Assessment of Coastal Access Proposals between Bawdsey and Aldeburgh on sites and features of nature conservation concern Date of publication February 2021



About this document

This document should be read in conjunction with the published Reports for the Bawdsey to Aldeburgh Stretch and the Habitats Regulations Assessment (HRA).

The Coastal Access Reports contain a full description of the access proposals, including any additional mitigation measures that have been included. These Reports can be viewed here https://www.gov.uk/government/collections/england-coast-path-bawdsey-to-aldeburgh

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

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

The NCA is arranged site by site. Maps A to F shows designated sites along this stretch of coast.

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



Contents

About this document	2
Introduction	4
Designated features	5
Assessment of coastal access proposals on:	6
Bawdsey Cliff SSSI	7
Alde-Ore Estuary SSSI	7
Iken Wood SSSI	20
Snape Warren SSSI	20
Round Hill Pit, Aldeburgh SSSI	21
Aldeburgh Brick Pit SSSI	22
Aldeburgh Hall Pit SSSI	22
Assessment of coastal access proposals on Local Wild sites	
Assessment of coastal access proposals on other noted	d features23
(Dark-bellied) Brent goose	23
Establishment works	24
Conclusion	25
Map A - Bawdsey Cliff SSSI	26
Map B – Shingle Street to Havergate Island	27
Map C – Butley River	28
Map D – Orfordness	Error! Bookmark not defined.
Map E – Slaughden and Aldeburgh Marshes	Error! Bookmark not defined.
Map F – Iken Marshes to Hazlewood Marshes	31
Appendix	32
References	39



Introduction

There are several protected sites on the land between Bawdsey and Aldeburgh. Many have been ruled out from this assessment due to their spatial separation from our proposals which we do not consider will damage or destroy the special interest features of the sites. These include:

- Buckanay Farm Pit, Alderton Site of Special Scientific Importance (SSSI)
- Sutton and Hollesley Heaths SSSI
- Sandlings Forest SSSI
- Staverton Park and the Thicks, Wantisden SSSI
- Neutral Farm Pit, Butley SSSI
- Chillesford Church Pit SSSI
- Sudbourne Park Pit SSSI
- Gedgrave Hall Pit SSSI
- Richmond Farm Pit, Gedgrave SSSI
- Crag Farm Pit, Sudbourne SSSI
- Valley Farm Pit, Sudbourne SSSI
- Red House Farm Pit, Sudbourne SSSI
- Gromford Meadow SSSI

Other sites such as Leiston-Aldeburgh SSSI and are dealt under proposals on other stretches of the England Coast Path (ECP).

Those features on sites with a European designation are assessed in the HRA which accompanies our proposals.

Features which are protected as part of both a national site e.g. SSSI and also as part of a European site, e.g. Special Protection Area (SPA), Special Area of Conservation (SAC), or Ramsar (wetland of international importance) are assessed in the HRA. The full list of features is listed in the Appendix. This assessment assesses the impact of our proposals on features of SSSIs which are not covered in the HRA, and any other species of concern as set out in the table "Designated features" below.

The mitigation measures in this document are described in further detail in the HRA.



Designated features

	1		1	1	1		
Designated feature	Bawdsey Cliff	lken Wood	Aldeburgh Hall Pit	Aldeburgh Brick Pit	Round Hill Pit, Aldeburgh	Snape Warren	Alde-Ore Estuary SSSI
Aggregations of breeding birds - black- headed gull, <i>Larus ridibundus</i>							✓
Aggregations of breeding birds – (European) herring gull, <i>Larus argentatus</i>							✓
Aggregations of breeding birds - shoveler, Anas clypeata (non-breeding only is part of Ramsar assemblage)							√
Aggregations of non-breeding birds - Bewick's swan, <i>Cygnus columbianus</i> bewickii							~
Assemblages of breeding birds - Lowland damp grasslands: - mute swan, gadwall, teal (non-breeding only is assessed in HRA), pintail (non-breeding only is assessed in HRA), garganey, shoveler (non-breeding only is assessed in HRA), pochard, grey heron, little egret, , lapwing, ruff (non-breeding only is assessed in HRA), snipe ¹ , black-tailed godwit, curlew, redshank (non-breeding only is assessed in HRA), cuckoo, grasshopper warbler, sedge warbler, yellow wagtail, reed bunting, quail ² , short-eared owl ² , whinchat, shelduck (non-breeding only is assessed in HRA)							>
Assemblages of breeding birds - Mixed							✓
Assemblages of breeding birds - variety of species (avocet, marsh harrier, lesser black-backed gull, Mediterranean gull, and Sandwich, little and common terns are the only HRA breeding bird species)							√

¹ Snipe is described in the Suffolk Bird Report Vol.68 as being extinct as a breeding species

² This species does not nest most years



Designated feature	Bawdsey Cliff	lken Wood	Aldeburgh Hall Pit	Aldeburgh Brick Pit	Round Hill Pit, Aldeburgh	Snape Warren	Alde-Ore Estuary SSSI
Hard maritime cliff and slope							✓
IA - Coastal Geomorphology							√
Invertebrate assemblage F1 unshaded early successional mosaic							√
Invertebrate assemblage M1 rocky shore							√
Littoral sediment							√
Vascular plant assemblage							√
Floodplain fen (lowland)						✓	
Lowland dry acid grassland (U1b,c,d,f)						✓	
Lowland dry acid grassland (U4)						✓	
Lowland dry heath						✓	
ED- Neogene			✓	✓	✓		
EC – Quaternary of East Anglia	✓						
Lowland mixed deciduous woodland		✓					
Other features of concern							•
(Dark-bellied) Brent goose, <i>Branta</i> bernicula bernicula							



Assessment of coastal access proposals on:

Bawdsey Cliff SSSI

Is this site also part of a European site? No

Designated feature - EC - Quaternary of East Anglia

Bawdsey Cliffs are of geological interest. There are over 2km of non-glacial Pleistocene environments present of the Butleyan division of the Early Pleistocene Red Crag. The site is the largest available exposure of the Red Crag and is rich in marine Mollusca.

A public right of way footpath exists seaward of Bawdsey Cliff, on the beach. It has been temporarily closed near Bawdsey Manor which is suffering from coastal squeeze, being frequently impassable at high tides. Walkers use the beach to continue their onward journey. Access levels are low; users comprise mainly locals and fishermen.

Further north, there is occasional use of the cliff top which has no legal standing but shows signs of use – a worn route has been made. Walkers are fenced off from WW2 gun emplacements and other defences but a level area is available to walk which becomes narrower in places where the cliff has eroded.

Low / occasional use continues on Bawdsey Beach (thought to be mainly fishermen) to the cliff top at Bawdsey Cliff, north of the bridleway track leading to Ferry Road.

On the cliff itself, north from the bridleway, occasional use continues on what used to be a permissive path; there are signs of use, with routes worn through vegetation on the seaward headland of a cropped field.

We are proposing to align the ECP trail on the cliff top, parallel to the public footpath and anticipate a medium increase in access levels. We anticipate a negligible increase in the margin where responsible fossil-hunting may occur. However the area is subject to coastal squeeze and the opportunity and safety of this activity will be increasingly limited as sea levels rise.

We do not consider our proposals will destroy or damage the special interest feature of this site.

Alde-Ore Estuary SSSI

Is this site also part of a European site? Yes:

- Alde-Ore Estuary Ramsar.
- Alde-Ore and Butley Estuaries SAC
- Alde-Ore Estuary SPA



Note that notified features of the SSSI that are also qualifying features of the European site are omitted from this assessment. The following SSSI features assessed in this NCA are not assessed in the HRA (see summary Table above).

Aggregations of breeding birds - black-headed gull, herring gull, shoveler, (non-breeding shoveler is part of Ramsar assemblage)

Black-headed gull are a very common resident, winter visitor and passage migrant. The main breeding site is at Minsmere but 23 pairs bred on Orfordness in 2018 although it is believed only three fledged. This compares with 240 breeding pairs on Orfordness in 2016 (Suffolk Bird Report Vol. 66) and 718 in 2015 (Suffolk Bird Report Vol. 65).

Herring gull are also a very common resident, winter visitor and passage migrant. It is on the Red List of Birds of Conservation Concern 4³. On Orfordness 68 pairs nested in 2018 (producing 45 chicks) with similar numbers in 2017 and 2016 (Suffolk Bird Report Vol.68).

Shoveler occur on the Alde-Ore estuary in numbers of International Importance (354 WeBS 5 year average). Two broods at Orfordness produced at least 10 chicks and there were successful breeding pairs at Boyton Marshes, Snape wetlands (five pairs) and two pairs at Hollesley Marshes.

Locations / units where features are found:

Hazlewood Marshes – there is a spatial separation between walkers using the trail on the line of the Sailors' Path and the current Suffolk Coast Path (SCP) and Hazlewood Marshes: the seawall breached in 2013 and prevents walkers from using the seawall.

Cob Island is a land mass set within the mudflats of the River Alde; walkers do not have access to any land near the island from the south bank of the Alde. The mudflats which surround it are subject to a section 25A of the Countryside and Rights of Way Act 2000 (s25A) exclusion of access all year round as it is unsuitable for public access.

Orfordness beach north – this area includes 500m of haulage track on Orfordness which forms part of the seaward margin and will not, unlike the rest of the Ness, be subject to a restriction: the area is currently used by fishermen gaining access to the shingle beach for sea-fishing. Fishermen with keys for the locked gate and a licence from the National Trust (300 such licences have been granted), gained access to this area in vehicles but the track from Slaughden has reduced in width following extreme weather events such that access on foot only is currently possible. Although there will be a lifting of an existing prohibition for members of the public over a short section, the

³ Eaton, M. et al man.pdf (accessed Feb 2020)



loose shingle is difficult to walk on, the beach area has groyne structures which may impede access and there is no onward route through Orfordness for ECP walkers. Most current use, other than by fishermen, is occasional use by members of the public bird watching or seeking the sandy intertidal area of the beach.

Lantern marshes / Cobra Mist, Pig Pail Bridge, East of King's Marshes, Stony ditch and Orford beach (south) – all form part of the remaining area of Orfordness which will be subject to a year round restriction of No Dogs and a further restriction for land management purposes which replicates current management by the National Trust, that is, restricting access on the Ness to the existing marked routes. This does not affect the public right of way at Crouch End, the three permissive routes currently managed by the National Trust at the distal end of the Ness or the track from the public right of way at Slaughden south down to the end of the groynes.

Havergate Island – is not accessible by a land bridge at any state of the tide and is therefore out of scope for consideration under coastal access.

Oxley Dairy – the ECP trail follows an existing public right of way. We anticipate a negligible increase in use of the trail as a result of our proposals at this location. A s25A restriction on the saltmarsh and flat and signage will ensure there is no additional access onto this area as a result of our proposals.

Bawdsey Beach and Shingle Street – the proposed trail along this section follows existing walked routes and public rights of way; a small increase is anticipated due to walkers being able to use a new cliff top route further south. Walkers tend to make their own way across the shingle to the shoreline but access impacts are concentrated on the two routes linking the two car parks to the sea and along the high tide mark. ⁴There is also a marked area with reduced/ no vegetation following the line of white stones down towards the sea. Increased use of the shingle is likely to be negligible as a result of our proposals: the loose shingle of the seaward margin is difficult to walk on and foot fall, apart from the main routes described above, is fairly spread out enabling vegetation to thrive in between walked shingle.

Butley estuary west, from just south of Sparrowhill Covert to part way along the arable field Further south, there is potential for walkers and their dogs to disturb breeding (and non-breeding) birds both landward, where there is a water body in the landward folding, and seaward of the trail for approximately 350m to the junction of the main trail with the proposed alternative route (which starts on the 1st September and ends on the 31st March). A year-round Dogs on Leads restriction is planned for this section of the trail (and margin where not already covered by the exclusions above) to avoid the potential for dogs to disturb breeding and non-breeding birds. This measure is described more fully in the HRA.

⁴ ABREHART ECOLOGY LTD., 2018 Updating Vegetated Shingle Survey, Shingle Street, Suffolk for Suffolk Coasts and Heaths AONB A "Touching the Tide" project (2018)



There is potential for walkers to disturb breeding marsh harrier. The walker is largely hidden behind vegetation forming the headland/ seawall at the northern end. Where vegetation needs to be cut to provide a path, a fringe of vegetation will be left on the seaward side providing screening. The path becomes more exposed further south along this section. There were two nests at Upper Butley River, both of which failed in 2018 (Suffolk Bird Report Vol. 68).

The land management exclusion to protect the reed commercial crop from damage and s25A on the saltmarsh and flat mean that these areas will be excluded from coastal access.

Butley estuary, northern section

On the western side: the trail follows the seawall on a currently walked route. A sign has been erected at the northern junction of the seawall with Mill Lane, to ensure it is used as a footpath only and to deter current use by horses.

An additional track is visible leading from Butley Mills through reedbed to the river's edge where aerial photographs show small boats are kept. A land management restriction on coastal access rights will apply on the reedbed all year round to avoid damage to a commercial crop (see Restrictions and Exclusions map BSA E2).

The walked seawall continues to the edge of an arable field where pigs are kept on rotation - the route through the field on the seaward headland is a newly-created route. There is an existing public right of way that runs parallel to the proposed trail but through the middle of the field.

Through Chillesford: the trail is spatially separated from the Butley and any reedbed or saltmarsh by a mix of excepted land (buildings and their curtilage) and land on which we are proposing a restriction of access for public safety. The proposed trail follows the northern footway of the B1084.

On the eastern side: the trail follows a public right of way from the B1084 road past Decoy Wood. The wood does not appear to be accessed by walkers from the public right of way. The public footpath and trail turn west towards the reedbed which falls within the seaward margin. The reedbed will be excluded from coastal access rights for land management purposes to protect a commercial crop from damage. The next section of seaward margin of the trail and public right of way feature saltmarsh and flat which is also subject to an all year round exclusion under s25A as it is unsuitable for public access; it is contiguous with the land management exclusion.

We anticipate a small increase in use of the trail over this section of route as a result of our proposals; access to the margin is subject to the exclusions described above.

Given the anticipated increase in walkers and our plans to protect people, crops and wildlife, via: -

- restrictions for dogs on leads;
- exclusions from reedbeds and saltmarsh and mudflat; and



 a suite of information boards to ensure dogs are kept under control and to engage and inform walkers about the features,

we do not consider our proposals will damage or destroy the "Aggregations of breeding birds" feature of the Alde-Ore Estuary SSSI.

Aggregations of non-breeding birds

Bewick's swan is a fairly common but declining winter visitor and passage migrant mainly found in Cambridgeshire. They feed on fields during the day (on left over potatoes and grain), flying back to roost on open water. A key site in Suffolk is around the Minsmere area. It is not currently meeting its site target of above 50% of 41 individuals. WeBS 5 year average is 2 pairs. Numbers have been low for over 20 years, and do not show a significant population trend⁵ but reflect a regional and national trend (the feature is subject of a "high" long term WeBS alert).⁶

(Northern) Lapwing is a very common winter visitor and passage migrant although it is declining as a breeding species and is on the Red list. In 2018, 22 pairs fledged at Orfordness and 20 young fledged; a single fledgling was recorded at Boyton Marshes, four pairs nesting at Hollesley Marshes and two young fledged at Bawdsey Marshes (Suffolk Bird Report Vol.68). A steady decline in over-wintering numbers from a peak in winter 1994/1995 has brought the WeBS 5 year average down to 3,946 (WeBS online 2013/2014 to 2017/2018). In 2016 it contributed towards the BTO score for Breeding Bird Assemblage (Mixed and Variety of species) on Orfordness and Havergate Island and also to the BTO score for Breeding Bird Assemblage - Lowland Damp Grassland (excluding Orfordness and Havergate Island) (Woods, P. 2017).

Dunlin is a very common winter visitor and passage migrant and is on the Amber list. Reduced over-wintering numbers in 2018 on the Alde-Ore may be a reflection of adverse weather conditions leading to greater numbers inland. Passage numbers were recorded of up to 130 at Hazlewood Marshes and 11 at Havergate Island (Suffolk Bird Report Vol.68). Dunlin over-winter on the Alde-Ore in numbers of National Importance with a WeBS 5 year average of 4, 626 (WeBS online 2013/2014 to 2017/2018) but have shown a downward trend nationally since their peak in 1990/1991.

The exclusions and restrictions we have planned and the options chosen for the alignment mean

⁵ WOODS, P. The Ornithological Importance and Status of the Alde-Ore Estuary (January 2017)

⁶ https://app.bto.org/webs-reporting/?tab=alerts (accessed Feb 2020)



that we do not consider our proposals will damage or destroy this interest feature on the Alde-Ore Estuary SSSI.

Locations/ units feature is found

Important locations for the aggregation of non-breeding birds feature are at Cob Island, Stanny Point and Slaughden at high tide, and at low tide: Slaughden, Cob Island and between Orfordness ferry, Boyton Dock and Bawdsey Beach and Shingle Street (Woods, P. 2017).

Cob Island and Stanny Point - The proposed trail remains on the road network and does not impact Cob Island and Stanny Point.

Orfordness ferry area, Boyton Dock and Shingle Street - The trail at Orfordness ferry, Boyton Dock and Shingle Street follows existing walked routes and public rights of way and at Bawdsey follows a new cliff top route. There will be an exclusion of coastal access on saltmarsh and flat around Boyton Dock and for the middle and lower reaches of the Butley. A land management restriction on access on Orfordness will largely reflect the current visitor management regime of the National Trust. The margin at Shingle Street is not attractive to a walker: it mainly comprises loose shingle which is difficult to walk on and the water bodies are not inviting for walkers or their dogs who are more likely to choose the open sea for bathing.

Aldeburgh Marshes used to support the highest numbers of Bewick's swan compared with elsewhere on the SSSI, but none have been recorded here since 1999/00 (WeBS online data) (Woods, P. 2017).

Assemblages of breeding birds - Lowland damp grasslands

Species included as part of Index Score based on 1983 SSSI Selection Guidelines:- mute swan, gadwall, teal (non-breeding teal are assessed in HRA), pintail (non-breeding assessed in HRA), garganey, shoveler (non-breeding assessed in HRA), pochard, grey heron, little egret, lapwing, ruff (non-breeding ruff assessed in HRA), snipe (not currently a breeding bird in Suffolk), blacktailed godwit, curlew, redshank (non-breeding redshank assessed in HRA), cuckoo, grasshopper warbler (few confirmed breeding reports in Suffolk with one intermittent singing male recorded at Aldeburgh Marshes in 2018), sedge warbler (18-21 territorial males recorded at Orfordness and 60 at Aldeburgh Marshes), yellow wagtail (rapidly declining summer visitor and passage migrant on the Red list, no confirmed breeding on Alde-Ore but 12individuals recorded at Aldeburgh), reed bunting (21 pairs recorded at Orfordness), quail, short-eared owl (no indication of any breeding territories anywhere in Suffolk), whinchat (no longer breeding in Suffolk), shelduck (non-breeding shelduck assessed in HRA – 18 pairs on Orfordness raised 124 ducklings of which at least 60 fledged). (Suffolk Bird report Vol.68).



This assemblage feature was added on expansion of the original SSSI to its current borders. The main location for this assemblage was at **Hazlewood Marshes** where, prior to the 2013 surge, the feature was meeting its targets. After the 2013 tidal surge which breached the seawall, Hazlewood Marshes has become intertidal and so does not support the breeding species of lowland damp grasslands. (Woods, P. 2017).

The area is not easily accessed and would in any event be subject to a negligible increase in use as a result of our proposals for the ECP.

This feature is also found on **Orfordness** which will be subject to a year round restriction of access (no dogs) and a land management restriction on access which largely mirrors the visitor management regime adopted by the National Trust, therefore we expect no change to this site

Havergate Island, another location for this feature, is not subject to coastal access legislation as it cannot be accessed by a land bridge at any state of the tide.

This feature is also found at **Hollesley and Boyton RSPB reserves**. The alignment option at these locations uses a mix of well walked routes and public rights of way.

With the land management restriction at Orfordness of no dogs and a further land management restriction which allows access only on currently marked routes on Orfordness, and alignment choice for the ECP which uses the Sailors' Path past Hazlewood Marshes and elsewhere uses existing walked routes or public rights of way, we do not consider there will be any damage or destruction of these features as a result of our proposals.

Assemblages of breeding birds – Mixed

In 2016 the BTO Index Score was applied to the following species:

Mute swan, mallard, shedluck, gadwall, teal, pintail, shoveler, pochard, tufted duck, red-legged partridge, little grebe, marsh harrier, kestrel, water rail, moorhen, coot, oystercatcher, avocet, ringed plover, lapwing, redshank, black-headed gull, common gull, lesser black-backed gull, herring gull, little tern, common tern, sandwich tern, stock dove, cuckoo, barn owl, carrion crow, bearded tit, swallow, grasshopper warbler, sedge warbler, reed warbler, Cetti's warbler, stonechat, wheatear, yellow wagtail, reed bunting and linnet.

The BTO index score only refers to **Havergate Island** and **Orfordness** units (near Pig Pail Bridge, King's Marshes, Orfordness Lighthouse, and Orford beach). Havergate Island is out of scope of coastal access legislation and Orfordness is subject to two land management restrictions to protect designated features currently protected through the National Trust's visitor management regime (no dogs and access restricted to marked routes on Orfordness).



We anticipate negligible increases in access as a result of our proposals at this location: there are currently occasional to low levels of use by committed walkers as there are few places to park or conduct circular routes and there are few specific attractions or sights of interest. The route will be clearly signed for ECP walkers to ensure the route is easy to follow.

With these measures in place and our choice of alignment, we do not consider there will be an adverse impact on this feature as a result of our proposals.

Assemblages of breeding birds

A variety of species: gadwall, shoveler, oystercatcher, ringed plover, common gull, short-eared owl, wheatear, black-headed gull and herring gull (breeding avocet, marsh harrier, lesser black-backed gull, Mediterranean gull, and Sandwich, little and common terns are assessed in the HRA)

Gadwall – on the Alde-Ore estuary, Orfordness had a total of 5 breeding pairs in 2017 and 11 in 2018. (Suffolk Bird report, Vol.68).

Shoveler – occur on the Alde-Ore in numbers of National Importance. An improving picture saw two pairs on Orfordness of which at least 10 fledged (compared with no confirmed breeding from the pair present in 2017) and further successes at Boyton Marshes, 5 pairs at Snape Wetlands and 2 pairs on Hollesley Marshes (Suffolk Bird report, Vol.68).

Oystercatcher – this very common visitor and passage migrant is a common but declining resident and is Amber listed. In 2018 21 pairs fledged a minimum of 8 young on Orfordness, compared with 25 pairs recorded in 2017 (when 6 young fledged) and 17-18 pairs recorded in 2016. This marks a stabilisation of a longer term downward trend in this species when 35-40 pairs were recorded in 2008 and 90 pairs estimated in 1984.

Ringed plover – this declining resident, winter visitor and passage migrant is on the Red list. Records of breeding in 2018 showed a single juvenile at Snape/ Botany Marshes, nine pairs (13 fledged young) at the key site of Orfordness and a pair with three chicks at Shingle Street. This compares with 8 breeding pairs in 2017 when at least 11 chicks were thought to have fledged and 8 pairs in 2016. A huge decline in breeding pairs since 1979 appears to have slowed but has still dropped 9% in the last ten years reflecting a similar decrease in the number of sites where this feature nests and an increasing reliance on sites with protection or intervention of some kind (Suffolk Bird report, Vol.68).

⁷ Eaton, M. et al, https://britishbirds.co.uk/wp-content/uploads/2014/07/BoCC4.pdf

⁸ Orfordness NNR Breeding Summary for Birds 2012

⁹ Orfordness Breeding Bird Survey 2017



Short-eared owl – there was no indication of breeding territories anywhere in 2018 (Suffolk Bird Report, Vol.68). Although up to six were seen in April 2017, no breeding activity was noted. ¹⁰ And a peak count of 20 on Orfordness in April 2012 soon dropped away and again there was no evidence that any of the birds attempted to breed. ¹¹

Locations/ units features are found

Key locations for this assemblage are on **Orfordness** where their condition was found favourable at last assessment (2010 and 2013) near the Pig Pail Bridge and King's Marshes. The unfavourable no change condition on Orford Beach reflects coastal processes resulting in coastal squeeze and a loss of habitat for some species notably ringed plover and little tern.

All locations apart from Orfordness have a trail alignment proposed on existing walked paths and public rights of way and small predicted increases of access as a result of our proposals. We plan to have a set of "branded" information panels to ensure dogs are kept under control and to engage and inform walkers about the features of the Alde-Ore, including the Butley River. We also plan a year-round exclusion on the saltmarsh and mudflat of the Alde where it is unsuitable for public access.

At Orfordness, we plan a land management restriction (no dogs) all year round where it falls within the seaward margin and a land management restriction restricting walkers to the marked routes on the spit, mirroring the visitor management regime employed by the National Trust. One section of the haulage track (which was for vehicular use and is now passable only on foot) from Slaughden past the Martello Tower for about 500m to the end of the groynes, will not be subject to this restriction. This reflects current use by fishermen and members of the public seeking access to the sea and beach or for watching wildlife. Our plans may result in a possible increase of use of the margin at this location. The interest features tend to occupy locations further south on the spit and will not therefore be impacted by our proposals.

Our plans to inform walkers, restrict or exclude access and our choice of alignment mean that we do not consider our proposals will damage or destroy this interest feature.

Hard maritime cliff and slope

The proposed trail follows an existing route that meets up with a track to the river's edge, about 77m north from the junction with Ferry Cottage public right of way. It continues past the cliff, a

¹⁰ Orfordness Breeding Bird Survey 2017

¹¹ Orfordness NNR Breeding Summary for Birds 2012



small exposure of Coralline Crag 3m high. The sandwave facies, overlies highly fossiliferous silty crag. The site is of historical as well as palaeontological interest and is one of the only Coralline Crag localities to show the lower erosional contact of the sandwave facies.

A small section is exposed, the remainder being covered by scrub. The exposed section is where the trail meets the river's edge. It is also the area used by commercial oystermen and their plant. The trail continues to follow a track, seaward of the scrub in front of the cliff, and onto the seawall via a field gate. We do not consider that the increase in walkers at this location will damage or destroy the designated feature of this unit.

IA - Coastal Geomorphology

Orfordness, together with Shingle Street, is one of three major shingle landforms in the British Isles and is the only one which combines a shingle spit with a cuspate foreland. This large feature comprises a complex sequence of shingle ridges deposited over a long period of time which record stages in the evolution of the landform. The distal end of the spit is still subject to rapid changes and is dynamically related to events at Shingle Street on the mainland shore.

A year-round restriction of coastal access on Orfordness, which forms part of the seaward margin of the trail at Slaughden, is proposed which reflects the current visitor management regime adopted by the National Trust. At Shingle Street, the predicted increase in use of the trail is small. The location already attracts a low but regular use, there are few facilities nearby and the negligible increase in use of the seaward margin is likely to be focussed on key points where walkers may wish to access the intertidal area, or where walkers may wish to investigate the line of white stones (featured on social media) placed from the main public right of way through Shingle Street towards the sea. ECP walkers are likely to want to continue their journey in order to reach facilities to the north or south. If they choose to break their journey at Shingle Street (unlikely due to the lack of facilities) it would be to use the margin as a means to access the sea or to investigate the line of white stones as described.

With these measures in place, we do not consider our proposals will damage or destroy this special interest feature.

Invertebrate assemblage F1 unshaded early successional mosaic

The lagoons at **Shingle Street** are notable for a number of brackish water species particularly the rare anthozoan *Nematostella vectensis* and the site is also noted for a number of rare spiders. Several nationally rare and scarce insects are found within ditches running through **Hazlewood Marshes**.



The ECP trail uses existing public rights of way and walked routes at Shingle Street. The lagoons do not look inviting and there are no reports or signs of dogs entering them. A walker with dogs wanting to enter water may be more likely to access the nearby sea from the beach.

Hazlewood Marshes reserve, managed by Suffolk Wildlife Trust, is a 10 minute walk from the car park at Saxmundham Street at its junction with Hazlewood Street. It lies in the seaward margin but we predict a negligible increase in access to it. The existing Sailors' Path, landward of Hazlewood Marshes is already a popular route and additional walkers as a result of our proposals for the ECP are likely to be relatively small. Most of those walkers would want to continue their onward journey to Snape or Aldeburgh where there are facilities available.

Suffolk Wildlife Trust describe the reserve as a "significantly…very different place" since the 2013 tidal surge, where "whole communities of plants and invertebrates disappeared almost overnight." ¹² But also a new area of inter-tidal habitat has been colonised.

With our choice of alignment and predicted use and increase in access at the locations this feature is found, we do not consider our proposals will damage or destroy these special interest features.

Invertebrate assemblage M1 rocky shore

This assemblage was found to be in favourable condition on the unit which runs parallel to **Havergate Island** but forms part of **Orfordness**.

We do not consider the proposals for the ECP will damage or destroy this feature which apart from being difficult to walk on will be subject to a year round restriction of coastal access rights which reflects the visitor management regime employed by the National Trust at this location.

Littoral sediment

Includes habitats of shingle (mobile cobbles and pebbles), gravel, sand and mud or any combination of these which occur in the intertidal zone. Littoral sediment environments can be eroded and become coarser during winter and accrete finer particles during calmer summer months. ¹³

¹² https://www.suffolkwildlifetrust.org/hazlewoodmarshes (accessed Feb 2020)

https://mhc.jncc.gov.uk/biotopes/jnccmncr00000274 (accessed Feb 2020)



The locations where this feature occurs are almost all in the seaward margin where access is predicted to be negligible as a result of our proposals for the ECP. There are two locations where there is a possible increase: at **The Cliff** on the east bank of the Butley; and at the northern end of **Orfordness** for 500m from the end of the public right of way running south past the Martello Tower at Slaughden.

The ECP trail meets the river's edge at The Cliff and walkers are likely to be walking on the littoral sediment. However, the location is currently used for managing the oyster beds in the Butley River where the centuries-old tradition of farming oysters was revived in the 1950s. A number of visits (about 10) are made to the location each day in a tractor as part of this management.

Access as part of the seaward coastal margin is only available down to the end of the groynes at the northern end of Orfordness. The structures form effective barriers to walkers who are likely to remain on the flat track, now eroded to a path, down to a marked point. This point will be signed and a gate will be installed to prevent onward passage by walkers.

We do not consider our proposals will have an adverse impact on the littoral sediment at these locations.

Vascular plant assemblage

There are a variety of habitats present along the stretch including: mudflats, saltmarsh, brackish lagoons, shingle beach, reedbeds, grassland, freshwater and brackish ditches.

Mudflats support the rare intertidal eelgrass *Zostera angustifolia* (although only two locations have been identified in Suffolk and it is thought to be more accurately regarded as a form of *Zostera marina*¹⁴) and narrow fringes of saltmarsh occur along the length of the rivers with wider expanses at **Shingle Street**, **Havergate Island** (out of scope for coastal access), parts of **Orfordness**, the upper reaches of the **Butley River** and in places by the **River Alde**. Saltmarsh, mostly dominated by sea purslane *Halimione portulacoides* and sea lavender *Limonium vulgare*, also includes seaheath *Frankenia laevis*, glasswort *Salicornia pusilla*, small cord-grass *Spartina maritima* and Borrer's saltmarshgrass *Puccinellia fasciculate* - representative of the *Halimione portulacoides* community.

Saltmarsh elements also occur around the lagoons such as those on Shingle Street and contain the rare tasselweeds *Ruppia spiralis* and *R. maritima* which are not considered inviting areas for people or their dogs to access – especially with the sea being so close by.

¹⁴ SANFORD, M. and Fisk, R. A Flora of Suffolk 2010 (Pub. D.K.& M.N. Sandford)



Saltmarsh and mudflats, on areas not suitable for public access, are excluded from coastal access under provisions set out in s25A. We do not consider our proposals will damage or destroy these features.

The site also contains the second largest and best preserved area of vegetated shingle in Britain. This is a nationally rare and delicate habitat and supports: sea pea *Lathyrus japonicus* and sea kale *Crambe maritima* on more mobile substrates; and areas of sea campion *Silene maritima* and stonecrops *Sedum acre* and *S. anglicum* occur on more stable ground. Orfordness contains one of the best examples of zonation in the shingle vegetation. Above the high water mark *Rumex crispus* and *Glaucium flavum* occur on mainly bare shingle, with sea pea becoming much more abundant within the matrix further inland where areas of grassland dominated by *Arrhenatherum elatius* and sea campion occur. Rare or local species also occur including yellow vetch *Vicia lutea* and the dwarf clovers *Trifolium suffocatum*, *T. glomeratum*, *T. striatum*, *T. scabrum* and bur medick *Medicago minima*. Lichen communities are also well developed here with areas of *Cladonia* heath.

Unique for East Anglia beach formations is the abundance of normally epiphytic lichens *Parmelia caperata* and *Evernia prunastre*. Higher saltmarsh blending to neutral grassland, dominated by sea couch grass, *Elymus pungens*, occurs on former grazing marsh on Havergate Island and Orfordness and on the extensive system of clay embankments throughout the site.

Orfordness is subject to a year round restriction of coastal access which mirrors the visitor management regime employed by the National Trust in addition to a year-round restriction of No Dogs on the spit.

There are small areas of reedbed at the head of the Butley River which is subject to a land management exclusion of access all year round prevent damage to a commercial crop.

We are proposing simple management measures at Iken to prevent access tracks developing through the reedbeds and on to the saltmarsh; and a package of "branded" signage at specified locations to encourage walkers to keep their dogs under control and to engage and inform walkers about the features of the Alde-Ore generally, including at Iken car park, a known starting point for many walkers.

With these measures in place and the low level of increase in use predicted as a result of our proposals, we do not consider there will any damage or destruction of the vascular plant assemblage on the Alde-Ore.



Iken Wood SSSI

Is this site also part of a European site? No

Designated feature - Lowland mixed deciduous woodland

Iken Wood may be the only ancient coppice wood on blown sand in Britain. It is an example of lowland coppice oakwood in Suffolk and has a distinctive flora typical of woods on light soils.

From Peach Cottage, Tunstall Road, access levels on the public right of way increase to medium levels on the approach to a busy car park near lken Cliff which is used as a starting point for many walkers and their dogs.

The route – still on the public right of way – continues towards Snape Maltings; it is used at medium to high levels. There is limited access from the proposed trail and public right of way into Iken Woods which lie landward of the landward edge of the trail and margin. Access points into Iken Woods are limited.

We anticipate a small increase in levels of access between Snape and Iken car park. Most visitors walk on the public right of way between Snape and Church Farm, Iken. The site is spatially separated from the ECP trail; a walk via Iken Woods using existing tracks, roads and public rights of way instead of using the ECP trail adds another kilometre to a walk, is mainly on roads and does not give views of the estuary. We do not therefore consider that our proposals will damage or destroy the special interest features of Iken Wood.

Snape Warren SSSI

Is this site also part of a European site? Yes, Sandlings SPA.

Note that notified features of the SSSI that are also qualifying features of the European site are assessed in the HRA.

Designated features assessed in NCA - Floodplain fen (lowland); Lowland dry acid grassland (U1b,c,d,f); Lowland dry acid grassland (U4) and Lowland dry heath

Once over Snape Bridge, access levels heading eastwards are high, dropping to between medium and high levels on the western edge of Snape Warren.

There is a small car parking area near where the public right of way meets Priory Road in Snape; the public right of way connected to the car park and following the whole of the east-west route known as Sailors' Path, experiences medium levels of access.



Snape Warren itself is mapped as Open Access land. A public right of way runs roughly north-south through the site and continues down towards the Alde. Another public footpath follows the southwestern edge of the site and forms the line of the Suffolk Coast Path. The SCP heads due north, away from Snape Warren, to Priory Road where it joins the popular Sailors' Path. A walked route continues further around Snape Warren until it meets up once more with the Sailors' Path, a kilometre further eastwards than the SCP. There are also guided walks across the site.

The proposed trail uses a mix of public rights of way (parts of which are currently promoted as the SCP) and existing walked paths. We anticipate a small increase in users with the advent of ECP. However walkers will be on well-signed, currently walked routes. Existing signage delivers a simple, clear message to walkers asking them to keep their dogs on leads all year round whilst on the site.

We therefore do not consider that there will be damage to or destruction of the interest features of this site as a result of our proposals.

Round Hill Pit, Aldeburgh SSSI

Is this site also part of a European site? No

Designated feature - ED - Neocene

This small pit is of geological interest because of the exposure of Coralline Crag deposited in the Pliocene age. It contains the mineral aragonite and is further north than any other Coralline Crag locality at which aragonitic fossils are present. This pit is important in the study of facies distributions and paleoecology (sediment and faunal patterns) of the Coralline Crag.

There is no current public access to the site.

We anticipate a small increase in use of the trail as a result of our proposals and a negligible increase in the use of the margin. This site falls within the seaward margin of the proposed trail; access to it is separated from walkers by land which may be regarded as excepted land (golf course and garden). Therefore we do not consider our proposals will damage or destroy the designated feature of this site.



Aldeburgh Brick Pit SSSI

Is this site also part of a European site? No

Designated feature - ED Quaternary of East Anglia

The brick pit is a Quaternary geological locality. It is an important stratigraphic site with a sequence from the top, of Kesgrave Sand and Gravel, Chillesford Clay and Chillesford Crag overlying Coralline Crag. The Chillesford Crag is of Bramertonian age and this is one of the few sites to reveal deposits of this age. This site is particularly significant for showing transgression of the Red Crag Sea.

A worn route is visible through the site seaward of the back gardens of properties on the Aldeburgh Road and on the green area to the north of the new housing development called Brickfields and 23-50m east of the track servicing the western side of Brickfields. These two routes form the northern and western edges of the site and are part of a wider circular route used by local walkers outside the Brickfields building site area between the new-builds and properties along Aldeburgh Road.

The main threats to the conservation of this pit are landfill and developments which obscure the geological features. If permission is granted for landfill or development, it may be possible to maintain a conservation face on the site which should be maintained clear of vegetation and build-up of rock debris. We do not consider our proposals will damage or destroy the interest feature of this site.

Aldeburgh Hall Pit SSSI

Is this site also part of a European site? No

Designated feature – ED Neogene

This shallow pit shows a section in a very fossiliferous facies of the Pliocene Coralline Crag. The fauna of calcitic bryozoans is rich and diverse. Most conspicuous of these bryozoans are the large spherical colonies of *Meandropora* and *Blumenbachium*. Articulated colonies of *Cellaria* are also present. Calcitic bivalves are generally encrusted with well-preserved bryozoans and serpulids. This locality yields probably the best Neogene fauna in Britain.

The area is well worn with visible walked routes, tracks made by heavy plant and grazing. Vegetation has been worn away at various entry points onto the site and a public right of way from the Alde runs east-west close to the southern tip of the site.



Two public rights of way lead from the proposed trail of the ECP towards the pit but the pit is at least 70m landward of the landward edge of the trail. Any circular routes are likely to have been developed already as the trail uses a public right of way on the edge of Aldeburgh Marshes.

We do not consider, with a small increase in users as a result of our proposals, that there will damage or destruction of the designated feature of this site.

Assessment of coastal access proposals on Local Wildlife Sites and geological sites

There are no Local Wildlife Sites or geological sites affected by the alignment of the Trail or within spreading room.

Assessment of coastal access proposals on other noted features.

(Dark-bellied) Brent goose

This species is a common winter visitor and passage migrant and is currently on the Amber list. In 2018, 5,700 passage were recorded off Orfordness and 1,040 on Aldeburgh Marshes. Few summer records included three at Orfordness and one around Aldeburgh Marshes and Havergate Island. Nationally numbers have increased since the 1970s. The WeBS online 5 year average of 391 (2013/2014 to 2017/2018) marks a trend of recovery from a low point in 2003/2004.

Restrictions and exclusions on walkers apply at Orfordness. Havergate Island is out of scope of coastal access. The proposed ECP follows existing public rights of way and walked routes around Aldeburgh Marshes where we anticipate a small increase in use of the trail and a negligible increase in use of the margin. The next available facilities are at Snape Maltings over 11 km to the west. Most users are likely to be local walks from Aldeburgh; there is an existing circular route for walkers from Aldeburgh, part of which will form the ECP trail. We do not consider the proposals for the ECP will damage or destroy this feature.



Establishment works

Considerations at the point of establishing the trail are discussed in detail in the HRA which accompanies this stretch report.



Conclusion

We, Natural England, are satisfied that our proposals to improve access to the English coast between Bawdsey to Aldeburgh are fully compatible with our duty to further the conservation and enhancement of the notified features of the following SSSIs: Bawdsey Cliff; Alde-Ore Estuary; Iken Wood; Snape Warren; Round Hill Pit, Aldeburgh; Aldeburgh Brick Pit; Aldeburgh Hall Pit, consistent with the proper exercise of our functions¹⁵.

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

In respect of undesignated but locally important sites and features we are satisfied that in developing the new access proposals the appropriate balance has been struck between Natural England's conservation and access objectives, duties and purposes.

The conclusions of this assessment have been checked by:

Darren Braine on behalf of the Coastal Access Programme Team (November 2020)

Catherine Whitehead on behalf of the Area Protected Sites Team (January 2020)

-

¹⁵ Natural England's functions includes its balanced general purposes for access, nature conservation and landscape under the NERC Act 2006, any specific statutory duties it may have to deliver specific improvements to public access, and the access-related policies and priorities it periodically agrees with Defra.

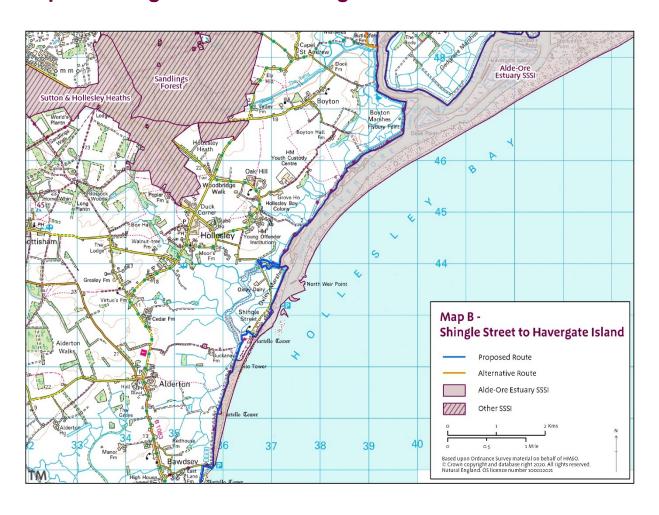


Map A - Bawdsey Cliff SSSI



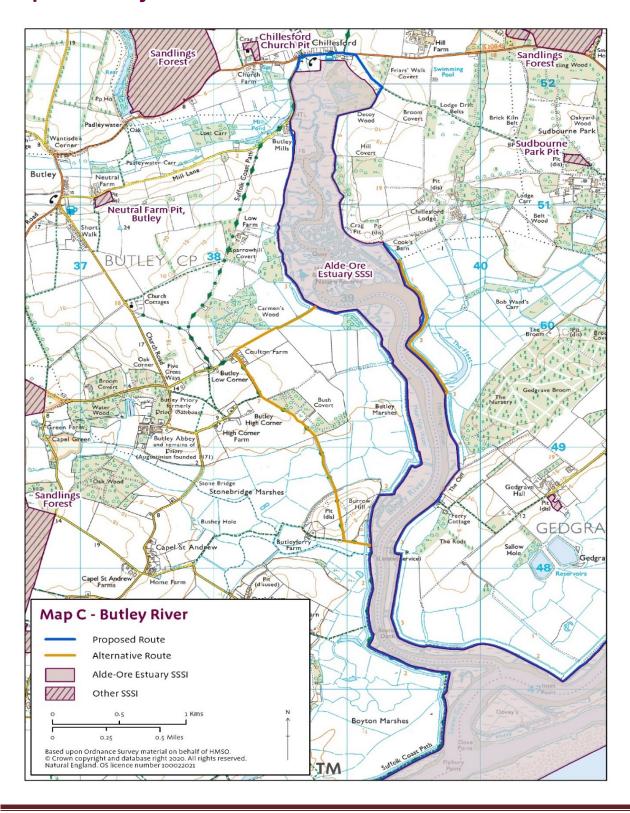


Map B - Shingle Street to Havergate Island



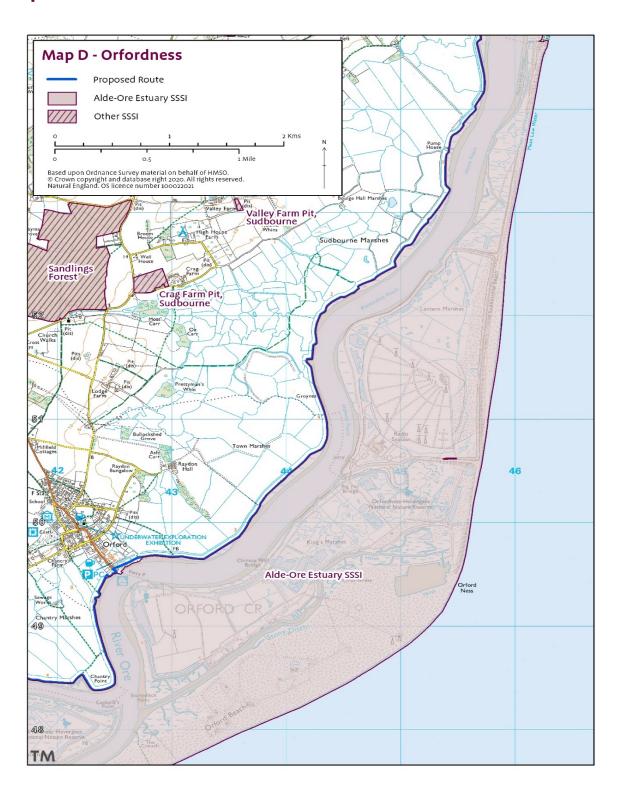


Map C - Butley River





Map D - Orfordness



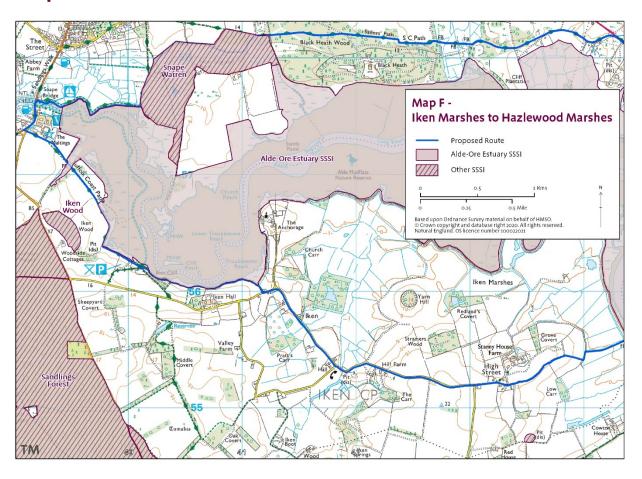


Map E - Slaughden and Aldeburgh Marshes





Map F - Iken Marshes to Hazlewood Marshes





Appendix

Master table of qualifying features of SPA, SAC, Ramsar and SSSIs on Bawdsey to Aldeburgh

Qualifying Feature	Alde-Ore Estuary Ramsar	Alde-Ore Estuary SPA	Outer Thames Estuary SPA	Sandlings SPA	Alde-Ore & Butley Estuaries SAC	Orfordness-Shingle Street SAC	Southern North Sea SAC	Bawdsey Cliff SSSI	Iken Wood SSSI	Aldeburgh Hall Pit SSSI	Aldeburgh Brick Pit SSSI	Round Hill Pit, Aldeburgh SSSI	Snape Warren SSSI	Alde-Ore Estuary SSSI	Considered in the HRA or the NCA?
A081 Circus aeruginosus; Eurasian marsh harrier (Breeding)		√												✓	HRA
A132 Recurvirostra avosetta; Pied avocet (Non-breeding)	√	√												✓	HRA
A132 Recurvirostra avosetta; Pied avocet (Breeding)		√												✓	HRA
A151 <i>Philomachus</i> pugnax; Ruff (Non-breeding)		✓												✓	HRA
A162 <i>Tringa totanus</i> ; Common redshank (Non-breeding)	✓	\												✓	HRA
A183 <i>Larus fuscus</i> ; Lesser black-backed gull (Breeding)	√	√												✓	HRA
A191 Sterna sandvicensis; Sandwich tern (Breeding)		→												✓	HRA
A195 Sterna albifrons; Little tern (Breeding)		√	✓											✓	HRA
A193 Common tern Sterna hirundo (breeding)			V												HRA
A001 Red-throated diver Gavia stellata (non- breeding)			√												HRA



Qualifying Feature	Alde-Ore Estuary Ramsar	Alde-Ore Estuary SPA	Outer Thames Estuary SPA	Sandlings SPA	Alde-Ore & Butley Estuaries SAC	Orfordness-Shingle Street SAC	Southern North Sea SAC	Bawdsey Cliff SSSI	Iken Wood SSSI	Aldeburgh Hall Pit SSSI	Aldeburgh Brick Pit SSSI	Round Hill Pit, Aldeburgh SSSI	Snape Warren SSSI	Alde-Ore Estuary SSSI	Considered in the HRA or the NCA?
Breeding Wetland Bird Assemblage Marsh Harrier Circus aeruginosus	√														
Mediterranean gull Larus melanocephalus Sandwich tern Sterna (Thalasseus) sandvicensis sandvicensis Little tern Sterna albifrons albifrons															HRA
Water bird assemblage (non-breeding)	√														
Black-tailed godwit Limosa limosa islandica Spotted redshank Tringa erythropus Common greenshank Tringa nebularia Greater white-fronted goose Anser albifrons albifrons Common shelduck Tadorna tadorna Eurasian wigeon Anas Penelope Eurasian teal Anas crecca Northern pintail Anas acuta Northern shoveler Anas clypeata															HRA + some features/ elements of features covered in NCA



Qualifying Feature	Alde-Ore Estuary Ramsar	Alde-Ore Estuary SPA	Outer Thames Estuary SPA	Sandlings SPA	Alde-Ore & Butley Estuaries SAC	Orfordness-Shingle Street SAC	Southern North Sea SAC	Bawdsey Cliff SSSI	Iken Wood SSSI	Aldeburgh Hall Pit SSSI	Aldeburgh Brick Pit SSSI	Round Hill Pit, Aldeburgh SSSI	Snape Warren SSSI	Alde-Ore Estuary SSSI	Considered in the HRA or the NCA?
A224 Caprimulgus europaeus; European nightjar (Breeding)				✓											HRA
A246 <i>Lullula arborea</i> ; Woodlark (Breeding)				✓											HRA
Wetland invertebrate assemblage Nematostella vectensis & Gammarus insensibilis of saline lagoons Malacosoma castrensis Campsicnemus magius Cheilosia velutina Empis prodomus Dixella attica Hylaeus euryscapus Pseudamnicola confusa Euophrys browningi Baryphyma duffeyi Haplodrassus minor Trichoncus affinis	~														HRA
Wetland plant assemblage Althaea officinalis Frankenia laevis Lathyrus japonicas Lepidium latifolium Medicago minima Parapholis incurva Puccinellia fasciculate Ruppia cirrhosa	✓														HRA



Qualifying Feature	Alde-Ore Estuary Ramsar	Alde-Ore Estuary SPA	Outer Thames Estuary SPA	Sandlings SPA	Alde-Ore & Butley Estuaries SAC	Orfordness-Shingle Street SAC	Southern North Sea SAC	Bawdsey Cliff SSSI	Iken Wood SSSI	Aldeburgh Hall Pit SSSI	Aldeburgh Brick Pit SSSI	Round Hill Pit, Aldeburgh SSSI	Snape Warren SSSI	Alde-Ore Estuary SSSI	Considered in the HRA or the NCA?
Sarcocornia perennis Sonchus palustris Trifolium suffocatum Vicia lutea Zostera angustifolia															
Estuaries					✓									√	HRA
Mudflat and sandflat not covered by seawater at low tide					✓										HRA
Atlantic salt meadows (Glauco-Puccinellietalia maritimae)					✓									√	HRA
1150 Coastal Lagoons						✓								✓	HRA
1210 Annual vegetation of drift lines						✓									HRA
1220 Perennial vegetation of stony banks						✓									HRA
Harbour porpoise Phocoena phocoena							✓								HRA
Aggregations of breeding birds - Black-headed gull, <i>Larus</i> ridibundus														✓	NCA
Aggregations of breeding birds - Herring gull, <i>Larus argentatus</i>														✓	NCA
Aggregations of breeding birds - Shoveler, <i>Anas clypeata</i> (non-breeding only is part of Ramsar assemblage)														<	NCA



	1			-											
Qualifying Feature	Alde-Ore Estuary Ramsar	Alde-Ore Estuary SPA	Outer Thames Estuary SPA	Sandlings SPA	Alde-Ore & Butley Estuaries SAC	Orfordness-Shingle Street SAC	Southern North Sea SAC	Bawdsey Cliff SSSI	Iken Wood SSSI	Aldeburgh Hall Pit SSSI	Aldeburgh Brick Pit SSSI	Round Hill Pit, Aldeburgh SSSI	Snape Warren SSSI	Alde-Ore Estuary SSSI	Considered in the HRA or the NCA?
Aggregations of non- breeding birds - Bewick's swan, <i>Cygnus</i> columbianus bewickii														√	NCA
Aggregations of non- breeding birds - Shelduck, <i>Tadorna</i> <i>tadorna</i> (part of Ramsar assemblage)	✓													✓	HRA
Aggregations of non- breeding birds - Teal, Anas crecca (part of Ramsar Assemblage)	√													✓	HRA
Aggregations of non- breeding birds - Wigeon, Anas Penelope (part of Ramsar Assemblage)	√													✓	HRA
Assemblages of breeding birds - Lowland damp grasslands: -														√	NCA
Mute Swan															NCA
Shelduck (non-breeding only is Ramsar)															NCA
Gadwall															NCA
Teal (non-breeding only is Ramsar)															NCA
Pintail (non-breeding only is Ramsar)															NCA
Garganay															NCA
Shoveler (non-breeding only is Ramsar)															NCA



Qualifying Feature	Alde-Ore Estuary Ramsar	Alde-Ore Estuary SPA	Outer Thames Estuary SPA	Sandlings SPA	Alde-Ore & Butley Estuaries SAC	Orfordness-Shingle Street SAC	Southern North Sea SAC	Bawdsey Cliff SSSI	Iken Wood SSSI	Aldeburgh Hall Pit SSSI	Aldeburgh Brick Pit SSSI	Round Hill Pit, Aldeburgh SSSI	Snape Warren SSSI	Alde-Ore Estuary SSSI	Considered in the HRA or the NCA?
Pochard Grey Heron															NCA
Little Egret															NCA NCA
Marsh Harrier		√													HRA
Corncrake		·													NCA
Lapwing															NCA
Ruff (non-breeding only is Ramsar)															NCA
Snipe															NCA
Black-tailed Godwit															NCA
Curlew															NCA
Redshank (non- breeding only is Ramsar)															NCA
Cuckoo															NCA
Grasshopper Warbler															NCA
Sedge Warbler															NCA
Yellow Wagtail															NCA
Reed Bunting															NCA
Quail															NCA
Short-Eared Owl															NCA
Whinchat															NCA
Mute Swan															NCA
Shelduck (non-breeding only is Ramsar)															NCA
Assemblages of breeding birds - Mixed														√	NCA
Assemblages of breeding birds - variety of species														✓	NCA



Qualifying Feature	Alde-Ore Estuary Ramsar	Alde-Ore Estuary SPA	Outer Thames Estuary SPA	Sandlings SPA	Alde-Ore & Butley Estuaries SAC	Orfordness-Shingle Street SAC	Southern North Sea SAC	Bawdsey Cliff SSSI	Iken Wood SSSI	Aldeburgh Hall Pit SSSI	Aldeburgh Brick Pit SSSI	Round Hill Pit, Aldeburgh SSSI	Snape Warren SSSI	Alde-Ore Estuary SSSI	Considered in the HRA or the NCA?
(Avocet, Marsh harrier, lesser black-backed gull, med. Gull, & sandwich, little and common terns are the only HRA breeding bird species)															
Hard maritime cliff and slope														✓	NCA
IA - Coastal Geomorphology														✓	NCA
Invert. assemblage F1 unshaded early successional mosaic														√	NCA
Invert. assemblage M1 rocky shore														✓	NCA
Invert. assemblage M311 saltmarsh and transitional brackish marsh (part of Ramsar inverts)	V													✓	HRA
Littoral sediment														✓	NCA
Population of Schedule 5 sea anemone - Nematostella vectensis, Starlet Sea Anemone (part of Ramsar invert assemblage)														√	HRA



Qualifying Feature	Alde-Ore Estuary Ramsar	Alde-Ore Estuary SPA	Outer Thames Estuary SPA	Sandlings SPA	Alde-Ore & Butley Estuaries SAC	Orfordness-Shingle Street SAC	Southern North Sea SAC	Bawdsey Cliff SSSI	Iken Wood SSSI	Aldeburgh Hall Pit SSSI	Aldeburgh Brick Pit SSSI	Round Hill Pit, Aldeburgh SSSI	Snape Warren SSSI	Alde-Ore Estuary SSSI	Considered in the HRA or the NCA?
SM4-28 – Saltmarsh (part of SAC saltmarsh)					✓									√	HRA
Vascular plant assemblage														√	NCA
Floodplain fen (lowland)													√		NCA
Lowland dry acid grassland (U1b,c,d,f)													✓		NCA
Lowland dry acid grassland (U4)													✓		NCA
Lowland dry heath													√		NCA
ED- Neogene										√	✓	✓			NCA
EC – Quaternary of East Anglia								✓							NCA
Lowland mixed deciduous woodland									✓						NCA

References

ABREHART ECOLOGY LTD., 2018 Updating Vegetated Shingle Survey, Shingle Street, Suffolk for Suffolk Coast and Heaths AONB A "Touching the Tide" project, 2018.

BTO, BirdTrack data October 2019. Records of individual bird species at key sites, 2019.

EAST SUFFOLK COUNCIL *Local Plan - Final Draft, Jan 2019*. Available from: https://www.eastsuffolk.gov.uk/assets/Planning/Suffolk-Coastal-Local-Plan/Final-Draft-Local-Plan.pdf

EAST SUFFOLK COUNCIL, *Suffolk Coast Recreational Disturbance Avoidance Mitigation Strategy* Q&A. Available from: https://www.eastsuffolk.gov.uk/assets/Planning/Section-106/Habitat-



mitigation/Suffolk-Coast-Recreational-Disturbance-Avoidance-Mitigation-Strategy-FAQ.pdf

EAST SUFFOLK COUNCIL, *Waveney Local Plan*. Available from: https://www.eastsuffolk.gov.uk/planning/planning-policy-and-local-plans/waveney-local-plan/, 2019.

EAST SUFFOLK COUNCIL, *Habitat Mitigation* webpage. Available from: https://www.eastsuffolk.gov.uk/planning/s106/habitat-mitigation/

ENVIRONMENT AGENCY, *Minsmere Flood Risk Management Strategy*, 2009. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/289667/gean0109bpfi-e-e.pdf

ENVIRONMENT AGENCY, Coastal Trends Report Suffolk (Lowestoft to Languard Point, Felixstowe). February 2011.

https://www.channelcoast.org/anglia/analysis_programme/Coastal%20Trends%20Report%20Suffo_lk%20(Lowestoft%20to%20Languard%20Point,%20Felixstowe)%202011%20RP022S2011.pdf

HOSKIN, R., LILEY, D. & PANTER, C. Habitats Regulations Assessment: Recreational Disturbance Avoidance and Mitigation Strategy for Ipswich Borough, Babergh District, Mid Suffolk District and East Suffolk Councils – Technical Report. Footprint Ecology, 2019

JNCC, Seabird Monitoring Programme Online Database. Available from: http://archive.jncc.gov.uk/smp/

NATIONAL TRUST, Orford Ness NNR Management Plan 2017-2022

NATURAL ENGLAND Designated Sites View Bawdsey Cliff SSSI https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1002355

NATURAL ENGLAND *Designated Sites View Alde-Ore Estuary SSSI* https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1003208

NATURAL ENGLAND Designated Sites View European Site Objectives for Orfordness-Shingle Street SAC Shingle Street to Orfordness SAC (UK0014780) http://publications.naturalengland.org.uk/publication/4635403541807104

NATURAL ENGLAND Designated Sites View Iken Wood SSSI https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1002409

NATURAL ENGLAND *Designated Sites View Snape Warren SSSI* https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1000928



NATURAL ENGLAND *Designated Sites View Round Hill Pt, Aldeburgh SSSI* https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1001513

NATURAL ENGLAND *Designated Sites View Aldeburgh Brick Pit SSSI* https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1002444

NATURAL ENGLAND *Designated Sites View Aldeburgh Hall Pit SSSI* https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1001559

NATURAL ENGLAND, Coastal Access Natural England's Approved Scheme 2013. Natural England Catalogue Code NE446, 2013.

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

NATURAL ENGLAND, European Site Conservation Objectives for Alde-Ore & Butley Estuaries Special Area of Conservation

http://publications.naturalengland.org.uk/publication/5301479954972672

NATURAL ENGLAND, European Site Conservation Objectives for Alde-Ore Estuary Special Protection Area (UK9009112)

http://publications.naturalengland.org.uk/publication/5170168510545920

NATURAL ENGLAND, European Site Conservation Objectives for Outer Thames Estuary SPA (UK9020309).

http://publications.naturalengland.org.uk/publication/4927106139029504

NATURAL ENGLAND, European Site Objectives for Alde-Ore and Butley Estuaries SAC (UK0030076).

http://publications.naturalengland.org.uk/publication/5301479954972672

NATURAL ENGLAND COMMISSIONED REPORT NECR012: Scientific research into the effects of access on nature conservation: Part 1: access on foot. Natural England, 2009.

NATURAL ENGLAND, *Information Note EIN034. Marine recreation evidence briefing: general beach life*. Available from: http://publications.naturalengland.org.uk/category/4891006631149568, 2017.

NATURAL ENGLAND, *Information Note EIN030. Marine recreation evidence briefing: wildlife watching*, 2017. Available from:

http://publications.naturalengland.org.uk/category/4891006631149568

RAMSAR *Ramsar Site Information Service, Alde-Ore Estuary* https://rsis.ramsar.org/ris/862



RSPB, Annual Little Tern Newsletter 2018, 24th edition. LIFE Little Tern Recovery Project, 2018.

SUFFOLK COASTAL DISTRICT COUNCIL/WAVENEY DISTRICT COUNCIL/ENVIRONMENT AGENCY, 2010. Shoreline Management Plan 7 Lowestoft Ness to Felixstowe Landguard Point. (Previously Sub-cell 3c). Available from http://www.suffolksmp2.org.uk/index.php

SUFFOLK ORNITHOLOGIST'S GROUP, *Suffolk Birds, Volume 65: A review of birds in Suffolk in 2015.* Suffolk Naturalists Society, 2016.

SUFFOLK ORNITHOLOGIST'S GROUP, *Suffolk Birds, Volume 66: A review of birds in Suffolk in 2016.* Suffolk Naturalists Society, 2017.

SUFFOLK ORNITHOLOGIST'S GROUP, *Suffolk Birds Volume 67: A review of birds in Suffolk in 2017*. Suffolk Naturalists Society, 2018.

SUFFOLK ORNITHOLOGIST'S GROUP, *Suffolk Birds Volume 68: A review of birds in Suffolk in 2018*. Suffolk Naturalists Society, 2019.

SUFFOLK WILDLIFE TRUST, *Hazlewood Marshes Nature Reserve webpage*: https://www.suffolkwildlifetrust.org/hazlewoodmarshes

SUFFOLK WILDLIFE TRUST, *Alde Mudflats Nature Reserve webpage:* https://www.suffolkwildlifetrust.org/aldemudflats

THE SUFFOLK COAST AND HEATHS AREA OF OUTSTANDING NATURAL BEAUTY, Management Plan 2018-2023.

 $\underline{https://www.suffolkcoastandheaths.org/wp-content/uploads/2020/03/2018-23-SCH-Management-\underline{Plan.pdf}}$

THE SUFFOLK COASTS AND HEATHS AONB, *Projects and Partnerships*. Available from: http://www.suffolkcoastandheaths.org/projects-and-partnerships/

THE SUFFOLK COASTS AND HEATHS AONB, "Balance" webpage Available from: http://www.suffolkcoastandheaths.org/projects-and-partnerships/balance/

TOUCHING THE TIDE Webpage. Available from: http://www.touchingthetide.org.uk/touching-the-tide/

UK CEED, A review of the effects of recreational interactions within UK European marine sites. Countryside Council for Wales (UK Marine SACs Project) Section 'Erosion from land-based recreation', 2000. Available from: http://www.ukmarinesac.org.uk/activities/recreation/r05 02.htm



VISITENGLAND online document. Available from: https://www.visitbritain.org/sites/default/files/vb-corporate/Documents-Library/documents/England-documents/most visited paid east 2016.pdf