measures:

The coastal access proposals have been through an iterative process as part of scheme development and modified to avoid and reduce potential significant effects on the designated nature conservation interest while still meeting the requirements of the approved Coastal Access Scheme.

It is recognised that without appropriate mitigation built into the proposals, significant effects on the sensitive interest features could arise from the Coastal Access Scheme. This is particularly the case in relation to the default assumption of the England Coast Path running as close to the shore as physically possible, and with the consequential introduction of access rights over the associated coastal margin. The mitigation measures which are integral to the proposals include:

- Careful alignment of the route itself, to avoid sensitive interest features;
- Informal management measures (interpretation, signs, gates etc);
- Formal legal restrictions or exclusions on new access rights.

The provisions of the Coastal Access Scheme do not affect existing requirements as set out under designated site legislation in particular the Wildlife and Countryside Act 1981 (as amended) and the Countryside and

Rights of Way (CRoW) Act 2000 to avoid damaging the interest features of designated sites. Consequently users of the England Coast Path and associated Coastal Margin are still required to adhere to the requirements of this legislation. Of particular relevance is the requirement not to cause disturbance to bird species which form part of the interest of these designated sites. Section 28P of the CRoW Act sets out the provision for enforcement of offences which can include fines and Civil Sanctions.

3.2 Details of Designated Sites and Interest Features

Upper Solway Flats and Marshes SPA, Upper Solway Flats and Marshes RAMSAR, Solway Firth SAC, Upper Solway Flats and Marshes SSSI, Solway Firth dSPA								
Interest Feature	SPA	draft/ SPA	SAC	Ramsar	SSSI			
Arctic tern; <i>Sterna paradisaea</i> (breeding)					✓			
Bar-tailed godwit; <i>Limosa lapponica</i> (non-breeding)	✓	✓			✓	✓		
Barnacle Goose (Svalbard); <i>Branta leucopsis</i> (non-breeding)	✓	✓			✓	✓		
Bewick Swan; <i>Cygnus columbianus</i> (non-breeding)						✓		
Black-headed gull: <i>Larus ridibundus</i> (breeding)						✓		
Black-headed gull: <i>Larus ridibundus</i> (non-breeding)		✓*						
Common redshank; <i>Tringa totanus</i> (non-breeding)	✓	✓			✓	✓		
Common redshank; <i>Tringa totanus</i> (breeding)						✓		
Common scoter; <i>Melanitta nigra</i> (non-breeding)		✓						
Common gull; <i>Larus canus</i> (non-breeding)		✓*						
Common shelduck; <i>Tadorna tadorna</i> (non-breeding)	✓*	✓*			✓	✓		
Common tern; <i>Sterna hirundo</i> (breeding)						✓		
Cormorant; <i>Phalacrocorax carbo</i> (non-breeding)		✓*						
Dunlin; <i>Calidris alpina alpina</i> (non-breeding)	✓*	✓*				✓		
Eurasian curlew; <i>Numenius arquata</i> (non-breeding)	✓	✓			✓	✓		
Eurasian oystercatcher; <i>Haematopus ostralegus</i> (non-breeding)	✓	✓			✓	✓		
Eurasian oystercatcher; <i>Haematopus ostralegus</i> (breeding)						✓		
European golden plover; <i>Pluvialis apricaria</i> (non-breeding)	✓	✓				✓		

Goldeneye; <i>Bucaphala clangula</i> (non-breeding)	✓	✓*					✓	
Goosander; <i>Mergus merganser</i> (non-breeding)		✓*						
Grey plover; <i>Pluvialis squatarola</i> (non-breeding)	✓*	✓*					✓	
Herring gull <i>Larus argentatus</i> (breeding)							✓	
Herring gull <i>Larus argentatus</i> (non-breeding)		✓*						
Lapwing; <i>Vanellus vanellus</i> (non-breeding)		✓*						
Lapwing; <i>Vanellus vanellus</i> (breeding)							✓	
Lesser blackbacked gull; <i>Larus fuscus</i> (breeding)							✓	
Northern pintail; <i>Anas acuta</i> (non-breeding)	✓	✓			✓		✓	
Pink-footed goose; <i>Anser brachyrhynchus</i> (non-breeding)	✓	✓			✓		✓	
Red-throated diver; <i>Gavia stellata</i>		✓						
Red knot; <i>Calidris canutus</i> (non-breeding)	✓	✓			✓		✓	
Ringed plover; <i>Charadrius hiaticula</i> (non-breeding)	✓	✓					✓	
Ringed plover; <i>Charadrius hiaticula</i> (breeding)							✓	
Sanderling; <i>Calidris alba</i> (-breeding)	✓*	✓*					✓	
Scaup; <i>Aythya marila</i> (non-breeding)	✓	✓			✓		✓	
Shoveler; <i>Anas clypeata</i> (non-breeding)	✓*	✓*						
Teal; <i>Anas crecca</i> (non-breeding)	✓*	✓*						
Turnstone; <i>Arenaria interpres</i> (non-breeding)	✓*	✓*					✓	
Whooper swan; <i>Cygnus cygnus</i> (non-breeding)	✓	✓			✓		✓	
Wigeon; <i>Anas penelope</i> (non-breeding)							✓	

Wintering waterfowl assemblages		✓	✓						
Assemblages of breeding birds characteristic of saltmarshes								✓	
Sandbanks which are slightly covered by sea water all the time				✓					
Estuaries				✓					
Mudflats and sandflats not covered by seawater at low tide				✓					
Reefs: honeycomb worm, biotopes supporting common mussel				✓					
Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves				✓				✓	
Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand				✓				✓	
Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>); Atlantic salt meadows				✓				✓	
Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland*				✓				✓	
Saltmarsh Transition communities								✓	
Vascular plant assemblage <i>Isle of Man cabbage, seaside centuary</i>								✓	
Invertebrate assemblage of saltmarsh & brackish marsh								✓	
Great Crested Newt; <i>Triturus cristatus</i>								✓	
Natterjack toad; <i>Bufo calamita</i>						✓		✓	
River Lamprey				✓					
Sea Lamprey				✓					

*Asterisk indicates these are named features of the SPA non-breeding bird assemblage.

River Eden SAC; River Eden and Tributaries SSSI	
Interest Features:	
SAC and SSSI	SSSI only

<p>Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation. <i>Rivers with floating vegetation often dominated by water-crowfoot.</i></p> <p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) <i>Alder woodland on floodplains.</i></p> <p>Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoetes-Nanojuncetea. <i>Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels.</i></p> <p><i>Petromyzon marinus</i> Sea lamprey</p> <p><i>Salmo salar</i> Atlantic salmon.</p> <p><i>Lampetra fluviatilis</i> River lamprey.</p> <p><i>Austropotamobius pallipes</i> White-clawed (or Atlantic stream) crayfish</p> <p><i>Cottus gobio</i> Bullhead.</p> <p><i>Lampetra planeri</i> Brook lamprey.</p> <p><i>Lutra lutra</i> Otter.</p>	<p>Invertebrate assemblage of exposed river sediment</p> <p>Breeding birds associated with the river and adjacent habitats</p> <p>Schelly <i>Coregonus lavaretus</i> (Ullswater only)</p>
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Silloth Dunes and Mawbray Banks SSSI.
Interest Features
<p>Pioneer Dune Communities</p> <p>SD1 <i>Rumex crispus</i> - <i>Glaucium flavum</i> shingle community</p> <p>SD2 <i>Honkenya peploides</i> - <i>Cakile maritima</i> strandline community</p>
<p>Mobile Dune Grassland communities</p> <p>SD5 <i>Leymus arenarius</i> mobile dune community</p> <p>SD6 <i>Ammophila arenaria</i> mobile dune community</p>
<p>Fixed Dune Grassland shifting dunes. Fixed dunes with herbaceous vegetation</p> <p>SD7 <i>Ammophila arenaria</i> - <i>Festuca rubra</i> semi-fixed dune community</p> <p>SD8 <i>Festuca rubra</i> - <i>Galium verum</i> fixed dune grassland</p> <p>SD9 <i>Ammophila arenaria</i> - <i>Arrhenatherum elatius</i> dune grassland</p> <p>SD10 <i>Carex arenaria</i> dune community</p> <p>SD11 <i>Carex arenaria</i> - <i>Cornicularia aculeata</i> dune community</p>
<p>Silloth Dunes & Mawbray Bank: Dune Heath</p> <p>H11 <i>Calluna vulgaris</i> - <i>Carex arenaria</i> heath</p>
<p>Species Features:</p> <p>Natterjack Toad <i>Bufo calamita</i></p> <p>Great Crested Newt <i>Triturus cristatus</i></p>

Allonby Bay Marine Conservation Zone (MCZ)

Interest Features

High energy intertidal rock
 Moderate energy intertidal rock
 Low energy intertidal rock
 Intertidal Biogenic reefs
 Intertidal coarse sediment
 Intertidal sand and muddy sand
 Moderate energy infralittoral rock
 Subtidal mixed sediments
 Blue mussel (*Mytilus edulis*) beds
 Peat and clay exposures
 Honeycomb worm (*Sabellaria alveolata*) reefs

Additional Features of concern

Feature	Status
Little Tern	Annex 1 species breeding on shingle

3.3 Management measures already in place to address issues and concerns related to current public access arrangements.

Concerns about existing public access and use and action already taken to address this (summary)

Gretna to Carlisle (Chapter 1)

In relation to the sensitive area for bird interest features at Rockcliffe Marsh, the staff at Castletown Estate and Cumbria Wildlife Trust maintain an effective wardening presence. They monitor and deter unauthorised access to areas of the marsh and foreshore along the Solway where there are concerns about disturbance to roosting, feeding and breeding birds. Access is granted by permission only.

The lack of disturbance from people is viewed as very important in supporting both breeding and non-breeding bird interest at Rockcliffe Marsh.

Carlisle to Bowness on Solway (Chapter 2)

Natural England is not aware of any concerns related to the impacts of existing levels of public access over much of this length of coast. However, there are some concerns about existing de facto access causing disturbance of roosting, non-breeding birds (particularly around high tides) in the vicinity of Drumburgh Marsh. It is regarded as essential that any such disturbance is not exacerbated by the introduction of new access rights in this area and Natural England will work with partners and local stakeholders to assess any existing impacts and secure necessary measures to address these. The England Coast Path programme provides opportunities to better understand levels and patterns of access, and to put in place positive management measures.

Bowness on Solway to Whitrigg Bridge (Chapter 3)

Campfield Marsh is managed by the RSPB which monitors both bird numbers and visitors. The RSPB also wardens the marsh to ensure there is no disturbance of the birds using the area. To assist in reducing the number of people and dogs accessing sensitive areas of the marsh they have provided car parks and laybys with interpretation at key points along the road out of Bowness on Solway. This allows visitors to view the birds whilst minimising the risk of disturbance. As an additional measure they have also created screening at key locations for birds which are sensitive to disturbance. As a further measure in response to the high risk represented by dogs, the area close to Bowness has been given over as a "sacrifice" area for local dog

walkers.

The lack of disturbance from people and dogs is viewed as vital in protecting and conserving the bird interest at Campfield.

Whitrigg Bridge to Silloth (Chapter 4)

No significant concerns have been brought to Natural England's attention in this area. However, an existing physical barrier will be replaced to help discourage access to an area of shingle bank which forms part of the coastal margin at the end of Grune Point.

Silloth to Allonby (Chapter 5)

Natural England is not aware of any concerns related to the impacts of existing levels of public access in this area.

3.4 Potential risks and impacts associated with the new coastal access proposals.

Potential concerns about the new coastal access proposals (summary)

Any significant change to levels and patterns of access in this area raises particular concerns about the following potential effects on habitats and species known to be sensitive to public access on foot:

- Changes to the populations and distribution of ground-nesting birds on saltmarsh and shingle and adjoining fields, as a consequence of changes in public access. This can arise through reduced breeding success, repeated disturbance, or physical trampling.
- Changes to the populations and distribution of non-breeding birds on the saltmarsh, its shoreline and adjoining fields, as a consequence of changes in the nature and levels of access by people and dogs; the main impacts arise from the effects of disturbance, resulting in reduced feeding/resting time, population declines and/or loss of available feeding and resting habitat.
- Impacts on Natterjack toad and Great Crested Newt populations caused mainly by dogs accessing breeding pools causing spread of disease and death of eggs and toadlets/newtlets due to silt deposition and trampling.
- Trampling of sensitive features causing damage and destruction
- Loss of area of designated features due to trampling or coverage by infrastructure such as footbridges on saltmarsh.

3.5 Assessment of potential impacts on the interest features of the designated sites.

3.5.1 Assessment of potential impacts on the interest features of Upper Solway Flats and Marshes SPA, Upper Solway Flats and Marshes RAMSAR, Upper Solway Flats and Marshes SSSI and Solway Firth dSPA: breeding and non-breeding birds.

NON-BREEDING BIRDS

For the purposes of this assessment, non-breeding birds have been grouped as follows:

- **Non-breeding waterfowl – Saltmarsh and Farmland feeding and intertidal roosting species**
- **Non-breeding waterfowl – offshore species**
- **Non-breeding waterbirds – Offshore feeding and inshore roosting species**
- **Non-breeding waterbirds – In-Shore/Saltmarsh feeding waterfowl**
- **Non-breeding waterbirds - Intertidal feeding species roosting on beaches and saltmarshes**

Non-breeding waterfowl – Saltmarsh and Farmland feeding and intertidal roosting species

Features: Whooper Swan; Bewick's Swan; Pink-footed Goose; Barnacle Goose; Wigeon; Lapwing; Golden Plover; Wintering Waterfowl Assemblage (in-part)

Current conservation status and use of the site

This group of species mainly feed on the marshes and adjacent farmland and roost on the intertidal or areas of pioneer saltmarsh. They are present on site from September until April (most species) or early-May (Barnacle Goose) when they migrate to their breeding grounds.

Ecological sensitivity and scope for interaction with the proposals

These species are sensitive to the loss of habitat and reduced survival and fecundity as a consequence of disturbance of feeding and roosting birds.

The ecological sensitivities for this feature relate to the areas of marshes and flats found on the Solway Estuary and adjacent farmland. These areas provide the birds with safe roosting (intertidal flats) and feeding (saltmarsh and farmland). The Barnacle Goose population is of particular sensitivity as the Solway is the only wintering ground of the geographically- isolated Svalbard breeding population. The quality of the non-breeding habitat, and the ability to maintain good body condition is critical not just for winter survival but also for breeding success as in some species such as Barnacle goose birds arrive on the summering grounds before there is food available and are dependent on stored fat reserves to carry them through the territory establishment, egg-laying and part of the incubation period of the breeding cycle.

Some of the areas of high usage by these species currently have little or no public access and there is a prediction for an increase in public use (see Section 2 for details). Maintaining low levels of disturbance is likely to be an important determinant of species distribution within the Solway as areas that are currently similar in physical habitat type but differ in current access provision often have different levels of usage, for example Burgh Marsh is much less used by feeding birds than the adjacent Rockcliffe despite similar vegetation communities being present. Barnacle Geese predominantly use the marshes adjoining Moricambe Bay, the fields and marshes of the Cardurnock Peninsula and Rockcliffe marsh with the whole of the Solway population using the latter area in the period immediately prior to spring migration. Other marshes, such as Burgh Marsh, are used less regularly for feeding, but still form an important habitat resource. In some areas including around Garriestown, on the Cardurnock Peninsula and around Newton Arlosh agricultural fields adjacent to the marshes are also feeding areas (WWT data; Mawby 2006). The other waterfowl species follow a similar pattern of distribution but with an increased use of farmland for foraging. Lapwing and Golden plover follow a similar pattern but with roost areas including the saltmarshes as well as the intertidal.

The reaction of this species to different disturbance events can vary significantly with some of the species on the Solway responding at distances of up to 400m to the presence of people on foot by adopting alert behaviour and taking flight. As a result there is risk of interaction through disturbance from modified public use of the coastal zone arising from Coastal Access from both the proposed line of the England Coast Path and associated the associated coastal margin. This has the potential to impact on both habitat extent and availability for these species both while feeding and roosting. A potential pathway therefore exists for an anthropogenic disturbance impact to occur, in the absence of any site-specific measures to manage visitors.

Any likely impact and mitigation

The proposed route alignment and restriction / exclusions have taken account of the sensitivity of these species to disturbance both with regards to foraging and roosting areas and including areas both on the designated site and adjacent farmland.

These measures include the routing of the path inland around the estuary, and adjacent fields of the Esk; limitation of access rights to the sea wall adjacent Rockcliffe Marsh (which has a backing mature hedge to

reduce sky-lining risk); adopting the road way for much of the route around the Cardurnock peninsula; avoiding Longcroft marsh; and crossing Newton, Calvo and Skinburness Marshes on a line removed from both adjacent inland fields and favoured low-lying marsh communities. This route, with associated restrictions of access for people and dogs, on either s25A or s26 grounds, to the marshes and foreshore, will serve to prevent disturbance to the species that use the marshes and farm and to feed and roost on the intertidal by separating Coastal Access users from sensitive areas for these species. Where the access route adopts roads or lies on the exiting public rights of way network adjacent to fields used by these species, such as around the Cardurnock Peninsula, there is not anticipated to be a significant change from current baseline levels or patterns of access.

In addition to the route alignment, and s25a/s26 restrictions on access to various areas of coastal margin, the physical measures (as previously described in Section 1) such as provision of creek crossings along an alignment that is sensitive to bird sensitivities will reinforce the restrictions by passively managing patterns of use, and supporting use of the line of the ECP over areas of saltmarsh, rather than dispersion of users into areas that are important for foraging. Where marshes are used by sensitive species but are already subject to Open Access provision under the CRoW legislation restrictions such as the requirement to keep dogs on leads are being replicated to ensure no increase in disturbance risk.

The distances between the path and the sensitive roosting / feeding areas are such that, for the majority of the time, the measures also provide the required level of confidence that the birds will continue with their normal feeding and roosting routine on the marshes and will not be displaced to areas of sub-optimal habitat.

Based on the balance of evidence available with regard to anthropogenic bird disturbance, and taking into account the specific details/measures built in to the proposal, it is considered unlikely that changes in use patterns as a consequence of these proposals will result in regular displacement of birds away from key areas.

CONCLUSION - *Subject to the fully effective implementation of the proposed mitigation measures and details of route alignment and design as proposed - the ecological resources and functions provided by the site will continue unchanged and it is therefore concluded that a significant effect on these interest features is not likely.*

Non-breeding waterfowl – offshore species

Features: Goosander; Scaup; Common Scoter; Goldeneye; Red-throated Diver; Wintering Waterfowl Assemblage (in-part)

Current conservation status and use of the site

All species feed offshore and roost on the water offshore, or in the case of goosander at fresh waterbodies away from the designated site.

Ecological sensitivity and scope for interaction with the proposals

These species spend little time in the areas affected by the proposals, instead both feeding and roosting on the shallow offshore waters of the Solway. Most species primarily use the waters of the outer Solway from Grune Point to Allonby, although Scaup regularly use the waters around Moricambe Bay and Goldeneye the tidal stretches of the Rivers that flow into the Solway, in particular the Eden and the Esk.

There are no areas where coastal access provision is considered likely to impact either directly or indirectly on the species, either as consequence of spatial separation or, in the case of goldeneye in the tidal river stretches as a result of no change from baseline conditions.

Any likely impact and mitigation

Because of the spatial separation of the access provision and these features, or the continuation of baseline conditions it is considered that the ecological resources and functions provided by the site for these species

will continue unchanged and it is therefore concluded that a significant effect is not likely.

CONCLUSION - *Subject to the fully effective implementation of the proposed mitigation measures and details of route alignment and design as proposed - the ecological resources and functions provided by the site will continue unchanged and it is therefore concluded that a significant effect on these interest features is not likely.*

Non-breeding waterbirds – Offshore feeding and inshore roosting species

Features: Cormorant; Black-headed Gull; Common Gull; Herring Gull

Current conservation status and use of the site

These species feed offshore, though in the case of the gulls often in inshore waters, but roost onshore. Cormorant roost primarily in the area from Grune Point to Dubmill Point, while the gull species are more widely distributed but with particularly large numbers around Dubmill Point shore and, in some conditions at least, around the mouth of the Eden where birds gather both to roost and preen in mixed flocks with other species.

Ecological sensitivity and scope for interaction with the proposals

While feeding these species are removed from areas of interaction with the Coastal Access proposals, however, while resting and preening these species are found on shore on areas of foreshore where they are at risk of disturbance and displacement by people and their dogs exercising rights of access to the coastal margin. Cormorants need to use land both to rest preen as other species do, but also to dry their feathers as unlike the feathers of most other birds (and as an aid to their foraging behaviour) their outer feathers are 'wetable' and not water resistant and consequently have to be dried out to keep them in good condition.

While under some conditions black-headed and herring gulls are very tolerant of people, particularly where exploiting anthropogenic food supplies, when preening and roosting they are less tolerant of disturbance and as with the other species may be displaced for roosting and preening sites at considerable distance. Of these three species Cormorant are the most disturbance sensitive and can be displaced by people or dogs at distances of over 150m.

Disturbance from roost areas reduced time spent maintaining feather condition and resting and can result in increased energy expenditure as birds relocate to alternative areas. Coastal access provision therefore has the potential to impact on both habitat extent and availability for these species both while preening in flocks and roosting. A potential pathway therefore exists for an anthropogenic disturbance impact to occur, in the absence of any site-specific measures to manage visitors.

Any likely impact and mitigation

Risk of impact for these species is highest in areas where the line of the ECP passes close to the shoreline in areas where birds will gather to preen and rest. In the case of the gulls this is predominantly around high water but the case of cormorant may be at any state of the tide as the bird's foraging behaviour is determined by accessibility of fish.

On the outer Solway the shoreline from Silloth to Allonby Bay is well used by roosting cormorant while large numbers of gulls gather to preen and roost around the northern stretches of Allonby Bay and around Dubmill point. Along this stretch there is also already a moderate level of *de facto* access to the foreshore which is expected to continue under the coastal margin provisions of Coastal Access. In the absence of any additional access points to the foreshore this is considered to follow the same patterns as current *de facto* usage. Around Dubmill Point the ECP will adopt a route landwards of the coast road as there is no capacity for a route on the seaward side of the road. The adoption of this route, and the anticipated response of users to leave the foreshore area when passing Dubmill Point and keep dogs on a lead in the presence of vehicles, will further

reduce the risk of changing access patterns affecting gulls in this area.

Around Grune Point it is anticipated that access patterns will not vary substantially from those currently being experienced due to *de facto* access, however, measures in this area to manage access for the protection of shingle-nesting species should be beneficial in reducing disturbance risk.

In the Inner Solway the line of the ECP is removed from the immediate high tide line/foreshore for much of its length while restrictions under s25A and s26 will serve to manage disturbance risk in the coastal margin. The main areas of concern here lie in areas where the path runs adjacent to the normal tidal limit as it does in areas around the northern section of the Cardurnock Peninsula and around Drumburgh Marsh. Around the Cardurnock Peninsula where the ECP is aligned close to the normal tidal limit, it is following existing rights of way so there is unlikely to be variation from existing usage patterns, the situation at Drumburgh Marsh is, however, different as the line of the ECP will follow a line which is only believed to receive very low levels of usage. This alignment brings the line of the ECP close to an area that is considered important for preening and roosting birds. This area appears well used by common and black-headed gulls for resting and preening, both because it is undisturbed but also because its position in a shallow embayment off the main Eden channel means that it acts as calm water eddy at times when there is considerable tidal flow through the estuary and which is topographically sheltered from the prevailing weather. In this area, in addition to restrictions on the margin provided through s25A/s26, the line of the ECP will be subject to a seasonal closure from 1st September until 1st April, with an alternate route identified. This will ensure that access is spatially removed from the areas of greatest sensitivity at the times of year that are most sensitive. The provision of an alternative route of the ECP as a mitigation measure will be reinforced by additional measures to secure gates towards either end of the excluded sections, and the provision of interpretation/notices explaining the reasons for the exclusion and the route of the alternative path to be followed. Monitoring may be initiated in this area so as to increase our knowledge of access management around sensitive sites, but the conclusions reached in this appraisal are not conditional on the outcome of any such monitoring.

The distances between the path and the sensitive roosting areas are such that, for the majority of the time, the measures also provide the required level of confidence that the birds will continue with their normal feeding and roosting routine on the marshes and will not be displaced to areas of sub-optimal habitat.

Based on the balance of evidence available with regard to anthropogenic bird disturbance, and taking into account the specific details/measures built in to the proposal, it is considered unlikely that changes in use patterns as a consequence of these proposals will result in regular displacement of birds away from key areas.

CONCLUSION - *Subject to the fully effective implementation of the proposed mitigation measures and details of route alignment and design as proposed - the ecological resources and functions provided by the site will continue unchanged and it is therefore concluded that a significant effect on these interest features is not likely.*

Non-breeding waterbirds – In-Shore/Saltmarsh feeding waterfowl

Features: Wigeon; Teal; Northern Pintail; Shelduck; Mallard; Shoveler; Wintering Waterfowl Assemblage (in-part)

Current conservation status and use of the site

These species feed on the foreshore and marshes and roost on the marshes
For these species the key period of sensitivity is from Sept – March.

Ecological sensitivity and scope for interaction with the proposals

These species form a grouping that feed either on the foreshore or the saltmarshes of the Estuary, mainly the

Inner Estuary east of Grune point, and roost on adjacent areas of undisturbed marsh. Most species exhibit a dispersed distribution with small numbers of individuals being found widely across the Inner Solway, however, both wigeon and pintail will form into larger flocks some of which roost along undisturbed lengths of shore and some of which roost on the tidal estuarine waters by day, moving onto the marshes to feed at night.

As species widely distributed across the saltmarshes and intertidal areas of the Inner Solway all these species may be affected by disturbance as a consequence of the Coastal Access proposals. Sensitivity to disturbance varies between species being highest in species like pintail and wigeon which can be disturbed at distances of 200m or more and lowest in species like teal which rely on camouflage and may only be displaced at distances of 40m or less. Disturbance in these species may affect ability to feed and rest, and may be most damaging at times of hard frost when food resources limit availability of feeding resources.

As a result there is risk of interaction through disturbance from modified public use of the coastal zone arising from Coastal Access from both the proposed line of the England Coast Path and associated the associated coastal margin. This has the potential to impact on both habitat extent and availability for these species both while feeding and roosting. A potential pathway therefore exists for an anthropogenic disturbance impact to occur, in the absence of any site-specific measures to manage visitors.

Any likely impact and mitigation

The proposed route alignment and restriction / exclusions have taken account of the sensitivity of these species to disturbance both with regards to foraging and roosting areas.

These measures include the routing of the path inland around the estuary, and adjacent fields of the Esk; limitation of access rights to the sea wall adjacent Rockcliffe Marsh (which has a backing mature hedge to reduce sky-lining risk); adopting the road way for much of the route around the Cardurnock peninsula; avoiding Longcroft marsh; and crossing Newton, Calvo and Skinburness Marshes on a line removed from both adjacent inland fields and favoured low-lying marsh communities. This route, with associated restrictions of access for people and dogs, on either s25A or s26 grounds, to the marshes and foreshore, will serve to prevent disturbance to the species that use the marshes and farm and to feed and roost on the intertidal by separating Coastal Access users from sensitive areas for these species. Where the access route adopts roads or lies on the existing public rights of way network adjacent to fields used by these species, such as around the Cardurnock Peninsula, there is not anticipated to be a significant change from current baseline levels or patterns of access.

In addition to the route alignment, and s25a/s26 restrictions on access to various areas of coastal margin, the physical measures (as previously described in Section 1) such as provision of creek crossings along an alignment that is sensitive to bird sensitivities will reinforce the restrictions by passively managing patterns of use, and supporting use of the line of the ECP over areas of saltmarsh, rather than dispersion of users into areas that are important for foraging.

The distances between the path and the sensitive roosting / feeding areas are such that, for the majority of the time, the measures also provide the required level of confidence that the birds will continue with their normal feeding and roosting routine on the marshes and will not be displaced to areas of sub-optimal habitat.

Based on the balance of evidence available with regard to anthropogenic bird disturbance, and taking into account the specific details/measures built in to the proposal, it is considered unlikely that changes in use patterns as a consequence of these proposals will result in regular displacement of birds away from key areas.

The ecological resources and functions provided by the site will continue unchanged and it is therefore concluded that a significant effect is not likely.

CONCLUSION - Subject to the fully effective implementation of the proposed mitigation measures and details of route alignment and design as proposed - the ecological resources and functions provided by the site will continue unchanged and it is therefore concluded that a significant effect on these interest features is not likely.

Non-breeding waterbirds: intertidal feeding species roosting on beaches and saltmarshes

Features: Ringed plover; Grey Plover; Eurasian Oystercatcher; Eurasian Curlew; Bar-tailed Godwit; Common Redshank; Dunlin; Red Knot; Sanderling; Turnstone; Wintering Waterfowl Assemblage (in-part)

Current conservation status and use of the site

These species can all be found feeding on intertidal areas of the Solway and aggregate into discreet roost sites at particular points along the on foreshore or the seaward edge of the marshes to roost. The distribution of these roosts is determined by factors which include lack of disturbance alongside physical constraints such as good visibility and proximity to feeding resource. Because the roosts act a focal point for birds from a large foraging area they are particularly sensitive. Different species are associated with different parts of the Solway, for example Bar-tailed Godwit, Knot and Sanderling are mainly found on the Outer Solway from Allonby Bay to Grune Point and around to Bowness-on-Solway, and Grey Plover are primarily found around Moricambe Bay, while other species, such as redshank, are more widely distributed being found in all areas (see Holt et al 2016 chapter 3 for a summary).

Key roost areas on the Solway associated with spring tides have recently been mapped (see Solway Firth Partnership 2016 - map to be annexed to this report in the future, subject to data licensing requirements).

For non-breeding waders the key period of sensitivity is from Sept-April

Ecological sensitivity and scope for interaction with the proposals

For these species all parts of their life cycle on the Solway are supported by land between the line of the ECP and mean low water therefore there is potential for all aspects of their non-breeding ecology to be affected by the provisions of coastal access.

These impacts include reduction of foraging and roosting habitat as a result of disturbance; loss of foraging time due to disturbance with consequent impacts on individual fitness; increased energy expenditure associated with disturbance and modified distributions within site leading to indirect impacts on individual fitness realised through density-dependant foraging impacts and the increased dependence on sub-optimal habitat.

Disturbance distances vary between species, and according to activity, with species such as turnstone in some circumstances tolerating people at distances of less than 30m (which allows roost to form in locations such as the lifeboat slipway at Silloth) while at roosting and tolerating closer approach when feeding, and up to 450m or more for species like curlew at roost effectively restricting their distribution to the least disturbed parts of the estuary (eg. Smit & Visser 1993, which is consistent with observations on the Solway).

Key roost areas on the Solway associated with spring tides have recently been mapped (see Solway Firth Partnership 2016) and these identify the key areas of sensitivity at periods of peak tides, however, other areas are sensitive at other states of the tide including key foraging areas close to shore, pre-roost areas on the foreshore and roost sites used predominantly on neap tides.

While some sensitive areas have a current level of *de facto* access others, such as Rockcliffe Marsh and Campfield Marsh, have little or no public access, and there is a prediction for an increase in public use (see Section 2 for details). Maintaining low levels of disturbance is likely to be an important determinant both of population health and species distribution within the Solway.

As a result there is risk of interaction through disturbance from modified public use of the coastal zone arising from Coastal Access from both the proposed line of the England Coast Path and associated the associated coastal margin. This has the potential to impact on both habitat extent and availability for these species both while feeding and roosting. A potential pathway therefore exists for an anthropogenic disturbance impact to occur, in the absence of any site-specific measures to manage visitors.

Any likely impact and mitigation

The proposed route alignment and restriction / exclusions have taken account of the sensitivity of these species to disturbance both with regards to foraging and roosting areas. All areas that have been identified a key roost areas, including both high tide roosts such as those identified in the Solway Firth Partnership roost mapping report (map to be annexed to this report in the future, subject to data licensing requirements), roosts used at other states of tide (such as at Drumburgh Marsh), and additional areas of sensitive habitat, such as the habitat creation site near Halltown Farm have been, have had measures identified to ensure that they are not affected by Coastal Access provision, or are safeguarded by other measures such as s25A restrictions on access. The only exception to this is along the coast from Grune Point to Allonby bay where there is not considered to be any variance as a consequence of these proposals from the current levels of *de facto* access.

These measures include the routing of the path inland around the estuary, and adjacent fields of the Esk; limitation of access rights to the sea wall adjacent Rockcliffe Marsh (which has a backing mature hedge to reduce sky-lining risk); adopting the road way for much of the route around the Cardurnock peninsula; and crossing Newton, Calvo and Skinburness Marshes on a line removed from the foreshore and associated marsh edge roost sites. This route, with associated restrictions of access for people and dogs, on either s25A or s26 grounds, to the marshes and foreshore, will serve to prevent disturbance to the species that use the marshes and farm and to feed and roost on the intertidal by separating Coastal Access users from sensitive areas for these species. Where marshes are used by sensitive species but are already subject to Open Access provision under the CRoW legislation restrictions such as the requirement to keep dogs on leads are being replicated to ensure no increase in disturbance risk to roosts or nearby foraging areas.

In addition to the route alignment, and s25a/s26 restrictions on access to various areas of coastal margin (including under s25A all areas of intertidal and most areas of saltmarsh in the Inner Solway eastwards of Grune Point, and under s26 key areas which have been identified as presenting a major skylining risk, such as the sea walls at Mossband and Garriestown), the physical measures (as previously described in Section 1) such as provision of creek crossings along an alignment that is sensitive to bird sensitivities will reinforce the restrictions by passively managing patterns of use, and supporting use of the line of the ECP over areas of saltmarsh, rather than dispersion of users into areas that are important for foraging.

After adoption of these measures the main residual areas of concern lie in areas where the path runs adjacent to the normal tidal limit as it does in areas around the northern section of the Cardurnock Peninsula and around Drumburgh Marsh. Around the Cardurnock peninsula where the ECP is aligned close to the normal tidal limit it is following existing rights of way so there is unlikely to be variation from existing usage patterns, the situation at Drumburgh Marsh is, however, different as the ECP will follow a line which is only believed to receive very low levels of usage. This alignment brings the line of the ECP close to an area that is considered important for pre-roost gathering and, on neap tides, roosting birds. This area appears well used by species such as redshank and curlew for resting and preening, both because it is undisturbed but also because it is topographically sheltered from the prevailing weather. In this area, in addition to restrictions on the margin provided through s25A/s26, the line of the ECP will be subject to a seasonal closure from 1st September until 1st April, with an alternate route identified. This will ensure that access is spatially removed from the areas of greatest sensitivity at the times of year that are most sensitive. As the provision of an alternative route of the ECP as a mitigation measure is an untested approach it cannot be concluded that it will be entirely successful at managing risk of disturbance, therefore a monitoring package has been identified that will allow the efficacy of the approach to be assessed and if necessary the ECP proposals to be modified.

In the areas of de facto access some measures being adopted may reduce current disturbance pressures. In particular around Grune Point it is anticipated that while access patterns will not vary substantially from those currently being experienced due to *de facto* access, measures in this area to manage access for the protection of shingle-nesting species should be beneficial in reducing disturbance risk.

Around Dubmill point there is also already a moderate level of *de facto* access to the foreshore which is expected to continue under the coastal margin provisions of Coastal Access. In the absence of any additional access points to the foreshore this is considered to follow the same patters as current *de facto* usage. However, around Dubmill Point the ECP will adopt a route landwards of the coast road as there is no capacity for a route on the seaward side of the road. The establishment of this route, and the anticipated response of users to leave the foreshore area when passing Dubmill Point and keep dogs on a lead in the presence of vehicles will further reduce the risk of changing access patterns affecting species using the intertidal and associated foreshore in this area.

Based on the balance of evidence available with regard to anthropogenic bird disturbance, and taking into account the specific details/measures built in to the proposal, it is considered unlikely that changes in use patterns as a consequence of these proposals will result in regular displacement of birds away from key areas and birds will continue with their normal feeding and roosting routine on the intertidal and marshes and will not be displaced to areas of sub-optimal habitat.

The ecological resources and functions provided by the site will continue unchanged and it is therefore concluded that a significant effect is not likely. The exception to this conclusion is at Drumburgh Marsh where a management package has been identified that will allow impact to me monitored at the ECP provision adapted if necessary.

CONCLUSION - Subject to the fully effective implementation of the proposed mitigation measures and details of route alignment and design as proposed - the ecological resources and functions provided by the site will continue unchanged and it is therefore concluded that a significant effect on these interest features is not likely.

BREEDING BIRDS

For the purposes of this assessment and distinguishing their ecological requirements and the nature and location of possible impacts, breeding birds have been grouped as follows:

- **Saltmarsh and Shingle breeding birds – Ground-nesting Species**
- **Saltmarsh and Shingle breeding birds – Thick vegetation and scrub nesting Species**

Saltmarsh and Shingle breeding birds – Ground-nesting Species

Features: Ringed plover; Lapwing; Common Redshank; Eurasian Oystercatcher; Herring Gull; Lesser Black-backed Gull; Black-headed Gull; Common Tern; Arctic Tern; Little Tern; Breeding bird Assemblage (in Part)

Current conservation status and use of the site

These species all breed on the ground in areas of saltmarsh or shingle foreshore. Within the Solway all the marshes and the foreshore of Grune Point and from Silloth to Allonby Bay are used to some degree by breeding bird species, however, the single most important sites are Rockcliffe Marsh, which has populations

of all the names species with the exception of little tern; Cardnock Marsh with lapwing; Grune point which is particularly important for breeding Little Tern, Oystercatcher and Ringed Plover and the foreshore from Beckfoot to Allonby Bay which also supports Ringed Plover, and Oystercatcher occasionally Little Tern.

A number of the species that form part of the site notification are also at critically low level including all the Terns, Black-headed Gull and Ringed Plover, increasing the risk that relatively impacts on productivity may result in site-wide impacts.

Ecological sensitivity and scope for interaction with the proposals

The ecological sensitivities for this feature relate to the areas of marshes, in particular Rockcliffe Marsh and the shoreline from Grune point to Allonby, these areas provide the birds with habitat for nesting and chick rearing. During the breeding season birds are dependent on limited areas of habitat for an extended period that persists from establishment of breeding territory through to the fledging of young. During this period they are at risk from disturbance and destruction of nests, eggs and chicks. Damage can occur through both direct and indirect pathways. Direct pathways include disturbance leading to eggs or chicks chilling, trampling of nest eggs and chicks, or direct predation of nest or young by dogs indirect pathways include increased predation risk as adults being disturbed from the nest leaving the nest more vulnerable to predation.

Susceptibility to disturbance events varies through the breeding cycle. Early in the establishment of nests a single event may be sufficient to cause birds to relocate elsewhere and in some species can lead to breeding failure, through the breeding season birds will be more robust to disturbance as a result of increased investment in the nest. Early on in the breeding season disturbance is likely to have an impact at greater distances as birds are less tolerant of disturbance. While disturbance thresholds vary between species and individuals many species will respond at distances of over 150m. Territory establishment may occur as early as March in some species such as Lapwing and Ringed plover and the breeding season may extend until mid-July, particularly for pairs that have lost broods and are relaying.

Early in the breeding season failure may result in pair relocation or re-nesting within an established territory. Some species such as Lapwing may be able to attempt multiple breeding attempts within one season other species have less capacity for repeat clutching and a single breeding failure may result in failure to recruit.

Most of the species nesting on saltmarsh and shingle are dispersed breeders with individual pairs occupying favoured territories. However, some species such as the terns and gulls are colonial nesting species where one disturbance event may lead to multiple breeding failures.

All areas supporting this interest feature lie in the coastal margin, with some areas potentially affected by disturbance from users of the ECP itself.

While some areas that are important for open ground nesting species that currently have de facto access or Open Access provision currently, the single most important site – Rockcliffe Marsh - has no public access and there is a prediction for an increase in public use (see Section 2 for details) in the absence of restrictions.

As a result, there is risk of interaction through disturbance and damage to nests, eggs and chicks that arises from modified public use of the coastal zone as a consequence of Coastal Access, from both the proposed line of the England Coast Path and associated the associated coastal margin. This has the potential to impact on both habitat extent and availability for these species during the breeding season. A potential pathway therefore exists for an anthropogenic disturbance impact to occur, in the absence of any site-specific measures to manage visitors.

Any likely impact and mitigation

The Coastal Access proposal have been developed to accommodate concerns relating to the disturbance to

the breeding birds of the saltmarshes and sand dunes, in particular open ground nesting species. This includes route alignment and restriction / exclusions, in conjunction with physical measures (as previously described in Section 1).

The single most important management response is a consequence of the s25A restriction on access to Rockcliffe Marsh. While established under s25A this will accommodate the needs of species breeding on the marsh to be separated from sources of anthropogenic disturbance. This will address concerns for most of the breeding pairs on the Solway of all the species identified except Little Tern. Restrictions under s25A of access on other marshes, and the requirement to keep dog's on leads, will similarly serve to protect other sites with smaller breeding populations; this will be complemented by s26 restrictions in certain areas limiting disturbance of birds nesting just outside the site boundary.

Along the outer Solway Coast specific measures will be established at Grune point to protect the shingle nesting species from disturbance, this will include ECP route alignment, provision of signage and fencing in key areas. Along the coast from Silloth to Allonby Bay, Coastal Access provision is not expected to result in any changes of use from current access patterns, however, the provision of a definitive route that avoids the upper shore between the high water mark and the established vegetation can be expected to reduce pressure on breeding birds in some locations.

Based on the balance of evidence available with regard to anthropogenic bird disturbance, and taking into account the specific details/measures built in to the proposal, it is considered unlikely that changes in use patterns as a consequence of these proposals will result in regular displacement of birds away from key breeding areas and birds will continue with their normal nesting routine in the coastal margin and will not be displaced to areas of sub-optimal habitat.

The ecological resources and functions provided by the site will continue unchanged and it is therefore concluded that a significant effect is not likely.

CONCLUSION - Subject to the fully effective implementation of the proposed mitigation measures and details of route alignment and design as proposed - the ecological resources and functions provided by the site will continue unchanged and it is therefore concluded that a significant effect on these interest features is not likely.

Saltmarsh and Shingle breeding birds – Thick vegetation and scrub nesting Species

Features: Breeding bird Assemblage (in Part)

Current conservation status and use of the site

Included in the SSSI breeding bird assemblage are a number of species associated with sand dune and saltmarsh communities and which nest in low thick vegetation, such as grasshopper warbler and reed bunting, and coastal scrub, such as linnet and sedge warbler. Most of these species are passerines and can be found in areas of high-level saltmarsh where it grades into thicker mesotrophic grassland with scattered scrub or in areas of stable dune with gorse and scrub communities.

Ecological sensitivity and scope for interaction with the proposals

As with the open ground nesting species these species are at risk from disturbance and nest destruction from coastal access, however, their association with areas of thicker vegetation and scrub lessens the risk of accidental nest damage as they are in 'unattractive' terrain. Many of the scrub nesting species also adopt thorny scrub such as gorse to nest in, eg. linnet, or wet areas, eg. grasshopper warbler.

Generally these species have lesser disturbance thresholds than many of the open ground nesting species, with disturbance thresholds of less than 30m, reducing the area at risk of disturbance from the ECP. Most of these species are multi-brooded, typically having two broods a year, making them better able to withstand losses.

Disruption of nesting is most likely to be realised by dogs off leads associated with Coastal Access users as these will be most likely to enter area used for nesting.

Many nesting areas will be landward of the ECP though they may be within the Coastal Margin on the landward side, however, in areas where the ECP route is set back from the open marsh and passes through screening vegetation there may be interaction with these species.

As a result, there is risk of interaction through disturbance and damage to nests, eggs and chicks that arises from modified public use of the coastal zone as a consequence of Coastal Access, from both the proposed line of the England Coast Path and associated the associated coastal margin. This has the potential to impact on both habitat extent and availability for these species during the breeding season. A potential pathway therefore exists for an anthropogenic disturbance impact to occur, in the absence of any site-specific measures to manage visitors.

Any likely impact and mitigation

Around the saltmarshes of the Inner Solway most of these species are to be found in areas of high level marsh with scattered scrub and often quite rank vegetation. These areas are often on the higher parts of the marshes where the grade into agricultural land, and in most cases are either excluded from Coastal Margin, because of their location landward of the ECP, or are subject to restrictions under s25A or s26 because of unsuitability for access or because of disturbance risk to other, more sensitive, features.

Where the ECP crosses areas of high marsh, including the marshes which currently support Open Access under CRoW legislation, the maintenance of the requirement to retain dogs on leads will further limit the potential for negative impacts associated with access.

On the outer Solway, most of the areas supporting this feature and in the Coastal Margin are already subject to *de facto* access. In these areas patterns of usage are unlikely to change as a result of the Coastal Access proposals.

Overall it is considered unlikely that the Coastal Access provisions will have any net impact on this interest feature.

CONCLUSION - Subject to the fully effective implementation of the proposed mitigation measures and details of route alignment and design as proposed - the ecological resources and functions provided by the site will continue unchanged and it is therefore concluded that a significant effect on these interest features is not likely.

3.5.2 Assessment of potential impacts on the interest features of Solway Firth SAC

- ***Sandbanks which are slightly covered by sea water all the time (Subtidal sandbanks)***
- ***Estuaries***
- ***Mudflats and sandflats not covered by seawater at low tide (Intertidal mudflats and sandflats)***
- ***Reefs***
- ***Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves***
- ***Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand***
- ***Atlantic salt meadows (Glauco-Puccinellietalia maritimae); Atlantic salt meadows***

Qualifying species: The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:

- ***River lamprey Lampetra fluviatilis***
- ***Sea lamprey Petromyzon marinus***

Current conservation status and objectives for the site

The Solway is a large, complex estuary on the west coast of Britain. It is one of the least-industrialised and most natural large estuaries in Europe. Tidal streams in the estuary are moderately strong and levels of wave energy can be high. There is considerable seasonal fluctuation in water temperature, owing to the shallow nature of the estuary. The sediment habitats present, mainly dynamic sandflats and subtidal reefs and sediment banks, are separated by six main river channels, which are continually changing their patterns of erosion and accretion. The estuary has been little affected by enclosure, with the result that it demonstrates unusually large areas of upper marsh and transitions to freshwater grassland communities. There is a greater proportion of sand in the substrate than is found in more southern saltmarshes.

The mid-upper marsh is heavily dominated by saltmarsh rush *Juncus gerardii* community with smaller areas of the saltmarsh-grass/fescue *Puccinellia/Festuca* communities. The glasswort *Salicornia* spp. saltmarsh is part of a complete sequence of saltmarsh types, from pioneer communities through extensive mid to high-saltmarsh and transition to tidal grazing marsh. The pioneer marshes within this site develop in response to changing river channels and erosion of existing marsh and form part of a dynamic suite of maritime habitats. Some of the species present, for example sea-purslane *Atriplex portulacoides*, common sea-lavender *Limonium vulgare* and lax-flowered sea-lavender *Limonium humile*, are at their northern limit in the UK.

The shingle and sand dune areas of Grune Point and Preston Merse support a typical range of plant species including burnet rose *Rosa pimpinellifolia*, sea-holly *Eryngium maritimum*, bloody crane's-bill *Geranium sanguineum* and the uncommon Isle of Man cabbage *Rhynchosinapis monensis*. Dyer's greenweed *Genista tinctoria* occurs in the small areas of dune heath and grassland.

The sublittoral sediment communities are typically sparse in the inner estuary, owing to the mobility of the sediment coupled with low and variable salinity. Salinity ranges from fully marine to estuarine in character, and these gradients in physical conditions add to the ecological diversity within the site. The presence of intertidal sediment flats of fine sands, rather than muds, in conditions of estuarine salinity is a notable feature. Communities become richer towards the outer estuary, where there are less extreme environmental conditions and more varied substrates.

The dominant species of the infaunal communities comprise different annelid worms, crustaceans, molluscs and echinoderms, depending on the nature of the substrate. For example, the bivalve molluscs *Fabulina fabula* and *Spisula subtruncata* occur at the edge of sandbanks in fine and medium sand respectively. These communities are richer in the less extreme conditions of the outer estuary. The estuary also provides a migratory passage for sea lampreys *Petromyzon marinus* and river lampreys *Lampetra fluviatilis* to and from their spawning and nursery grounds.

Conservation Objectives:

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- the extent and distribution of qualifying natural habitats and habitats of qualifying species;
- the structure and function (including typical species) of qualifying natural habitats;
- the structure and function of the habitats of qualifying species;
- the supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
- the populations of qualifying species, and,
- the distribution of qualifying species within the site.

Ecological sensitivity and scope for interaction with the proposals

Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); Atlantic salt meadows This habitat is the predominant habitat along the line of the proposed coastal path. The constituent plant communities are sensitive to harvesting, trampling and abrasion. Access infrastructure such as footbridges may reduce and damage the area of saltmarsh, both in terms of construction impacts and permanent footprint and use of the structures.

Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves / Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland These features are sensitive to both nutrient enrichment from dogs and the physical effects of direct damage from trampling leading to changes in vegetation composition and loss of habitat.

Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud

and sand; Mudflats and sandflats not covered by seawater at low tide. (Intertidal mudflats and sandflats) As this feature is not covered by sea water at low tide it would be accessible to walkers and therefore at risk from the effects of trampling.

Sandbanks which are slightly covered by sea water all the time (Subtidal sandbanks) As this feature is covered by sea water all the time it will be unlikely to be accessible or attractive to walkers.

Reefs: Sabellaria reefs and mussel beds These reef habitats are sensitive to trampling damage due to walkers or vehicles/machinery.

River lamprey *Lampetra fluviatilis*; Sea lamprey *Petromyzon marinus* The Solway Firth provides migratory passage for river lamprey *Lampetra fluviatilis* and Sea Lamprey *Petromyzon marinus* to and from spawning and nursery grounds in a number of rivers, including the Eden which is designated as a SAC for these species. There is little if any scope for interaction between the coastal path proposals and these species.

Any likely impact and mitigation

Atlantic salt meadows (*Glauco-Puccinellietalia maritima*); Atlantic salt meadows The extent of the proposed exclusions seaward of the route offers some protection. Sign posting and infrastructure will reduce the spread and area of damage on the more sensitive, less walked vegetative communities. Each of the planned 146 sleeper bridges will have an abutment area of approximately 1m², combining to give a direct total loss of SAC saltmarsh habitat of 146 square metres (representing less than 0.0003% of saltmarsh area within the SAC). The area beneath each bridge span will not be significantly impacted by the installation of the bridges, given their design, and is not regarded as representing potential loss of habitat. This figure represents a maximum loss as the installation of the bridges will result in remediation of current creek crossings for the reasons mentioned above; it is likely that the installation of these bridges will lead to an overall increase in functioning salt-marsh habitat in other parts of the SAC. Installation of all infrastructure items associated with the establishment of the approved coastal access proposals will be governed by method statements, which will themselves be subject to further Habitats Regulations Assessment. Method statements will cover the following, as a minimum:

- Timing of works to avoid seasonal and any other identified sensitivities;
- Details of access arrangements for installation of infrastructure, minimising the needs for and extent of vehicular access and where necessary including use of low ground-pressure vehicles on soft terrain;
- Storage of plant and materials to ensure no risk to sensitive habitats and species;
- Pollution prevention and control measures to be employed at all times;
- Biosecurity measures to be integral to all working methods.

Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland / Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves. Whilst such areas are already well used by the public and their dogs, the coastal access proposals will use infrastructure, signposting and interpretation to ensure people remain on well walked paths and avoid or reduce any potential impacts.

Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand; Mudflats and sandflats not covered by seawater at low tide (Intertidal mudflats and sandflats) – All of the pioneer saltmarsh communities are found in the inner Solway estuary from Grune Point eastwards. In this area all the intertidal area is covered by s25A restrictions on access due to the unsuitability of the ground for public access. Along the proposed route, much of the area where this habitat is present, due to the soft mud, would not be attractive to walkers or easily accessible in any event.

Sandbanks which are slightly covered by sea water all the time (Subtidal sandbanks) As this feature is covered by sea water all the time it will be unattractive to walkers and inaccessible to walkers and therefore no significant impacts are likely to occur.

Reefs: Sabellaria reefs and mussel beds This feature is found in the tidal to intertidal zones. It is therefore located well away from the main coastal access route and is not easily accessible. Increased levels of access are therefore unlikely to have an effect on this feature.

River lamprey *Lampetra fluviatilis*; Sea lamprey *Petromyzon marinus*. In view of the lack of scope for pathways of interaction between the coastal path proposals and these species, there is unlikely to be a significant effect on these features.

CONCLUSION – Subject to the effective implementation of all the proposed mitigation measures and details of route alignment and design as proposed - No likely significant effect on the interest features of the Solway Firth SAC

3.5.3 Assessment of potential impacts on the interest features of Upper Solway Flats and Marshes SSSI and Upper Solway Flats and Marshes Ramsar– features not covered by SPA and SAC assessments above.

Vascular plant assemblage (SSSI)

Current conservation status and use of the site

Particular species of note on the English side of the Solway are Isle of Man cabbage and Seaside century. There is also Grune sea kale and Rays knotgrass (features of local distinctiveness).

Mid upper marsh communities Isle of Man cabbage (known from Bowness-on-Solway) seaside century was recorded at Campfield Marsh, historically present around Wampool estuary.

Ecological sensitivity and scope for interaction with the proposals

These vascular plants would be sensitive to trampling as a result of increased public access. ,

Any likely impact and mitigation

The line of the main access route along with visitor management measures such as signposting, interpretation and restrictions will significantly reduce the risk from trampling.

Great Crested Newt (SSSI)

Current conservation status and use of the site

The great crested newt is protected under the Wildlife & Countryside Act 1981 Schedule 5, Countryside & Rights of Way Act 2000 and Habitat Regulations 1995. On the Solway any of the larger, deeper ponds may contain breeding Great Crested Newts.

Ecological sensitivity and scope for interaction with the proposals

Great crested newts are most sensitive to anthropogenic impacts when in and around their breeding ponds. They inhabit deeper ponds than natterjack toads making them less vulnerable to suffocation by silt deposition and trampling. However, impacts on Great Crested Newt populations can be caused mainly by dogs accessing breeding pools causing spread of disease and death of eggs and newtlets due to silt deposition and trampling.

Any likely impact and mitigation

The route of the ECP has been planned carefully to avoid putting it into close proximity to sensitive areas. However, the locations of newt breeding ponds are not necessarily well-known and recorded. The proposed route will tend to avoid the vicinity of ponds in general, including those likely to be used by newts, for various reasons, not least the requirement to identify a route over dry and firm terrain, wherever possible. Restrictions requiring dogs to be kept on leads have been proposed over much of this stretch, including the majority of areas where the route is in the vicinity of marshes and other less intensively managed land. These restrictions are primarily intended to avoid disturbance to birds, but will also reduce the risk of dogs entering ponds favoured by newts.

Natterjack toad (SSSI and Ramsar)

Current conservation status and use of the site

Over 10% of the total British population of the rare Natterjack toad occurs on the Solway, dispersed between several colonies.

The natterjack toads breed in ephemeral pools in the sand dunes on the landward edge of the saltmarsh from Grune Point to Allonby, mainly in dune systems along the line of the path. They are present here near the northern limit of their range in Britain

Ecological sensitivity and scope for interaction with the proposals

Pools used by breeding natterjacks are typically shallow, often temporary pools in dune systems or heathland. There is evidence that dogs swimming in such sites can have an impact. The Wildlife Access Advisory Group Guidance¹ indicates that unrestricted access may have an impact upon the Natterjack toads during the breeding season and on the conservation grazing regime.

Edgar (2002) addresses the potential implications (for amphibians and reptiles in the UK) of increased access associated with the introduction of the CRoW Act (2000). Other work includes three direct studies (from outside the UK) addressing the effects of disturbance on individual species.

Additional new material comes from the UK Biodiversity Action Plan (BAP). In 2005 lead partners involved in the UK BAP were asked to report on their species and habitats and the reporting included identifying current or emerging threats. From this reporting work the Natterjack toad is cited as having current threats potentially relating to access. Edgar (2002) considers amphibians are generally immune to most public access effects during their terrestrial lives, but the necessity for all species to utilise ponds for breeding purposes exposes them to a greater range of pressures. Because adult natterjack toads are nocturnal and spend the day within burrows (often >20cm deep), Edgar considers impacts from human disturbance, even from trampling by humans or grazing animals, to be minimal. However they are vulnerable in the breeding season. At this time they prefer temporary ponds and the shallow water meaning their spawn is vulnerable, especially to dogs running through the ponds. Dogs entering the pools disturb the silt which then rests on the spawn strings leading to the development of a fungus *Saprolegnia* spp (A. Kimpton pers. comm.) Infrastructure installation may have a detrimental effect on the natterjack population through disturbance or accidental killing through trapping toads by leaving holes exposed or squashing toads sheltering in material stacks.

Any likely impact and mitigation

The main cause of disturbance to Natterjack toads as described above is access, particularly by dogs and also installation of infrastructure.

Most of the breeding pools and related sensitive areas that fall within the coastal margin are within areas from which access will be excluded, or where little to no increase in access levels is expected. The route of the ECP has been planned carefully to avoid putting it into close proximity to sensitive areas. The proposed restriction, requiring dogs to be kept on leads between Anthorn and Beckbrow, intended to avoid disturbance to roosting and breeding birds, will also serve to avoid damage to the natterjack toad population in this area during the breeding stage when they are more vulnerable.

Installation of all infrastructure items associated with the establishment of the approved coastal access proposals will be governed by method statements, which will themselves be subject to further Habitats Regulations Assessment. Method statements will cover the following, as a minimum:

- Timing of works to avoid seasonal and any other identified sensitivities;
- Details of access arrangements for installation of infrastructure, minimising the needs for and extent of vehicular access and where necessary including use of low ground-pressure vehicles on soft terrain;
- Storage of plant and materials to ensure no risk to sensitive habitats and species;
- Pollution prevention and control measures to be employed at all times;
- Biosecurity measures to be integral to all working methods.

Invertebrate assemblage

Current conservation status and use of the site

Broad assemblage type: W53: salt marsh estuary and mudflats. Specific assemblage types W531 saltmarsh and transition brackish marsh including scare species with high habitat fidelity

Ecological sensitivity and scope for interaction with the proposals
The invertebrate assemblage requires a high diversity of habitats. The diversity and extent of these habitats will not be affected by these proposals and consequently the proposals are unlikely to have any effect on the invertebrate assemblage.
Any likely impact and mitigation
No impact likely so no mitigation measures required.
CONCLUSION – Subject to the effective implementation of all the proposed mitigation measures and details of route alignment and design as proposed - no significant impacts on the interest features of Upper Solway Flats and Marshes SSSI and Ramsar.

3.5.4 Assessment of potential impacts on the interest features of Silloth Dunes & Mawbray Bank SSSI
Sand dune & coastal shingle
Current conservation status and use of the site
<p>Silloth Dunes & Mawbray Bank</p> <p>Shingle</p> <p>SD1 <i>Rumex crispus</i> - <i>Glaucium flavum</i> shingle community SD2 <i>Honkenya peploides</i> - <i>Cakile maritima</i> strandline community</p> <p>Sand Dune</p> <p>Fixed Dune grassland</p> <p>SD2 <i>Honkenya peploides</i> - <i>Cakile maritima</i> strandline community SD5 <i>Leymus arenarius</i> mobile dune community SD6 <i>Ammophila arenaria</i> mobile dune community SD7 <i>Ammophila arenaria</i> - <i>Festuca rubra</i> semi-fixed dune community SD8 <i>Festuca rubra</i> - <i>Galium verum</i> fixed dune grassland SD9 <i>Ammophila arenaria</i> - <i>Arrhenatherum elatius</i> dune grassland SD10 <i>Carex arenaria</i> dune community SD11 <i>Carex arenaria</i> - <i>Cornicularia aculeata</i> dune community</p> <p>Dune heath</p> <p>H11 <i>Calluna vulgaris</i> - <i>Carex arenaria</i> heath</p>
Ecological sensitivity and scope for interaction with the proposals
These features are sensitive to both to nutrient enrichment from dogs leading to changes in vegetation composition and the physical effects of direct damage from trampling.
Any likely impact and mitigation
Whilst such areas are already well used by the public and their dogs, the coastal access proposals will use infrastructure, signposting and interpretation to ensure people remain on well-walked paths and avoid or reduce any potential impacts.
CONCLUSION – Subject to the effective implementation of all the proposed mitigation measures and details of route alignment and design as proposed - No damaging impacts on the interest features of Silloth Dunes & Mawbray Bank SSSI.

3.5.5 Assessment of potential impacts on the interest features of Allonby Bay Marine Conservation Zone

Features

- High energy intertidal rock
- Moderate energy intertidal rock
- Low energy intertidal rock
- Intertidal Biogenic reefs
- Intertidal coarse sediment
- Intertidal sand and muddy sand
- Moderate energy infralittoral rock
- Subtidal mixed sediments
- Blue mussel (*Mytilus edulis*) beds
- Peat and clay exposures
- Honeycomb worm (*Sabellaria alveolata*) reefs

Current conservation status and use of the site

The site became a marine conservation zone in January 2016. The designation protects a diverse range of marine habitat and species. There are large areas of living reef formed by honeycomb worm and blue mussel beds. Sandy beaches (intertidal sand and muddy sand) host a range of species such as sandhoppers, cockles, sea snails and worms. Peat exposures provide habitats for piddocks a type of burrowing clam.

Conservation objectives:

For each protected feature, favourable condition means that, within a zone:

1.its extent is stable or increasing

2.its structures and functions, its quality, and the composition of its characteristic biological communities (including the diversity and abundance of species forming part or inhabiting the habitat) are sufficient to ensure that it remains healthy and not deteriorate

Any temporary deterioration in condition is to be disregarded if the habitat is sufficiently healthy and resilient to enable its recovery.

Any alteration to a feature brought about entirely by natural processes is to be disregarded when determining whether a protected feature is in favourable condition.

Ecological sensitivity and scope for interaction with the proposals

Physical disturbance and damage at low tide as a result of increased levels of public access and visitor pressures. The main sensitivity is from the impacts of people exercising their Coastal Access rights in relation to features exposed at low tide. The most sensitive features being honeycomb reef, blue mussels, cockles and worms which could be subject to trampling and removal at low tide.

The expectation is that the proposals will lead to a slight increase in access levels on this stretch: The proposed route between Dubmill Point and Allonby will, for part of its length, be on the landward side of the road. This will be a completely new route and will allow people to walk along this section of the coast without having to walk on the top of the foreshore. Having a passable route along the roadside will reduce access pressure on the foreshore and walkers with dogs are likely to keep them on a lead on or near to the road. It is possible that many walkers will continue to use the foreshore in this area, whilst perhaps those wishing to walk longer distances are likely to use the new route. In addition the foreshore here is subject to significant erosion and is likely to be more difficult to access as this continues. The coastal margin in this area will largely be limited to the foreshore. Given the popularity of Allonby Bay already for recreational activities on the coast, such as kite surfing and horse riding, the project team feel it is unlikely that there will be any significant change

in levels or patterns of access over this area, after the introduction of coastal access rights.

Any likely impact and mitigation

Disturbance and damage will be avoided or minimised through the following: Access along this section of the shore is unlikely to affect the sensitive habitats and features as they are associated with the intertidal zone and located a considerable distance from the line of the path. Levels of access are only expected to increase slightly on this section of the path from existing levels and this is not expected to lead to additional access to the intertidal zone where the sensitive MCZ features are located. The route will be well defined above the high tide line and many coastal path users are expected to stay on the defined route.

CONCLUSION – Subject to the effective implementation of the proposed mitigation measures and details of route alignment and design as proposed - No likely significant effect on the interest features of Allonby Bay MCZ

3.5.6 Assessment of potential impacts on the interest features of River Eden SAC

Features

- Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation. *Rivers with floating vegetation often dominated by water-crowfoot.*
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae) *Alder woodland on floodplains.*
- Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoetes-Nanojuncetea. *Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels.*
- *Petromyzon marinus* Sea lamprey
- *Salmo salar* Atlantic salmon.
- *Lampetra fluviatilis* River lamprey.
- *Austropotamobius pallipes* White-clawed (or Atlantic stream) crayfish
- *Cottus gobio* Bullhead.
- *Lampetra planeri* Brook lamprey.
- *Lutra lutra* Otter.

Current conservation status and use of the site

The Eden is an outstanding floristically rich, northern river on sandstone and hard limestone. The catchment includes headwaters running off the Yorkshire Dales, the North Pennines and the eastern fells of the Lake District and the major standing water body of Ullswater. The designated site stretches to the downstream tidal reach towards the Solway where it adjoins the boundary of the Solway Firth SAC near Rockcliffe. The high ecological value of the river system and the fact that migratory fish such as Atlantic salmon are able to use most of the catchment (even above Ullswater) mean that the Eden is able to maintain a large population of salmon. The highly erodible nature of the rock results in extensive areas of gravel and finer silt being deposited throughout the system, providing conditions for spawning and nursery areas. Brook and river lampreys are supported widely within the catchment and a large and healthy population of sea lamprey is supported in the middle to lower regions of the river. The presence of extensive areas of gravel and generally good quality water provides good habitat for bullheads, which are widely distributed throughout the system. The tributaries, in particular those flowing over limestone, hold abundant numbers of bullhead. The River Eden system is important for otters *Lutra lutra* which favour areas of undisturbed riparian habitat and associated features.

Ecological sensitivity and scope for interaction with the proposals

The line of the proposed coastal path follows existing rights of way (including the Hadrian's Wall Path National Trail) where it coincides with the banks of the River Eden and it is not expected to lead to a significant increase in the numbers of people using the path from current levels. No new river crossings or other infrastructure works are proposed that would directly affect the River Eden SAC or its tributaries. There are therefore no significant pathways for impacts on the River Eden SAC interest features.

Any likely impact and mitigation

There are no significant pathways for impacts on the interest features of the River Eden SAC.

CONCLUSION – Subject to the fully effective implementation of the proposed mitigation measures and details of route alignment and design as proposed - No likely significant effect on the interest features of the River Eden SAC

3.5.7 Assessment of potential impacts on the interest features of River Eden and

Tributaries SSSI not covered by the SAC assessment above
<p>Additional SSSI Features</p> <p>Invertebrate assemblage of exposed river sediment</p> <p>Breeding birds associated with the river and adjacent habitats</p> <p>Schelly <i>Coregonus lavaretus</i> (Ullswater only)</p>
<p>Current conservation status and use of the site</p> <p>The Eden is an outstanding floristically rich, northern river on sandstone and hard limestone. The catchment includes headwaters running off the Yorkshire Dales, the North Pennines and the eastern fells of the Lake District and the major standing water body of Ullswater. The designated site stretches to the downstream tidal reach towards the Solway where it adjoins the boundary of the Solway Firth SAC near Rockcliffe. The high ecological value of the river system and the fact that migratory fish such as Atlantic salmon are able to use most of the catchment (even above Ullswater) mean that the Eden is able to maintain a large population of salmon. The highly erodible nature of the rock results in extensive areas of gravel and finer silt being deposited throughout the system, providing conditions for spawning and nursery areas. Brook and river lampreys are supported widely within the catchment and a large and healthy population of sea lamprey is supported in the middle to lower regions of the river. The presence of extensive areas of gravel and generally good quality water provides good habitat for bullheads, which are widely distributed throughout the system. The tributaries, in particular those flowing over limestone, hold abundant numbers of bullhead. The River Eden system is important for otters <i>Lutra lutra</i> which favour areas of undisturbed riparian habitat and associated features.</p>
<p>Ecological sensitivity and scope for interaction with the proposals</p> <p>Schelly is only present in Ullswater lake and can therefore be screened out from further assessment. Key locations for the invertebrate assemblages of exposed river sediment are mainly upstream of the line of the path and would in any event not be impacted unless there was significant amounts of trampling (people, dogs, vehicles and stock) or direct damage from infrastructure, channel modification works, changes in hydrology or gravel removal. The breeding bird interest feature is species associated with upland rivers such as oystercatcher, goosander and dipper. Any potential impacts on the breeding birds associated with the River Eden and Tributaries SSSI would be addressed through the same mitigation measures as proposed for the breeding birds within the Upper Solway Flats and Marshes SPA and SSSI. The line of the proposed coastal path follows existing rights of way (including the Hadrian's Wall Path National Trail) where it coincides with the banks of the River Eden and it is not expected to lead to a significant increase in the numbers of people using the path from current levels. No new river crossings or other infrastructure works are proposed that would directly affect habitats associated with the River Eden or its tributaries and the species that depend upon these. There are therefore no pathways for significant damaging impacts on the River Eden SSSI interest features.</p>
<p>Any likely impact and mitigation</p> <p>There are no pathways for significant damaging impacts on the interest features of the River Eden SSSI.</p>
<p>CONCLUSION – Subject to the fully effective implementation of the proposed mitigation measures and details of route alignment and design as proposed - No likely significant effect on the interest features of the River Eden and Tributaries SSSI</p>

Note: If the table suggests unacceptable residual impacts on the features in question, the norm is to repeat the earlier process of consideration, and complete when ready a further version of the template. But if at this point the access case officer and responsible officer cannot agree whether the access proposal adequately addresses the potential sensitivities, the case should be referred to the Access and Nature Conservation Review Panel.

3.5.8 References

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Section 4: FINAL CONCLUSIONS

THIS FINAL STAGE SHOULD ONLY BE COMPLETED AFTER THE ACCESS CASE OFFICER AND RESPONSIBLE OFFICER HAVE REACHED AGREEMENT, OR FOLLOWING ESCALATION TO THE ACCESS AND NATURE CONSERVATION REVIEW PANEL

4.1: FINAL CONCLUSIONS – HABITATS REGULATIONS ASSESSMENT FOR EUROPEAN SITES

As assessment of the proposals is required under Regulation 61 of the Conservation of Habitats and Species Regulations 2010 (Habitats Regulations) to identify potential impacts on the interest features of the European sites as listed above. Under the Habitats Regulations an appropriate assessment needs to be undertaken in respect of any plan or project which is (a) likely to have a

significant effect on a European site (either alone or in combination with other plans or projects) and (b) not directly connected with or necessary to the management of the site.

- **Natural England has concluded that the proposals are not directly connected with or necessary to the management of the European sites.**

The following presents Natural England's conclusions of the HRA screening exercise to determine whether the proposals are likely to have significant effect(s), alone or in-combination, on the relevant European designated sites including Upper Solway Flats and Marshes SPA, Upper Solway Flats and Marshes RAMSAR, Solway Firth SAC and River Eden SAC. The proposed England Coast Path is also located within or adjacent to the Solway Firth draft (d)SPA, which is being considered for future designation. Additional features relevant to this site have also been assessed in order to 'future-proof' the proposals as far as possible. The screening exercise under the Habitats Regulations to determine likely significant effect has taken into account the mitigation (reduction and avoidance) measures that have been built into the proposals through the iterative process of scheme development, as described in Section 3 above and elsewhere in Natural England's published report.

The screening exercise has been carried out in relation to the conservation objectives for the sites and in accordance with the precautionary principle which underpins the Habitats Regulations.

4.1.1 Upper Solway Flats and Marshes SPA & Ramsar; Solway Firth dSPA

Screening for Likely Significant Effect under the Habitats Regulations – ALONE

In relation to the new access proposals summarised in Sections 1 and 2 above and detailed elsewhere in Natural England's published proposals for the ECP, Natural England has assessed the proposals (Sections 3.5.1 and 3.5.3) and concluded on the best available evidence and information that:

A. **It can be excluded that the new access proposal, taken alone, will have a significant effect** on any of the features listed in section 3 above for which the European site has been designated or classified, for the following reasons:

X

B. While it cannot be excluded that the new access proposals taken alone will have an effect, **it is not considered that the effect is likely to be significant**, for the following reasons:

C. **It cannot be excluded that the new access proposal, taken alone, will have a likely significant effect** on the following feature(s) for which the European site has been designated or classified, for the following reasons:

4.1.2 Solway Firth SAC

Screening for Likely Significant Effect under the Habitats Regulations – ALONE

In relation to the new access proposals summarised in Sections 1 and 2 above and detailed elsewhere in Natural England's published proposals for the ECP, Natural England has assessed the proposals (Sections 3.5.2) and concluded on the best available evidence and information that:

In relation to the new access proposal detailed in sections 1 and 2, taken alone, Natural England has concluded on the best available evidence and information that:

- A. **It can be excluded that the new access proposal, taken alone, will have any effect** on any of the features listed in section 3 above for which the European site has been designated or classified, for the following reasons:
- B. While it cannot be excluded that the new access proposal taken alone will have an effect, **it is not considered that the effect is likely to be significant**, for the following reasons:
- C. **It cannot be excluded that the new access proposal, taken alone, will have a significant effect** on the following feature(s) for which the European site has been designated or classified, for the following reasons:

4.1.3 River Eden and Tributaries SAC

Screening for Likely Significant Effect under Habitats Regulations – alone

In relation to the new access proposals summarised in Sections 1 and 2 above and detailed elsewhere in Natural England's published proposals for the ECP, Natural England has assessed the proposals (Sections 3.5.6) and concluded on the best available evidence and information that:

- A. **It can be excluded that the new access proposal, taken alone, will have any effect** on any of the features listed in section 3 above for which the European site has been designated or classified, for the following reasons:
- B. While it cannot be excluded that the new access proposal taken alone will have an effect, **it is not considered that the effect is likely to be significant**, for the following reasons:
- C. **It cannot be excluded that the new access proposal, taken alone, will have a significant effect** on the following feature(s) for which the European site has been designated or classified, for the following reasons:

4.1.4 Screening for Likely Significant Effect under Habitats Regulations – assessment of effects in combination with other plans and projects

Upper Solway Flats and Marshes SPA & Ramsar; Solway Firth dSPA; Solway Firth SAC

Other relevant plan or project	Is each other plan or project clear and specific enough for a judgement to be made at this stage about the probability or risk of its having any <i>similar</i> effect on the features	Where the answer in Column 2 is Yes, what effect is it considered the other plan or project is likely to have in its own right on the features in question? Enter <u>one</u> of the following values, with brief reasons: <ul style="list-style-type: none"> • No effect • A non-significant effect

	in question?	<ul style="list-style-type: none"> • A significant effect Where the answer in Column 2 is No, enter “Not applicable” in this column.
North West Coast Connections (pylon replacement) Northern part of the corridor is close to the access route and Upper Solway Flats and Marshes designation.	Yes – We are aware of plans for the proposed infrastructure development. This is currently at pre-application stage and is a nationally significant infrastructure project (NSIP).	The main risks identified with this project in the area also subject to England Coast Path plans are related to the expected crossing by power lines of the River Eden. This relates to disturbance impacts on SPA using this area during the construction phase.
Wildlife Licence 2016-2017 at Newton Arlosh Shooting licence issued for geese to back up scaring methods. Pink-footed geese and barnacle geese are listed as qualifying interest features for the Upper Solway Flats and Marshes SPA. The proposed shooting would take place on land close to the SPA.	Yes – the licence has been subject to an Appropriate Assessment under the Habitats Regulations as it was concluded to have a likely significant effect on the SPA interest features.	The main impacts are that birds will be killed, disturbed and displaced. The Appropriate Assessment concluded that with mitigation in place the licence would not have an adverse effect on the integrity of the SPA. Permission was therefore given subject to conditions controlling the specific location, timing and duration of the time-limited consent; the need for scaring methods to be employed first with shooting to kill as a last resort; maximum numbers of geese to be shot; and subject to this being the only licence issued on English side of the Solway within the time frame of the licence. No shooting during periods of prolonged severe cold weather as advised by NE
Shoreline Management Plan	No - The Shoreline Management Plan is a long term high-level strategic plan with insufficient detail at a location or site-specific level at this stage. The Plan has itself been subject to HRA. Current and future schemes and projects arising as part of the delivery of the SMP could be relevant where sufficient detail is available. Such schemes and projects would themselves be subject to HRA.	Not applicable
Cumbria Coastal Strategy and individual coastal defence and flood risk management schemes along the Solway coast.	No – the Cumbria Coastal Strategy has not yet been formally started and Natural England is not are of	Not applicable

	any details of current or planned coastal defence or flood risk management projects along the stretch of coast from Gretna to Allonby.	
Existing Wind farms and proposals	Existing windfarms and proposals in the area which have been identified as having a potential effect on European interest features have been subject to HRA and effects mitigated as necessary.	Not applicable
Other development proposals on or adjacent to the line of the England Coast Path	Natural England is not aware of any details of development proposals which could act in combination with the England Coast Path	Not applicable
Works within the Solway Coast Area of Outstanding Natural Beauty	Natural England is not aware of any details of development proposals which could act in combination with the England Coast Path	Not applicable

Conclusions of screening in combination

Having considered the best available evidence and information on any other qualifying plans or projects that might operate in combination with the new access proposal detailed in sections 1 and 2, Natural England has concluded that **it can be excluded** that the new access proposal, in combination with any such qualifying plans or projects, will have a significant effect on any of the features for which the European sites have been designated or classified, for the following reasons:

Overall Screening Decision for European site/features

Accordingly, taking into account the preceding screening both alone and, where appropriate, in combination, Natural England has concluded:

No likely significant effect – the new access proposal may proceed as finally specified, subject to any separate considerations in relation to SSSI features etc (see below);

OR

Likely significant effect - appropriate assessment is required to consider whether the new access proposal may proceed.

[Continued]

PART 4.2: FINAL CONCLUSION – SSSIs

Upper Solway Flats & Marshes SSSI

Conclusion

In the light of the analysis in section 3.5.1 and 3.5.3 and based on the best available evidence and information, Natural England has concluded that the new access proposal summarised in sections 1 and 2 above and detailed elsewhere in Natural England's published proposals for the ECP:

complies with NE's duty to further the conservation and enhancement of the notified features of the SSSI, consistent with the proper exercise of its functions¹ - and accordingly the new access proposal may proceed as finally specified in this template

OR

would not comply with the duty referred to in (a) – and accordingly permission/ authorisation/ assent for the new proposal should not be given, for the following reasons:

Silloth and Mawbray Dunes SSSI

Conclusion

In the light of the analysis in section 3.5.4 and based on the best available evidence and information, Natural England has concluded that the new access proposal summarised in sections 1 and 2 above and detailed elsewhere in Natural England's published proposals for the ECP:

complies with NE's duty to further the conservation and enhancement of the notified features of the SSSI, consistent with the proper exercise of its functions² - and accordingly the new access proposal may proceed as finally specified in this template

OR

would not comply with the duty referred to in (a) – and accordingly permission/ authorisation/ assent for the new proposal should not be given, for the following reasons:

River Eden SSSI

Conclusion

In the light of the analysis in section 3.5.7 and based on the best available evidence and information, Natural England has concluded that the new access proposal summarised in sections 1 and 2 above and detailed elsewhere in Natural England's published proposals for the ECP:

complies with NE's duty to further the conservation and enhancement of the notified features of the SSSI, consistent with the proper exercise of its functions³ - and accordingly the new access proposal may proceed as finally specified in this template

OR

would not comply with the duty referred to in (a) – and accordingly permission/ authorisation/ assent for the new proposal should not be given, for the following reasons:

¹ The reference in (a) above to Natural England's functions includes its balanced general purposes under the NERC Act 2006, any specific statutory duties it may have to deliver specific improvements to public access, and the access-related policies and priorities it has agreed with Defra.

² The reference in (a) above to Natural England's functions includes its balanced general purposes under the NERC Act 2006, any specific statutory duties it may have to deliver specific improvements to public access, and the access-related policies and priorities it has agreed with Defra.

³ The reference in (a) above to Natural England's functions includes its balanced general purposes under the NERC Act 2006, any specific statutory duties it may have to deliver specific improvements to public access, and the access-related policies and priorities it has agreed with Defra.

PART 4.3: FINAL CONCLUSION – Marine Conservation Zones

Allonby Bay MCZ - Assessment of impacts on Marine Conservation Zones under Section 125 and 126 of the Marine and Coastal Access Act (MCAA) (2009).

Conclusion

In the light of the analysis in section 3.5.5 and based on the best available evidence and information, Natural England has concluded that the new access proposal summarised in sections 1 and 2 above and detailed elsewhere in Natural England's published proposals for the ECP

the project is NOT likely to hinder the achievement of the conservation objectives of the Allonby Bay MCZ and its designated features, either alone or in combination, and no further assessment is required.

OR

the project IS likely to hinder the achievement of the conservation objectives of the Allonby Bay MCZ and its designated features, either alone or in combination, and further assessment is therefore required

In-combination assessment

Natural England is not aware of any potential plans or projects within, adjacent to or likely to affect Allonby Bay MCZ which need to be considered in-combination with the proposed works.

[Continued]

PART 4C: FINAL CONCLUSION - Other features about which concerns have been expressed

Additional sensitive features

- Little Tern

Conclusion

In the light of the analysis in section 3.5.1 (BREEDING BIRDS - Saltmarsh and Shingle breeding birds – Ground-nesting Species) and based on the best available evidence and information, Natural England has concluded that the new access proposal summarised in sections 1 and 2 above and detailed elsewhere in Natural England's published proposals for the ECP:

the appropriate balance has been struck by the new access proposal between NE's conservation and access objectives, duties and purposes - and accordingly the new access proposal should proceed as finally specified in this template

OR

the appropriate balance referred to above has not been struck – and accordingly the new access proposal should not proceed in the form specified in this template, for the following reasons:

SIGNATURE COVERING THE WHOLE OF PART 4:

Responsible officers

Name:
Alison McAleer

Signed:



Date:
21st July 2016

Name:
Kathryn Doughty

Signed:












Date:
21st July 2016

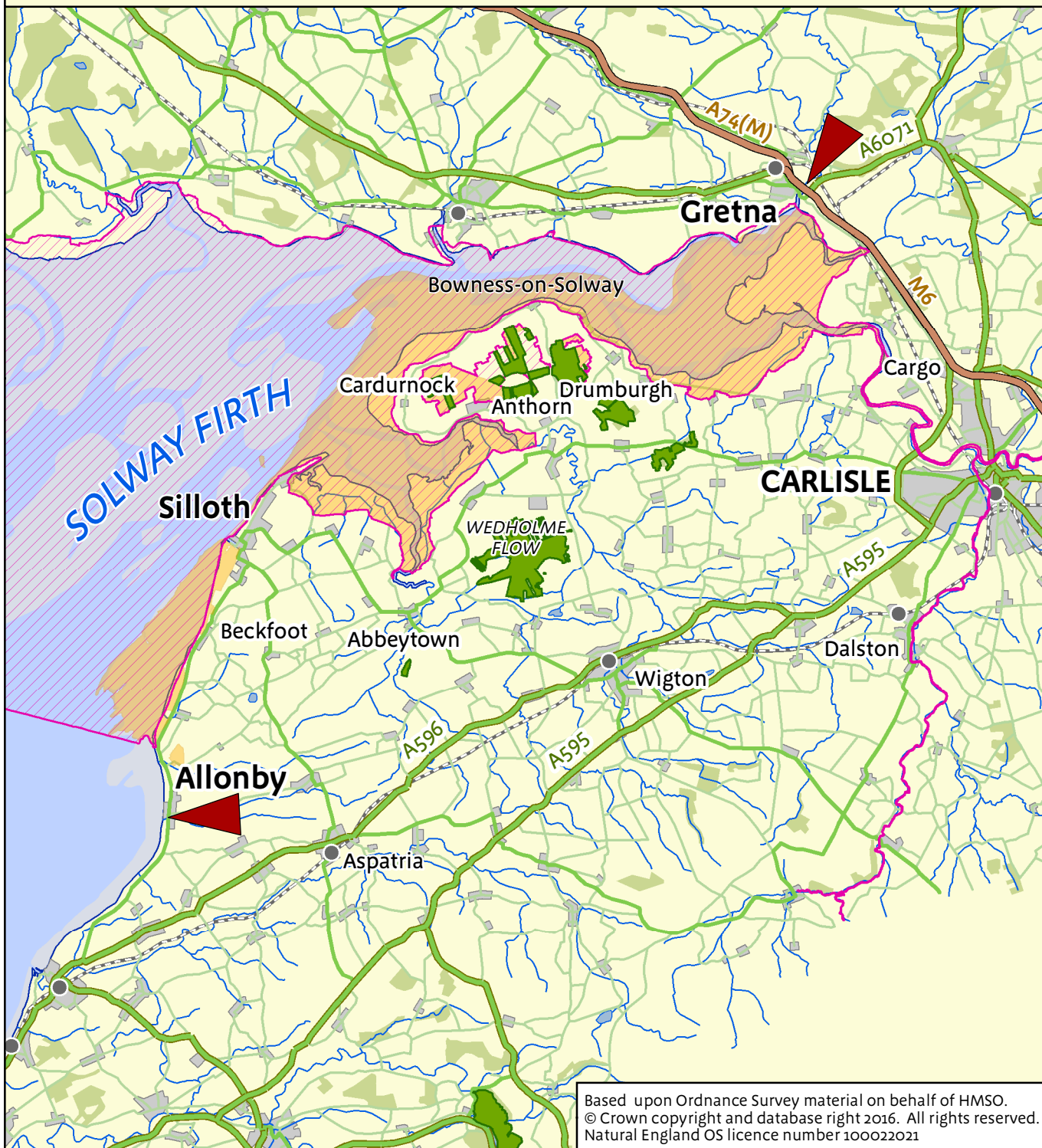
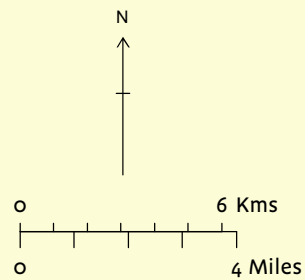
Annex 1: Map i – Designated sites

Map i: Key statutory environmental designations on the Gretna to Allonby stretch

Natural environment designations

-  National Nature Reserve
-  International/ EU designations:
Ramsar/ Special Conservation Area (SAC)/
Special Protection Area (SPA)
-  Site of Special Scientific Interest (SSSI)

- Extent of proposals 
- Motorways 
- A road 
- B road 
- Minor road 
- Railway & station 



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