

Natural England Board



Meeting: 106
Date: 10 November 2021

Paper number: NEBPU 106 01

Title: Swanscombe Peninsula Site of Special Scientific Interest (SSSI), confirmation of notification

Lead/s: Alan Law, Deputy Chief Executive; James Seymour Sussex and Kent Area Manager; and Ben Fraser, Principal Adviser – Protected Sites

1 Purpose

1.1 The purpose of this paper is to seek approval to confirm the notification of Swanscombe Peninsula SSSI. The Natural England Board confirmation report is attached at Annex 1.

2 Recommendation

2.1 The Board is asked to:

Approve confirmation of the notification of the Swanscombe Peninsula SSSI with modifications to the boundary (to remove ten areas of land totalling 4.65 ha), the statement of Natural England's views about management of the SSSI and the citation. The recommended confirmed area of the SSSI is 259.44 ha. The amended documents recommended for confirmation are at section 3 of Annex 1. The other legal document (list of operations requiring Natural England's consent) is recommended for confirmation without modification.

3 Report

3.1. Background

3.1.1. The Swanscombe Peninsula SSSI was notified on 11 March 2021 under section 28C of the Wildlife and Countryside Act 1981. A decision upon whether to confirm the notification of the SSSI is required to enable confirmation papers to be served on or before 10 December 2021.

3.1.2. The Swanscombe Peninsula SSSI is a corridor of habitats connecting Ebbsfleet Valley with the southern shore of the River Thames between Dartford and Gravesend. It is considered to be of special interest for its:

- Quaternary geology at Bakers Hole, a key Pleistocene site with a complex sequence of periglacial and temperate climate deposits and Middle Palaeolithic archaeology;
- populations of the plants divided sedge *Carex divisa*, yellow vetchling *Lathyrus aphaca*, slender hare's-ear *Bupleurum tenuissimum*, Bithynian vetch *Vicia bithynica* and round-leaved wintergreen *Pyrola rotundifolia* subsp. *maritima*;
- assemblages of invertebrates associated with bare sand and chalk, open short swards, open water on disturbed mineral sediments, and saltmarsh and transitional brackish marsh; and
- two diverse assemblages of breeding birds, one associated with lowland open waters and their margins, lowland fen and lowland damp grassland, the other with lowland scrub.

- 3.1.3. Bakers Hole SSSI was first notified in 1951 and last notified in 1989. Swanscombe Peninsula SSSI covers 264.10 ha. It includes the land previously notified as Bakers Hole SSSI and extensions totalling 257.21 ha. It encompasses a complex of open mosaic habitats on previously developed land and traditional estuarine habitats adjacent to and within the River Thames. The site includes chalk pits, free-draining grassland, scrub, wetlands, grazing marsh and saltmarsh.
- 3.1.4. The notification document (attached at section 2 of Annex 1) was issued on 11 March 2021 and explains why Swanscombe Peninsula SSSI is notified as a SSSI. The selection of this site against the relevant guidelines is dealt with fully in the supporting information document to the SSSI notification (also attached at section 2 of Annex 1).

3.2 Issues

- 3.2.1 The Swanscombe Peninsula SSSI has 25 owners and occupiers and is the subject of eight outstanding objections. The period for making objections and representations ran from 11 March 2021 to 12 July 2021.
- 3.2.2 Broadness Cruising Club was identified as an owner occupier after the notification date. It was notified on 8 April 2021 and given four months (ending on 9 August 2021) to submit an objection or representation.
- 3.2.3 There is a dispute regarding the ownership of an area of land adjacent to the Cemex Northfleet Concrete Plant. Current Land Registry data shows this area to be in the ownership of Swanscombe Development LLP.
- 3.2.4 Annex 1 describes the site and its special interest, and considers the objections and representations made in respect of the 11 March 2021 notification. The grounds for the objections have been carefully considered by officers of Natural England.

Natural England Board Confirmation Report: Swanscombe Peninsula SSSI

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Section 1

Report to the Board of Natural England meeting on 10 November 2021

Swanscombe Peninsula Site of Special Scientific Interest (SSSI)

1.1 Executive summary

Swanscombe Peninsula SSSI is a corridor of habitats connecting Ebbsfleet Valley with the southern shore of the River Thames between Dartford and Gravesend. The site is a complex of open mosaic habitats on previously developed land and traditional estuarine habitats located near and within the River Thames. Habitats include chalk pits, free-draining grassland, scrub, wetlands, grazing marsh, mudflats and saltmarsh. It is of special interest for its nationally important assemblages of invertebrates, assemblages of breeding birds, populations of five species of vascular plant and its geological features.

The site is an enlargement of the previously notified Bakers Hole SSSI which was first notified for its Quaternary geology and Middle Palaeolithic archaeology in 1951. Swanscombe Peninsula SSSI includes the land previously notified as Bakers Hole SSSI (6.89 ha) and extensions totalling 257.21 ha.

Evidence gathering for invertebrate sites around the Thames Estuary, including Swanscombe Peninsula, started in late 2017. Pre-notification letters were sent to landowners, occupiers, stakeholders and partners on 25 November 2020 together with a map showing an initial draft boundary. Evidence gathering continued until February 2021 and resulted in changes to the draft boundary.

The notification document issued on 11 March 2021 explains why Swanscombe Peninsula is notified by Natural England as a SSSI. The site has 25 owners and occupiers. The notification is the subject of eight unresolved objections. A further 453 representations were received, of which at least 428 expressed support for the notification. The grounds for the objections and representations have been carefully considered by officers of Natural England.

Officers recommend to the Board of Natural England that the notification of the SSSI under section 28C of the Wildlife and Countryside Act 1981 should be confirmed with modifications identified in objections, representations and by the area team to:

- the boundary, to remove ten areas of land (total area of 4.65 ha) which officers recommend should not be considered to be of special scientific interest;
- the citation, to reflect the revised area figure (259.44 ha); and
- the statement of Natural England's views about the management of the SSSI to clarify management recommendations for breeding waders on wet grassland and to reduce the risk of disturbance of any long-eared owls using the site.

The modified boundary map, citation and statement of Natural England's views about the management of the SSSI recommended for confirmation are attached at section 3 of this report. Officers recommend that the list of operations requiring Natural England's consent (see pages 19-21 of the SSSI notification document in section 2 of this report) should be confirmed without modification.

1.2 Introduction

Swanscombe Peninsula SSSI was notified on 11 March 2021 under section 28C of the Wildlife and Countryside Act 1981. The enlarged SSSI includes all of the land previously notified as Bakers Hole SSSI and extensions totalling 257.21 ha.

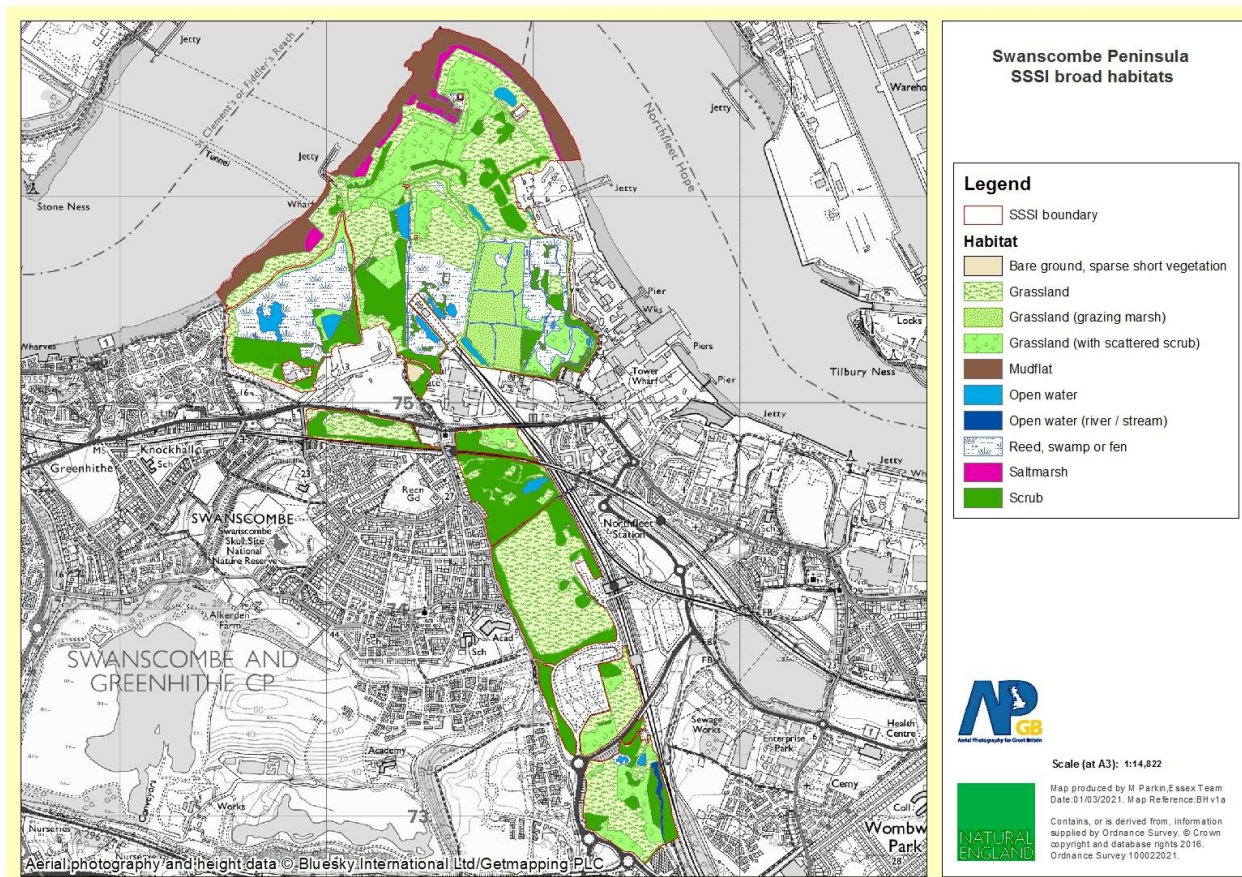
Natural England has a duty to notify land as SSSI where it is of the opinion that it is of special interest. Having formed an opinion that the land is of special interest, Natural England has

discretion¹ as to whether to enlarge a previously notified SSSI under section 28C. That discretion was exercised in this case. This report describes the site and its special interest, and considers the objections and representations made in respect of the 11 March 2021 notification.

1.3 Site description and special interest

Swanscombe Peninsula SSSI is a corridor of habitats connecting Ebbsfleet Valley with the southern shore of the River Thames between Dartford and Gravesend. Industrial processes such as engineering, power generation, landfill and dredging have left a legacy of low nutrient and often toxic substrates which have developed into bare open ground habitats with low scrub cover. The peninsula also supports wetland, grazing marsh, scrub, mudflats and saltmarsh habitats (see map below). These habitats, coupled with a mild climate, provide ideal conditions for certain species and assemblages of plants, invertebrates and breeding birds.

Four chalk pits are included within the boundary of the SSSI and, in addition to the habitats described above, contribute to the varied topography. Chalk quarried from these pits was used for the manufacture of cement. JB White's Portland cement works and APCM (Blue Circle) occupied an area between these pits and the peninsula from 1845 to 1990. It is likely that the Swanscombe peninsula was used as a landfill site for the disposal of cement kiln dust from these works. The high pH and significant concentrations of chloride, sulphate and potassium associated with this dust result in greatly stunted plant growth and a largely early successional habitat. Northfleet landfill and Bakers Hole are also former chalk quarries with notable archaeological records. The former is back-filled and restored mainly to grassland and the latter conserved for its geological features.



¹ Where Natural England is of the opinion that an area of land related to an existing SSSI is of special interest, its discretion is limited to the mode of notification (new site, addition or enlargement), not whether to notify at all.

1.3.1 Geology

Bakers Hole (see map below) is a key Pleistocene site with a complex sequence of periglacial and temperate climate deposits, including solifluction, freshwater and possible estuarine deposits associated with the Ebbsfleet Valley. The deposits have yielded fossils and evidence of human occupation. The site contains Levallois lithic remains from the Middle Palaeolithic and palaeoenvironmental indicators, including fossils of small and large mammals, molluscs and ostracods. The temperate deposits correlate with an interglacial recognised as Marine Isotope Stage (MIS) 7. It is thought that the three individual temperate episodes of MIS 7 may be represented at the site. Further investigation of this will help to establish a framework for MIS 7 sites in the British Pleistocene.

Most of the interest at Baker's Hole is buried. The photograph below, dated 1993, is from the Site Management Brief for Baker's Hole SSSI. It shows Pleistocene cold stage deposits on the southern side of the northern knoll. This face is no longer fully exposed. Standard practice for geoconservation of soft sediments is to allow a light covering of vegetation and talus to develop, with periodic vegetation control to suppress scrub.



1.3.2 Vascular plants

Although the vegetation communities of the SSSI have been significantly affected by the cement industry and construction of the Channel Tunnel Rail Link (CTRL), there are surviving fragments of habitats that are representative of a former more extensive marshland. These include intertidal mudflats, saltmarsh, sea wall corridor with transitional grasslands, grazing marsh with extensive reed-lined ditch networks, winter wet low-ways and scattered scrub. In addition to this, the relatively recent habitats of free-draining grassland and extensive scrub, and the increased range of waterbodies with brackish transitions, have collectively formed a habitat mosaic that has enabled characteristic and scarce plants to survive and establish.

The site supports populations of five nationally scarce species of vascular plant, the first four of which are also 'Vulnerable' to extinction in Great Britain. These are divided sedge *Carex divisa* and slender hare's-ear *Bupleurum tenuissimum* both of which are associated with coastal grazing marsh and transitional grassland, and yellow vetchling *Lathyrus aphaca* and Bithynian vetch *Vicia bithynica* which are associated with open grassland areas across the site. A sustainable population of the nationally scarce round-leaved wintergreen *Pyrola rotundifolia* subsp. *maritima* is found amongst denser scrub. The map below indicates the distribution across the SSSI of the five plant species of special interest, based on a sample of records compiled by and surveys conducted for London Resort Company Holdings Ltd.

Yellow vetchling *Lathyrus aphaca*.

Photograph courtesy of John Martin.



Divided sedge *Carex divisa*.

Photograph courtesy of John Martin.





Swanscombe Peninsula SSSI

Botanical & Geological Interest Features

Legend

SSSI boundary



London Resort Survey Records*

Lathyrus aphaca, Yellow vetchling

Carex divisa, Divided sedge

Vicia bithynica, Bithynian vetch

Bupleurum tenuissimum, Slender hare's-ear

Pyrola rotundifolia ssp. *maritima*, Round-leaved wintergreen

Geological Feature

Quaternary Geology

* Data derived from The London Resort Preliminary Environmental Information Report, Appendix 12.1 Ecology Baseline Report, Nationally Rare and Scarce Plant Figures 3 (2012), 4a - 4e (2012-15), 12.5 (2020) <https://londonresort.info/appendices/>



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1.3.3 Invertebrates

The site supports over 1,700 species of invertebrate and four nationally important assemblages. Brownfield areas support assemblages of species chiefly associated with bare sand and chalk and open short swards. These assemblages are rich in bee and wasp species which use the open substrates for nesting, prey collection and basking, and the rich wild flower resource for nectar and pollen. Significant species within the assemblage include the critically endangered distinguished jumping spider *Sitticus distinguendus* and rare five-banded weevil-wasp *Cerceris quinquefasciata*.

Wetland areas, primarily Black Duck Marsh and ponds resulting from construction of the CTRL support assemblages chiefly associated with open water on disturbed mineral sediments and saltmarsh and transitional brackish marsh. These wetlands support 84 species of water beetle. This represents over a quarter of the UK water beetle fauna. This richness derives from a mix of fresh and brackish water. Species of note include the nationally scarce *Enochrus halophilus*, which is generally associated with brackish pools and ditch saltmarsh and the nationally rare great silver water beetle *Hydrophilus piceus*, found in marshes, drains and especially coastal grazing marshes.

The SSSI selection guidelines for invertebrates emphasise the consideration of assemblages as a core principle in determining invertebrate interest. Assemblages are ordination end-groups from a number of controlled surveys of habitat types which show statistical clustering of species. This defined species pool then forms the assemblage. The species pool is composed of both common and less common species. The Guidelines rely on applying this fixed assemblage concept to land parcel data, and on then assessing the representation of the assemblage founded on the number of species from the pool that are present. If there are rarer species present in the survey then that is supportive, but it is not essential. It is the representation of the assemblage type that is satisfied.

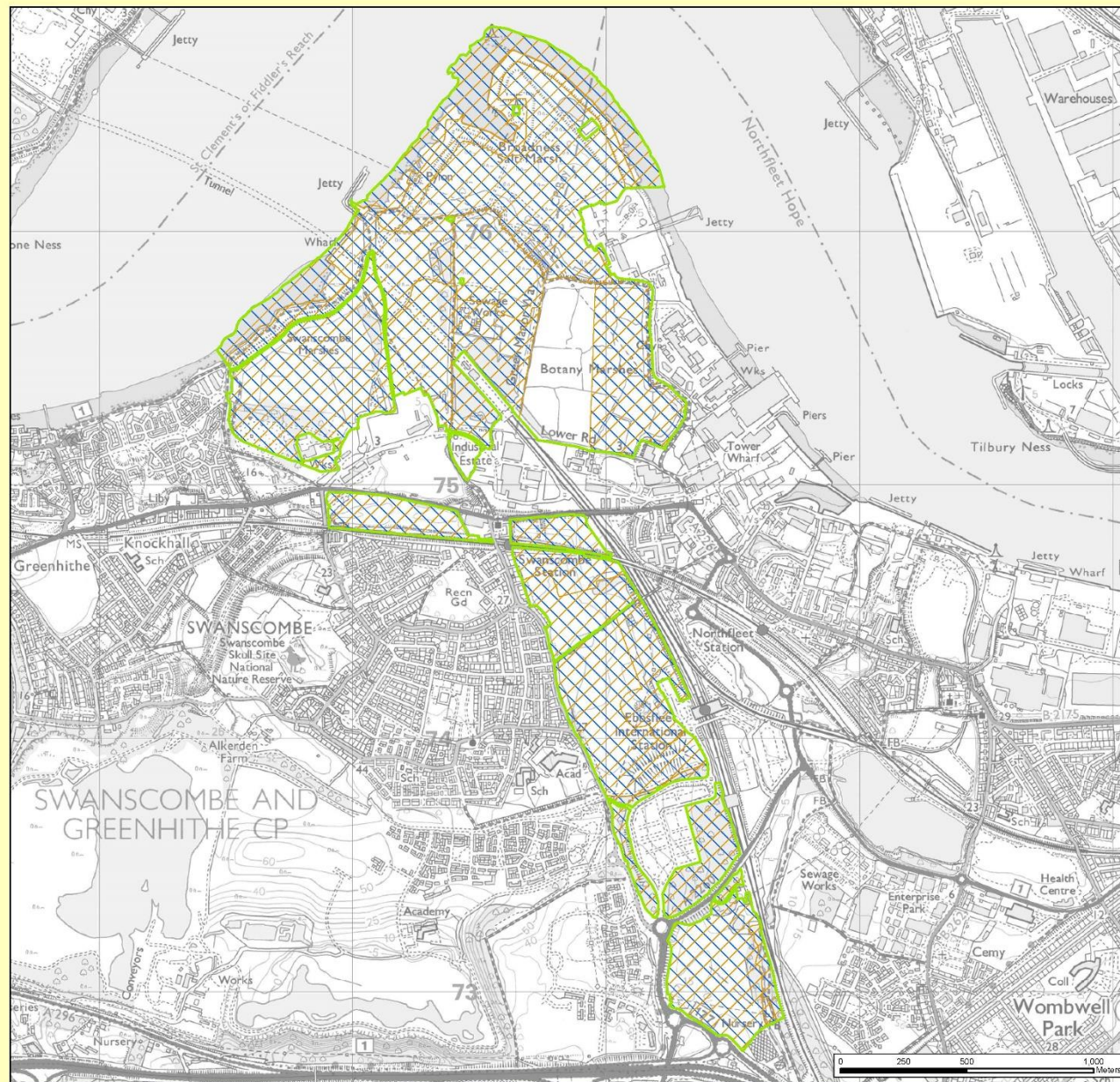
Invertebrate survey data are analysed using Pantheon, which is a database tool developed by Natural England and the Centre for Ecology & Hydrology. Pantheon determines associated habitats, assemblage types and conservation status. Its application to site selection is described in the Guidelines. The maps below indicate the distribution by SSSI unit of the species comprising the four invertebrate assemblages of special interest, based on surveys conducted for London Resort Company Holdings Ltd in 2015 and 2020.

Distinguished jumping spider, *Sitticus distinguendus* (bare sand and chalk assemblage). Photo courtesy of Ian Hughes.



Chalk carpet moth, *Scotopteryx bipunctaria* (open short sward assemblage). Photo courtesy of Butterfly Conservation/Stuart Reed.





Swanscombe Peninsula SSSI

Invertebrate Assemblage F111 & F112 Interest Features

Legend

SSSI boundary



F111 bare sand and chalk*



F112 open short sward*

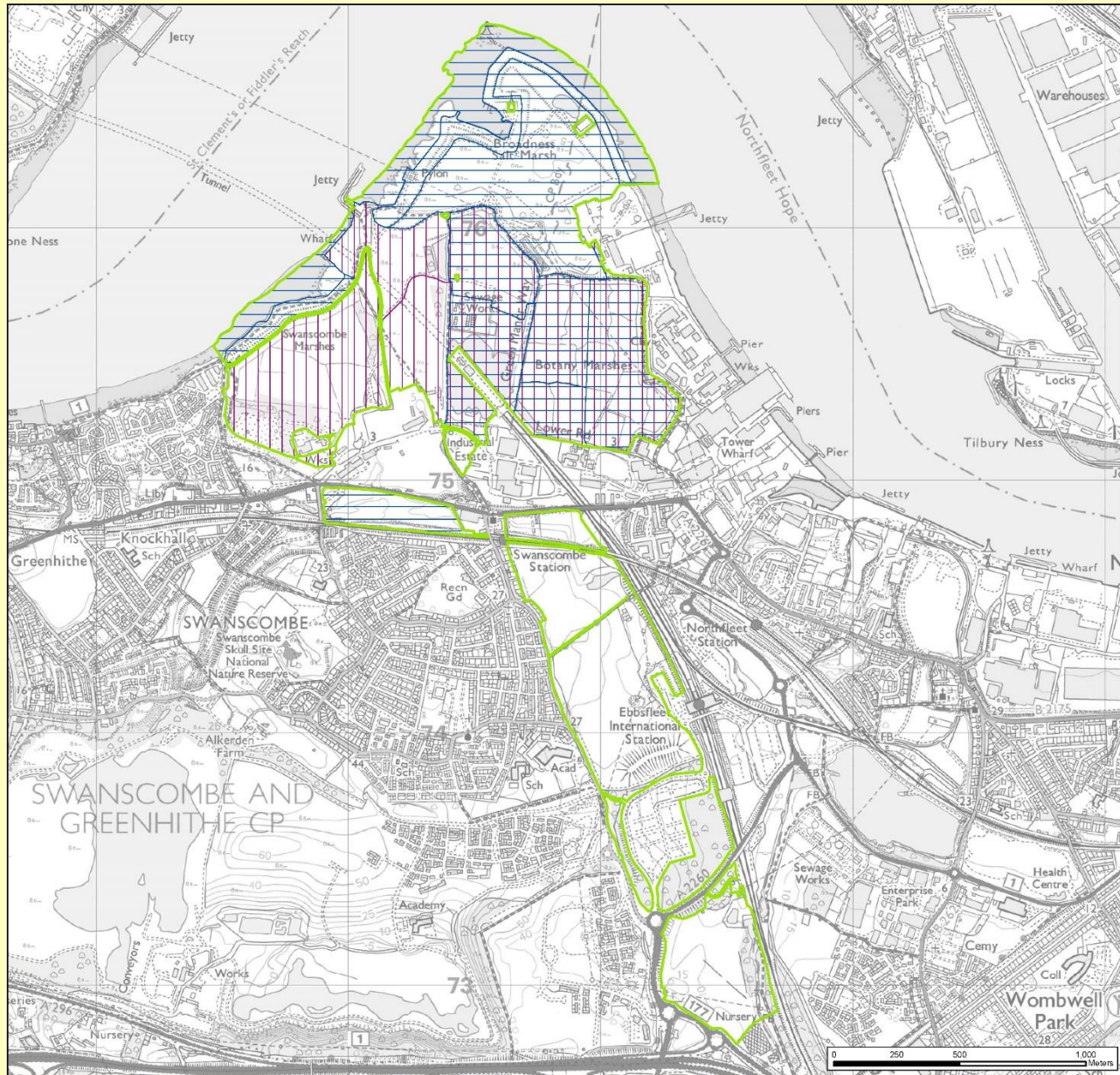


* Data derived from The London Resort Preliminary Environmental Information Report. Appendix 12.1 Ecology Baseline Report <https://londonresort.info/appendices/>

For presentational purposes, this map shows those SSSI units that overlap with survey compartments from 2015 and/or 2020 with records of 5 or more species from the F111 and/or F112 assemblages.



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Swanscombe Peninsula SSSI

Invertebrate Assemblage M311 & W211 Interest Features

Legend

SSSI boundary



M311 saltmarsh and transitional*



W211 open water on disturbed*



* Data derived from The London Resort Preliminary Environmental Information Report. Appendix 12.1 Ecology Baseline Report <https://londonresort.info/appendices/>

For presentational purposes, this map shows those SSSI units that overlap with survey compartments from 2015 and/or 2020 with records of 2 or more species from the M311 and/or W211 assemblages.



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1.3.4 Breeding birds

The wetlands, grasslands, scrub, saltmarsh and intertidal mud within the SSSI support two nationally important breeding bird assemblages, one associated with lowland open waters and their margins, lowland fen and lowland damp grassland, the other with lowland scrub. The maps below indicate the distributions across the SSSI of the species included in each of the breeding bird assemblages, based on surveys conducted for London Resort Company Holdings Ltd in 2020.

The fen and swamp habitats of Black Duck Marsh and the CTRL wetlands support marsh harrier *Circus aeruginosus* and water rail *Rallus aquaticus*. Wetland habitats across the site also support reed bunting *Emberiza schoeniclus*, sedge warbler *Acrocephalus schoenobaenus*, bearded tit *Panurus biarmicus* and reed warbler *Acrocephalus scirpaceus*, with the last of these often providing host nests for cuckoo *Cuculus canorus*. The wetland mosaic with scrub supports Cetti's warblers *Cettia cetti*.

Botany Marsh West is a surviving fragment of a formerly more extensive grazing marsh, providing damp grassland habitat for lapwing *Vanellus vanellus* and greylag goose *Anser anser*. Shelduck *Tadorna tadorna*, little egret *Egretta garzetta* and grey heron *Ardea cinerea* utilise a number of wetland habitats and forage within the intertidal habitats of the adjacent River Thames. Little egret and grey heron nest in a heronry south of Black Duck Marsh. The water bodies, particularly the larger examples within the CTRL wetlands and Black Duck Marsh also support a number of breeding waterfowl including pochard *Aythya ferina*, tufted duck *Aythya fuligula*, gadwall *Mareca strepera*, shoveler *Spatula clypeata*, mute swan *Cygnus olor* and little grebe *Tachybaptus ruficollis*.

Scrub varies in density across the site. Species such as grasshopper warbler *Locustella naevia* prefer scattered patches in open habitat, while nightingale *Luscinia megarhynchos*, bullfinch *Pyrrhula pyrrhula* and garden warbler *Sylvia borin* favour areas of denser scrub. Long-tailed tits *Aegithalos caudatus* favour areas of scrub with more open margins, whilst linnets *Linaria cannabina* and lesser whitethroats *Curruca curruca* are typically associated with the scrub mosaic of the former landfill tips and areas north of the CTRL wetlands, respectively.

Bearded tit. *Panurus biarmicus*

Photo courtesy of Alan Drewitt.



Marsh harrier *Circus aeruginosus*.

Photo courtesy of Philip Ray.





Swanscombe Peninsula SSSI

**Lowland Scrub
Breeding Bird Assemblage
Interest Features**

Legend

SSSI boundary



Species*

- Bullfinch
- Cuckoo
- Garden Warbler
- Grasshopper Warbler
- Lesser Whitethroat
- Linnet
- Long-tailed Tit
- Nightingale

* Data derived from The London Resort Preliminary Environmental Information Report. Appendix 12.1 Ecology Baseline Report, Breeding Bird Survey Data of 2020 <https://londonresort.info/appendices/>



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Swanscombe Peninsula SSSI


**Mixed Wetland
Breeding Bird Assemblage
Interest Features**

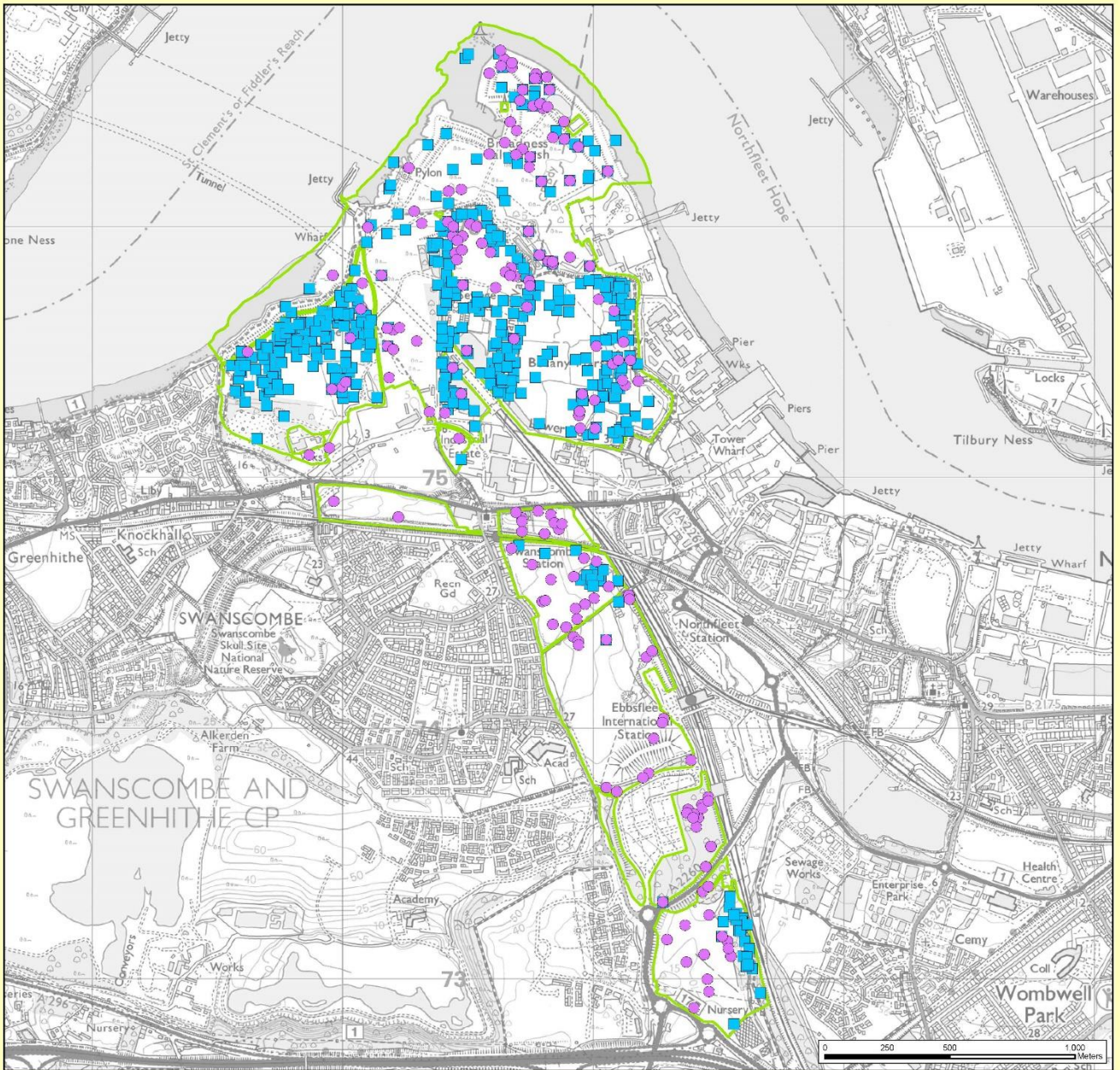
Legend

- | | | |
|----------------------|---------------------|---------------|
| SSSI boundary | | Little Grebe |
| Species* | | Marsh Harrier |
| | Bearded Tit | Mute Swan |
| | Cetti's Warbler | Pochard |
| | Cuckoo | Reed Bunting |
| | Gadwall | Reed Warbler |
| | Grasshopper Warbler | Sedge Warbler |
| | Grey Heron | Shelduck |
| | Greylag Goose | Shoveler |
| | Lapwing | Tufted Duck |
| | Little Egret | Water Rail |

* Data derived from The London Resort Preliminary Environmental Information Report. Appendix 12.1 Ecology Baseline Report, Breeding Bird Survey Data of 2020 <https://londonresort.info/appendices/>

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Swanscombe Peninsula SSSI

Breeding Bird Assemblage Interest Features

Legend

- SSSI boundary
- Lowland Scrub Assemblage Species*
- Mixed Wetland Assemblage Species*

* Data derived from The London Resort Preliminary Environmental Information Report. Appendix 12.1 Ecology Baseline Report, Breeding Bird Survey Data of 2020 <https://londonresort.info/appendices/>

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1.4 Assessment of Swanscombe Peninsula SSSI against the SSSI selection guidelines

The selection of Swanscombe Peninsula SSSI was assessed against the 'Guidelines for the Selection of Biological SSSIs. Part 1: Rationale, Operational Approach and Criteria for Site Selection'² and 'Part 2: Detailed guidelines for habitats and species groups' hereafter referred to as 'the Guidelines' and according to the selection guidelines listed in 'An introduction to the Geological Conservation Review'³.

The assessment of interest features using the relevant guidelines was supported by Natural England's specialists and, as part of the notification approval process, was scrutinised by the Chief Scientist. The assessment is dealt with fully in the supporting information to the SSSI notification document. Which is attached at section 2 of this report.

1.4.1 Pre-notification evidence base

The evidence used to inform the SSSI notification is listed in section 1 of the supporting information to the SSSI notification. It includes a range of evidence from the site itself and, where appropriate, other locations within the relevant 'Area of Search' for comparative purposes. Informing the evidence base are surveys of breeding birds, vascular plants and invertebrates carried out in 2012, 2015 and 2020 for London Resort Company Holdings Ltd (LRCH), with additional information obtained from widely available and reputable sources, including the local records centres, British Trust for Ornithology (BTO), Botanical Society of Britain and Ireland (BSBI) and Kent Ornithological Society.

Table 1 summarises this range of evidence for each of the broad categories of biological special interest, and with reference to parts of the SSSI to indicate the geographical coverage of the evidence (see also the maps in sections 1.3-1.3.4). Broadly speaking, the areas referred to are: 'the Peninsula' which refers to the majority of the portion of the SSSI that lies north of the London Road; 'the pits' which refers to the former chalk quarries south of the London Road and lying either side of the railway line in the vicinity of Swanscombe station; and 'Ebbsfleet Valley' which refers to the remainder of the SSSI from the former Northfleet Landfill, south past Ebbsfleet International station towards the A2 road.

² Bainbridge, I., Brown, A., Burnett, N., Corbett, P., Cork, C., Ferris, R., Howe, M., Maddock, A., Mountford, E. & Pritchard, S. (Eds.), 2013. Guidelines for the Selection of Biological SSSIs - Part 1: Rationale, Operational Approach and Criteria for Site Selection.

³ Ellis, N.V. (ed.), Bowen, D.Q., Campbell, S., Knill, J.L., McKirdy, A.P., Prosser, C.D., Vincent, M.A. & Wilson, R.C.L. 1996. An Introduction to the Geological Conservation Review.

Table 1 – Summary of supporting evidence for biological features of special interest

Features	LRCH surveys and evidence			Other surveys and evidence
	2012	2015	2020	
Vascular plants	Desk study and roughly half of the Peninsula area and Bamber Pit surveyed. Survey did not cover Ebbsfleet Valley but presents historical record (1995) for round-leaved wintergreen.	Peninsula, pits and Ebbsfleet Valley	Peninsula and Bamber Pit. Not clear whether Ebbsfleet Valley was covered.	Local Records Centre (LRC) 1987-2020 for round-leaved wintergreen only. BSBI distribution database and rare plant register 2020.
Breeding birds	Peninsula only. Did not cover the Ebbsfleet Valley.	Peninsula, pits and Ebbsfleet Valley (except area immediately around station car park).	Peninsula, pits and Ebbsfleet Valley (including area immediately around station car park).	Kent Ornithological Society 2010-2020 LRC 2010-2020 BTO Heronries Census 2011-2020 BTO BirdTrack 2015-2020
Invertebrates	Northern and central part of the peninsula only. Did not cover Ebbsfleet Valley.	Peninsula, pits and Ebbsfleet Valley.	Peninsula, pits and Ebbsfleet Valley.	Range of data used for National Character Area comparison purposes.

1.5 SSSI boundary as notified

Using the guidance in Part 1 and Part 2⁴ of the SSSI selection guidelines, the boundary has been drawn to include the features of special interest and habitat required to ensure their long-term sustainability. The evidence base summarised in section 1.4.1 demonstrates a high level of survey coverage across the SSSI, as further emphasised by the maps in sections 1.3.1-1.3.4 which indicate the distribution of the interest features. The inclusion of each of the land parcels is underpinned by records of at least one (typically more) of the features of special interest.

The Guidelines (Part 1, section 8.2, p.34) state that:

‘SSSI boundaries should be drawn to encompass the special features of the site and all land necessary to ensure the sustainability of those features. Consideration should be given to the inclusion of whole management units, entire ecological units and supporting processes (such as hydrology or sediment supply). Boundaries should take account of dynamic processes (such as active coastal and floodplain geomorphology)’.

All areas within the SSSI boundary support one or more of the special interest features and collectively contribute to and support the special interest of the site. The SSSI is an ‘archipelago’ of closely juxtaposed land parcels, many of which directly abut, and those that do not are no more than approximately 80m from the next nearest parcel. This close juxtaposition gives us confidence that the more mobile species of birds and invertebrates especially, but also the vascular plants, will be able to disperse regularly between the components of the SSSI.

⁴Taylor, I., Leach, S.J., Martin, J.P., Jones, R.A., Woodman, J. & Macdonald, I. 2021. Guidelines for the Selection of Biological SSSIs. Part 2: Detailed Guidelines for Habitats and Species Groups. Chapter 11 Vascular Plants; and Curson, J., Howe, M., Webb, J., Heaver, D. & Tonhasca, A. 2019. Guidelines for the Selection of Biological SSSIs Part 2: Detailed Guidelines for Habitats and Species Groups. Chapter 20 Invertebrates.

The Guidelines (Part 1, section 8.10, p.37) also state that:

‘The lower or seaward boundaries of SSSIs should normally extend to the extent of the local authority planning area. This varies between countries. In England it is normally to Mean Low Water Mark (MLWM).

In order to maintain the saltmarsh which supports a nationally important invertebrate assemblage and include feeding habitat for breeding birds the boundary of Swanscombe Peninsula SSSI has been drawn to MLWM at its northern perimeter.

The SSSI selection guidelines provide specific guidance on boundaries for vascular plants and invertebrates, as described in the supporting information document.

For vascular plants, the guidelines (Part 2, Chapter 11, section 5.1, p13) state that:

‘The SSSI boundary should include a sufficient area of suitable habitat to enable the long term maintenance of populations of taxa qualifying...as notified features in their own right... Populations are frequently dynamic, with individuals colonising new patches of suitable habitat whilst others may be lost due to natural change in habitat condition, etc. Therefore, patches of suitable (or potentially suitable) habitat within the same management unit that do not currently support the qualifying taxon should still be included within the SSSI boundary. Areas of suitable habitat nearby should also be considered for inclusion, especially if the habitat is particularly rare or unusual (such as heavy metal contaminated ground and mine spoil), or if the taxon in question is known to be opportunistic or highly mobile, thus allowing appropriate management to be applied across a wider area to provide additional opportunities for the spread of rare or threatened taxa. For some taxa in certain habitats the SSSI boundary may have to include quite large areas which lack the taxon but which are ecologically and functionally part of the same site’.

For invertebrates, the guidelines (Part 2, Chapter 20, section 4.2) provide guidance on the types of habitat that are valuable and should be considered for inclusion within the boundary as follows:

Habitat Type	Habitat patches for consideration of inclusion in SSSI boundaries
Grassland and Heathland	Adjoining scrub, woodland, tall ruderal and wetland systems, old sand and marl pits.
Wetlands and pools	The catchment as a whole, connections with river systems, muddy areas, accumulations of leaf litter, and trees (e.g. willow clumps).
Coastal habitats	Connections with all other habitats (e.g. the ecotones between saltmarsh and heathland/grassland or with freshwater wetlands, the ecotones between beach and dune etc. Also, the interconnectivity of different coastal habitats (such as saltmarsh and intertidal sediment).

Using the above guidance, the boundary has been drawn to include a mosaic of free-draining grassland, scrub, wetlands, grazing marsh, transitional grassland, saltmarsh and chalk pits which collectively support and will maintain the nationally important vascular plant, invertebrate and bird features of special interest.

The boundaries are typically determined by the extent of suitable habitat, with often clear demarcations to subtidal habitats, roads, railways and other built development. The boundary follows the River Thames MLWM in the north and fence lines and roads for most of its remaining perimeter. In places where there is no mapped feature, the boundary is formed by straight lines between fixed points. The footprints of a number of internal built structures such as roads, pumping stations, treatment works and radar towers have been excluded from the boundary. Raised or suspended structures such as bridge decks, jetties and gantries are excluded but exposed land or water beneath them is included within the boundary.

1.6 Procedures

1.6.1 Pre-notification

Evidence gathering started in late 2017 with a review of 2012 and 2015 invertebrate data from surveys commissioned by London Resort Company Holdings Ltd (LRCH). This work was carried out in parallel with revision of the selection guidelines for terrestrial and freshwater invertebrates

which were published in 2019. Following a strategic assessment of Thames Estuary brownfield sites supporting invertebrates, in order to fully understand their relative importance, a group of sites under the heading 'Thames Estuary Invertebrates, Essex and Kent' were added to our published designation programme on Gov.uk on 15 October 2020. Review of 2012 and 2015 survey data for other interest features started in 2020 and together with further assessment of invertebrate interest enabled officers to draw an initial draft site boundary in October 2020.

A Land Registry search was carried out in October 2020 to identify land owners/occupiers within the draft boundary. Site visits were carried out on 13 November 2020 and 20 November 2020 to review the site in relation to the evidence and check the draft boundary. Pre-notification letters were sent to all registered landowners and occupiers on 25 November 2020. Letters were also sent to stakeholders and partners.

Evidence gathering for breeding birds and vascular plants continued throughout December 2020 and January 2021. On 20 January 2021 officers met with Swanscombe Development LLP and Britannia Refined Metals Ltd to discuss the notification and draft boundary. On 29 January 2021 officers met with LRCH and Ebbsfleet Development Corporation (Bamber Pit) also to discuss the notification and draft boundary.

LRCH applied for a Development Consent Order on 31 December 2020. LRCH uploaded their ecology baseline report to the Planning Inspectorate's website between 28 January 2021 and 9 February 2021. Documents added on 9 February 2021 included 2020 survey data for breeding birds and invertebrates. Following a review of this data and challenge through Natural England's quality assurance process, the draft boundary was reviewed and amended. A further Land Registry search was carried out on 12 February 2021 in order to identify any new landowners/occupiers. On 15 February 2021, a pre-notification letter was sent to landowners, occupiers, stakeholders and partners with an interest in the land not included in the 25 November 2020 pre-notification consultation. On 23 February 2021 officers met with Springhead Nurseries to discuss the notification and consider the revision to the draft boundary. On the same day officers visited additional land owned by Ebbsfleet Development Corporation.

1.6.2 Notification

The SSSI was notified on 11 March 2021, following approval by the Chief Executive on 9 March 2021. Notification documents were sent, by recorded delivery, to 24 owners and occupiers on 10 March 2021. A further owner occupier was identified after the notification date. They were notified on 8 April 2021 and given four months to submit an objection or representation. In addition notification letters were sent by post/email to 63 statutory and observing bodies. Notices were posted on six land parcels where ownership was not recorded by the Land Registry. A notice was placed in the Dartford & Gravesend Messenger on 15 April 2021. The notification documents and an online survey were available on Citizen Space (our online consultation portal) from 11 March 2021. With the exception of the owner-occupier notified on 8 April 2021 the period for making objections and representations ran from 11 March to 12 July 2021.

Objections to the notification of Swanscombe Peninsula SSSI under section 28C were received from eight owners, occupiers, statutory authorities and interested parties:

- Ebbsfleet Development Corporation
- Ebbsfleet Investment General Partner
- Gillian Charlton
- HS1 Limited
- London Resort Company Holdings Limited
- Port of London Authority
- Swanscombe Development LLP
- Tarmac Trading Limited

Representations were received from a further 453 owners, occupiers, statutory authorities and interested parties, 428 of which expressed support for the notification. Three of the representations neither support or object to the notification. The remaining 22 representations were made via Citizenspace. They all agreed with the scientific case for designation and made comments in support of the notification. However, they selected the 'object to the notification' option. Given the

supportive comments made, officers consider it likely that they selected this option in error. Copies of these representations are in section 5.

1.6.3 Decision

The Board is required to take a decision upon whether to confirm the notification of Swanscombe Peninsula SSSI under section 28C to enable confirmation papers to be served on or before **10 December 2021**.

1.7 Objections and representations

Objections and representations to the notification of Swanscombe Peninsula SSSI have been received from the owners, occupiers, statutory authorities and interested parties detailed in sections 1.8-1.26. Land where officers recommend boundary modifications is shown in maps at section 6 of this report. The key correspondence relating to each objection is presented at section 5 of this report.

1.8 Objection from Ebbsfleet Development Corporation

Ebbsfleet Development Corporation (EDC) submitted its objection on 12 July 2021. Further, more detailed, questions regarding the assessment of special interest were submitted on 10 September 2021 (invertebrates) and 15 September 2021 (birds and vascular plants).

1.8.1 Objection

EDC objects to the notification of land in its ownership, known as Ebbsfleet Central, on the following grounds.

- Natural England has not provided sufficient justification for the land at Ebbsfleet Central to be included within the enlargement of the SSSI.
- Ebbsfleet Central does not support sufficient notified invertebrate assemblages or stable populations of these invertebrates to justify its inclusion within the SSSI, as outlined in the “Guidelines for the Selection of Biological Sites of Special Scientific Interest” and Section 28C of the Wildlife and Countryside Act 1981. In particular:
 - the habitats supporting the four notified invertebrate assemblages are not all present within the land at Ebbsfleet Central;
 - at Ebbsfleet Central areas of supporting habitat for invertebrates are small in size and isolated from each other. The majority of the land at Ebbsfleet Central includes a significant proportion of scrub, which does not support the invertebrate assemblages outlined in the notification;
 - the survey data demonstrates that the invertebrate assemblages present at Ebbsfleet Central are found in small populations and there are very few specialist or high conservation value species present;
 - of the specialist, rare and scarce species found, few were recorded in both survey years (2015 and 2020) suggesting a mobile, transient population and that there was an overall decline in specialist species between 2015 and 2020;
 - there is a small number (15) of rare and scarce species which are only found on land at Ebbsfleet Central which therefore contributes little to the overall invertebrate diversity of the SSSI;
 - the land at Ebbsfleet Central is severed from the peninsula by significant physical features, resulting in isolated areas of habitat; and
 - due to the type and quality of habitats within the land at Ebbsfleet Central and its separation from the peninsula, it does not have a role as supporting or connected habitat and therefore does not meet the guidance for the selection of biological SSSIs (Part 2 Chapter 20 Terrestrial and Freshwater Invertebrates of the JNCC Guidelines).

- The land at Ebbsfleet Central does not contain any significant populations of the notified vascular plants or significant numbers of birds which contribute to the notified breeding bird assemblages. It is therefore considered to have low importance for the species identified in the notification.
- The inclusion of public footpath DS17, highway improvements to the Ebbsfleet/A2 junction and areas of plantation on the northern and western boundary of EC4, which are described as scrub on the habitat map.

The points raised in support of EDC's objection and Natural England's responses are summarised in Table 2.

1.8.2 Consideration of objection

Since notification officers have engaged regularly with EDC to understand and discuss its concerns, including several meetings at Chief Executive level. Officers wrote to EDC on 7 September 2021 with an interim response to its objection to help inform these ongoing discussions. On 24 September 2021, officers (including designation and invertebrate specialists) met with EDC and its invertebrate consultant (Hopkins Ecology) to discuss how the invertebrate survey data had been used to assess the special interest of the site and inform determination of the boundary. On 1 October 2021, officers (including designation, botanical and ornithology specialists) met with EDC and its ecological consultants (Stantec) to discuss how the vascular plant and bird survey data had been used to assess the special interest of the site and inform determination of the boundary. Following these meetings officers wrote to EDC with a full response to its objection on 22 October 2021. Officers also set out detailed responses to the questions raised by EDC on 10 September 2021 (invertebrates) and 24 September 2021 (vascular plants and breeding birds); see pages 220-232 of the EDC correspondence in section 5 of this report.

1.8.3 Scientific justification

All areas within the SSSI boundary support one or more of the special interest features and collectively contribute to and support the special interest of the site. The close proximity of the various component parts of the site, with most directly abutting others and those that do not no more than c.80m from the next component, coupled with the known mobility of elements of the special interest, means that the site is indivisible in terms of its special interest. A site that encompasses the full extent of its special interest is more resilient than one that does not. The map below shows the location and extent of Ebbsfleet Central (areas EC3-5 shaded in grey).



As part of the SSSI, Ebbsfleet Central:

- supports two of the notified invertebrate assemblages. Surveys commissioned by London Resort Company Holdings (LRCH) in 2015 and 2020 included Ebbsfleet Central. Pantheon analysis of the 2015 survey data confirms the presence of assemblages associated with bare sand and chalk and open short swards. Although the detailed species data from the 2020 surveys were not made available to Natural England, summary reports and Pantheon analysis were provided for each survey area. For Ebbsfleet Central, taking account of the conditions preceding and during the surveys and variation in survey effort and methodology, the results of the 2020 survey are consistent with those from 2015. The 2020 survey confirmed the continued presence of both assemblages which are considered to be sustainable;
- is supporting habitat for species components of both of the notified breeding bird assemblages. The 2015 breeding bird survey commissioned by LRCH recorded probable or confirmed breeding of the following component species of these assemblages, within Ebbsfleet Central: reed warbler, linnet and Cetti's warbler. The 2020 LRCH commissioned breeding bird survey recorded the probable or confirmed breeding of Cetti's warbler, reed warbler, bullfinch, long-tailed tit, linnet, lesser whitethroat and little grebe within Ebbsfleet Central; and
- is supporting habitat for the vascular plant special interest. The 2015 LRCH commissioned botanical survey recorded three of the five notified vascular plant species namely yellow vetchling, Bithynian vetch and divided sedge within Ebbsfleet Central. Records for 2015 are considered to be sufficiently recent particularly for annual species of dynamic and open habitats such as yellow vetchling and Bithynian vetch.

With regard to the specific boundary queries:

- public footpath DS17 is not included within the boundary with the exception of a small section adjacent to the railway line. The latter area was part of the previously designated Bakers Hole SSSI and is therefore of geological interest;
- where highways had been built at the time of notification they were excluded from the boundary. Works on the A2/Ebbsfleet junction have been ongoing since notification and officers recommend a boundary modification to exclude newly constructed road surfaces at the junction. The recommended modified boundary follows the top of the slope adjacent to these areas. This will allow for either natural regeneration or appropriate planting of the slope; and
- officers agree that the western boundary of EC4 is plantation woodland which will not support the interest features. A recommendation has therefore been made to exclude this area from the SSSI boundary. LRCH carried out an extended phase 1 habitat survey in May/June 2020. This classified the area on the northern boundary of EC4 as dense continuous scrub which will support breeding birds and officers therefore recommend that this scrub should remain within the SSSI.

1.8.4 Officers' recommendation

With respect to the objection from Ebbsfleet Development Corporation, the Board is recommended to approve confirmation with modifications to the boundary to exclude an area of tarmac resulting from recent road construction and plantation woodland, a total area of 2.53 ha.

Table 2 Unresolved objections from Ebbsfleet Development Corporation

Grounds for objection	Consideration of objection
Natural England has not provided sufficient justification for the land at Ebbsfleet Central to be included within the enlargement of the SSSI.	See section 1.8.3.

Grounds for objection	Consideration of objection
<p>Ebbsfleet Central does not support sufficient notified invertebrate assemblages or stable populations of these invertebrates to justify its inclusion within the SSSI, as outlined in the “Guidelines for the Selection of Biological Sites of Special Scientific Interest” and Section 28C of the Wildlife and Countryside Act 1981.</p>	<p>See section 1.8.3.</p>
<p>The habitats supporting the four notified invertebrate assemblages are not all present within the land at Ebbsfleet Central.</p>	<p>Two of the notified invertebrate assemblages are present at Ebbsfleet Central. As the invertebrate assemblages are habitat dependent, Natural England does not expect all of the notified invertebrate assemblages to be present across all parts of the site.</p>
<p>At Ebbsfleet Central areas of supporting habitat for invertebrates are small in size and isolated from each other. The majority of the land at Ebbsfleet Central includes a significant proportion of scrub, which does not support the invertebrate assemblages outlined in the notification.</p>	<p>The SSSI boundary has been drawn to include a mosaic of free-draining grassland, scrub, wetlands, grazing marsh, transitional grassland, saltmarsh and chalk pits which collectively support and will maintain the nationally important vascular plant, invertebrate and bird features of special interest. There is no expectation that all features will be present in every part of the SSSI at any given time. EDC's land supports the breeding bird, invertebrate, and vascular plant interest of the SSSI.</p>
<p>The survey data demonstrates that the invertebrate assemblages present at Ebbsfleet Central are found in small populations and there are very few specialist or high conservation value species present.</p>	<p>The SSSI selection guidelines for invertebrates emphasise the consideration of assemblages as a core principle in determining invertebrate interest. Individual species should only be selected as features if they cannot be accommodated by an assemblage approach.</p> <p>Assemblages are ordination end-groups from a number of controlled surveys of habitat types which show statistical clustering of species. This defined species pool then forms the assemblage. An assemblage is a fixed species pool. It is composed of both common and less common species. There is no selection of species to add them in or leave them out depending on their rarity. The guidelines rely on applying this fixed assemblage concept to land parcel data, and on then assessing the representation of the assemblage founded on the number of species from the pool that are present. If there are rarer species present in the survey then that is supportive, but it is not essential. It is the representation of the assemblage type that is satisfied.</p>
<p>Of the specialist, rare and scarce species found, few were recorded in both survey years (2015 and 2020) suggesting a mobile, transient population and that there was an overall decline in specialist species between 2015 and 2020.</p>	<p>With regard to invertebrates, the approach is primarily assemblage-focused. The presence of rare or scarce species is a bonus, as is the support for Section 41 Priority Species. The Ebbsfleet land parcels do support species of conservation concern, which provides</p>

Grounds for objection	Consideration of objection
<p>There is a small number (15) of rare and scarce species which are only found on land at Ebbsfleet Central which therefore contributes little to the overall invertebrate diversity of the SSSI.</p>	<p>additional rationale for their inclusion in the SSSI, in addition to their assemblage representation.</p> <p>With respect to vascular plants, the 2015 records are considered to be sufficiently recent, particularly for annual species of dynamic and open habitats, and Natural England is confident that enough habitat is present across the site for the populations to be sustainable, and to offer scope for future recruitment. The land at Ebbsfleet Central contributes to and supports the vascular plant special interest of the site overall. The Supporting Information to the SSSI notification details the case for the selection of these species, and Natural England's view is that the habitat continuity and diversity of the site as a whole can continue to maintain sustainable populations of both the annual and perennial vascular plant species.</p>
<p>The land at Ebbsfleet Central is severed from the peninsula by significant physical features, resulting in isolated areas of habitat.</p>	<p>Natural England has not described the Ebbsfleet Central land as severed from the peninsula to the north. This terminology implies 'ecological severance'. We consider all parts of the site contribute collectively to the available habitat resource, and the SSSI supports a number of different interest features, not all of which will occur across all parts of the site. See also section 1.8.3.</p>
<p>Due to the type and quality of habitats within the land at Ebbsfleet Central and its separation from the peninsula, it does not have a role as supporting or connected habitat and therefore does not meet the guidance for the selection of biological SSSIs (Part 2 Chapter 20 Terrestrial and Freshwater Invertebrates of the JNCC Guidelines).</p>	<p>The Ebbsfleet Central land parcels support two of the notified invertebrate assemblages. Whilst the Ebbsfleet land parcels are to the south of the area of brownfield habitat on the Swanscombe peninsula, they are part of the post-industrial landscape and support complementary expressions of the grassland and chalk invertebrate assemblages as found over the cement kiln dust.</p>
<p>The land at Ebbsfleet Central does not contain any significant populations of the notified vascular plants or significant numbers of birds which contribute to the notified breeding bird assemblages. It is therefore considered to have low importance for the species identified in the notification.</p>	<p>See section 1.8.3. The Ebbsfleet Central area provides supporting habitat for species components of both of the notified breeding bird assemblages. It also contributes to and supports the vascular plant special interest of the site overall, with records for three of the five notified vascular plant species - yellow vetchling, Bithynian vetch and divided sedge.</p>
<p>The inclusion of public footpath DS17, highway improvements to the Ebbsfleet/A2 junction and areas of plantation on the northern and western boundary, which are described as scrub on the habitat map.</p>	<p>See section 1.8.3.</p>

1.9 Objection from Ebbsfleet Investment General Partner

Jonathan Levy of Landsec submitted an objection on behalf of Ebbsfleet Investment General Partner (EIGP) on 9 July 2021.

1.9.1 Objection

EIGP is the previous owner of land referred to as Ebbsfleet Central now owned by Ebbsfleet Development Corporation. EIGP retains rights and interests over areas of this land which are within the SSSI boundary. EIGP has requested that the detailed objection submitted by Ebbsfleet Development Corporation should be taken in all respects as EIGP's objection.

1.9.2 Consideration of objection

Officers wrote to EIGP on 22 October 2021 and provided a copy of their response to the objection received from Ebbsfleet Development Corporation.

1.9.3 Scientific justification

See section 1.8.3.

1.9.4 Officers' recommendation

With respect to the objection from Ebbsfleet Investment General Partner, the Board is recommended to approve confirmation with modifications to the boundary (as recommended with respect to EDC's objection – see section 1.8.4) to exclude an area of tarmac resulting from recent road construction and plantation woodland, a total area of 2.53 ha.

1.10 Objection from Gillian Charlton

Gillian Charlton submitted an objection to the notification via Citizenspace on 9 June 2021.

1.10.1 Objection

Gillian Charlton acknowledges that Swanscombe Peninsula SSSI 'does have unique features' but objects to the notification on the following grounds:

- designation will prevent development;
- without development the site may become a derelict zone for undesirable pursuits if not properly managed;
- London Resort has considered all aspects and will undertake the protection of this environment allowing it to flourish without local taxpayers expenses to pay for the necessary staff to monitor it on a daily basis; and
- the theme park will bring local jobs for the young and old who have lived in the area for generations.

The points raised in support of Gillian Charlton's objection and Natural England's responses are summarised in Table 3.

1.10.2 Consideration of objection

Officers wrote to Gillian Charlton on 16 June 2021 to outline the reasons for notification and provide contact details to discuss her objection. As no response was received officers wrote again on 20 October 2021 addressing the points raised in the objection.

1.10.3 Scientific justification

Gillian Charlton does not object to the notification on scientific grounds.

1.10.4 Officers' recommendation

With respect to the objection from Gillian Charlton the Board is recommended to approve confirmation without modification.

Table 3 Unresolved objections from Gillian Charlton

Grounds for objection	Consideration of objection
Designation will prevent development.	This is a matter for the relevant planning authority and in the case of the London Resort for the Planning Inspectorate.

Grounds for objection	Consideration of objection
Without development the site may become a derelict zone for undesirable pursuits if not properly managed.	Future management requirements are set out in the Views about Management statement. Natural England will work with owner occupiers to agree and facilitate future management of the SSSI.
London Resort has considered all aspects and will undertake the protection of this environment allowing it to flourish without local taxpayers' expenses to pay for the necessary staff to monitor it on a daily basis.	
The theme park will bring local jobs for the young and old who have lived in the area for generations.	The courts have been clear that Natural England cannot take account of socio-economic issues when forming the opinion whether an area of land is of special scientific interest or not.

1.11 Objection from HS1 Limited

Having expressed initial concerns in correspondence with officers during March and April 2021, HS1 Limited (HS1) submitted an objection on 13 July 2021.

1.11.1 Objection

HS1 holds a lease from the Secretary of State for Transport to maintain and operate the high speed stations and track between St Pancras International Station and the Channel Tunnel until December 2040. As part of this lease, it operates and maintains car parks around Ebbsfleet International Station. The Freeholder of the land in which the car parks are situated is Ebbsfleet Development Corporation. HS1 objects to the notification on the following grounds:

- the designation will in effect “void” the whole purpose behind the construction of Ebbsfleet International Station in the Ebbsfleet Valley;
- impact on regeneration of the Ebbsfleet area;
- HS1 Limited support all of the grounds for objection raised by Ebbsfleet Development Corporation; and
- the inclusion of land with ‘Deemed Consent’ under the Channel Tunnel Rail Link Act 1996 for the construction of car parking.

The points raised in support of HS1’s objection and Natural England’s responses are summarised in Table 4.

1.11.2 Consideration of objection

Officers have been in discussion with Ben Olney of HS1 since November 2020. On 14 September 2021 officers wrote to Ben Olney with comments on HS1 Limited’s objection to aid further discussion. On 23 September 2021 officers wrote to Ben Olney to seek clarity regarding consent for future car parking and the matter was discussed at a meeting on 13 October 2021. On 22 October 2021 officers wrote to Ben Olney with a formal response to HS1’s objection and provided a copy of their response to the objections raised by Ebbsfleet Development Corporation.

1.11.3 Scientific justification

See section 1.8.3.

1.11.4 Officers’ recommendation

With respect to the objection from HS1 Limited the Board is recommended to approve confirmation without modification.

Table 4 Unresolved objections from HS1 Limited

Grounds for objection	Consideration of objection
The designation will in effect “void” the whole purpose behind the construction of Ebbsfleet International Station in the Ebbsfleet Valley.	Under the Wildlife and Countryside Act 1981, Natural England has a statutory duty to designate a site as an SSSI where it is of the opinion that any area of land is of special interest by reason of any of its flora, fauna, or geological or physiographical features.
Impact on regeneration of the Ebbsfleet area.	Whilst Natural England recognises the development that has occurred around Ebbsfleet, and the context for this, it remains the case that development proposals need to be weighed up with other considerations, including environmental matters. Should the SSSI be confirmed, we will continue to work closely with HS1 and all relevant stakeholders to ensure the natural environment is fully considered in future planning proposals. We believe that nature and wildlife can play a key part in regeneration and, should the SSSI be confirmed, we hope that the nationally important wildlife and geology of the area will be seen as a vital part of its natural green infrastructure.
HS1 Limited support all of the grounds for objection raised by Ebbsfleet Development Corporation.	See section 1.8.
The inclusion of land with ‘Deemed Consent’ under the Channel Tunnel Rail Link Act 1996 for the construction of car parking.	It was agreed at a meeting with HS1 on 13 October 2021, that any future car parking proposals would, under the provisions of the CTRL Act 1996 (Section 9), still be subject to reserved matters for the subsequent approval of the relevant planning authority. The SSSI would therefore be considered as part of the planning process if proposals for car parking come forward in the future. Natural England will continue to engage with HS1 to discuss any proposals that come forward.

1.12 Objection from London Resort Company Holdings Limited

Tim Goodwin of Ecology Solutions submitted an objection on behalf of London Resort Company Holdings Limited (LRCH) on 12 July 2021.

1.12.1 Objection

On 31 December 2020 LRCH applied for a development consent order under Section 37 of the Planning Act 2008 to develop an entertainment resort focused primarily on the Swanscombe peninsula. LRCH objects to the notification on the following broad grounds:

- the robustness of the evidence base;
- the lack of reasoned judgements by Natural England as required by the guidelines; and
- Natural England’s failure to take a reasonable and proportionate approach.

There are a number of more detailed points made in support of, and additional to, these broad grounds. These points and Natural England’s responses to them are summarised in Table 5.

1.12.2 Consideration of objection

Officers wrote to Tim Goodwin on 22 October 2021 with a response to LRCH’s objection.

1.12.3 Scientific justification

The robustness of the evidence base

See section 1.4.1.

The lack of reasoned judgements by Natural England as required by the guidelines

Mr Goodwin refers to what he describes as 'fundamental principles' in part 1 of the Guidelines for the selection of biological SSSIs. The extracts quoted (underlined and italicised for ease of reference) are presented below within the whole of each of the relevant paragraphs. Setting out the quoted extracts in their full context enables a fuller understanding of how the Guidelines inform the site selection process:

- Paragraph 2.7 of the Guidelines: "The purpose of biological SSSIs is to safeguard the diversity and geographic range of habitats and species throughout Great Britain, within which the viable populations of all our threatened native species will be represented; as well as the full range of natural, near-natural and semi-natural ecosystems. To do this effectively, the principle behind the designation must be to protect all the component parts of the habitat within an SSSI, and all the species within those habitats in the SSSI. The SSSI series should therefore include our most important natural heritage sites."
- Paragraph 4.5 of the Guidelines: "In the site selection process, there must be a clear framework of judgements within which evaluation takes place. The evaluation of quality depends on the prior definition of qualifying requirements, which will vary according to the type of interest feature. This leads to decisions as to which and how many of the known sites should be selected for notification. Selection is the crucial, first scientific step towards meeting the legislative requirements and allocating resources for protected sites, and this is the stage which requires clear guiding principles derived from basic conservation objectives."
- Paragraph 4.20 of the Guidelines: "It is not always possible to provide rigid rules for SSSI selection which require only the measurement of attributes to determine whether sites pass a critical total 'score' or value. The nature of the evaluation process means that scores themselves will be subjective. In practice, a mixture of attributes has to be evaluated, which requires expert judgement stemming from a wide experience of the ecosystems, habitats and species in question. When a scoring procedure is recommended (e.g. for certain species groups), these limitations must be borne in mind. When threshold values (such as minimum area or population size) are provided, they must be regarded as guidance, subject to the judgement of those concerned, and not used uncritically to accept or reject sites. The decision to select (or not) a site for SSSI notification must be transparent, objective and explicable. This must be based on the rationale in this document, and an explanation of how evaluation decisions are reached must be available for any particular case. If discretion has been exercised with regard to specific guidelines, it must be capable of reasoned explanation."
- Paragraph 8.1 of the Guidelines: "When designating or reviewing SSSIs, the boundaries and integrity of a site should be determined in a way that enables the SNCB to explain the boundary selected, and the site's overall integrity. In practice, this means that site boundaries must be defined in accordance with a number of requirements and conditions, which are considered in the paragraphs below. Whatever variations in importance may be found within a site, all parts must function to protect the standard of special interest, so that loss of or damage to any part of the site would detract significantly from the value of the whole. The loss or damage to any part of a site cannot be justified by the survival of the larger fraction of the site, since, once the process of fragmentation has begun, there are no logical stopping points short of total loss of the site. We will not set arbitrary limits of acceptable loss as this would fundamentally undermine the consistency of approach which is the credible basis for SSSI selection. Small incursions into protected sites are often disproportionately large in their direct ecological effects. The concept of site integrity may seem far-fetched when the defining boundaries are artificial, but any further intrusions make an already unsatisfactory situation worse. The smaller and more fragmented a site, the more important it is to ensure that still further reduction does not occur."
- Paragraph 8.2 of the Guidelines: "SSSI boundaries should be drawn to encompass the special features of the site and all land necessary to ensure the sustainability of those features. Consideration should be given to the inclusion of whole management units, entire ecological units and supporting processes (such as hydrology or sediment supply).

Boundaries should take account of dynamic processes (such as active coastal and floodplain geomorphology). Where part of a site does not hold the special features at the time of selection, **the guiding principle is that:**

- **there must be good evidence that this part of the site could support the special features for which others parts of the site are notified.**

For example, this could be as a result of natural processes (such as coastal erosion or accretion), predictable rotational management (such as that associated with forestry and agriculture) or the known ecological requirements of a species which uses a series of habitat patches but where not all patches are occupied at one time.”

The Guidelines themselves do not describe any of the extracts Mr Goodwin cited as ‘fundamental principles’ but, nevertheless, they do form (along with a great many other points and principles) part of the overall ‘rationale, operational approach and criteria for site selection’. As noted in paragraph 4.5 of the Guidelines, the approach to evaluation varies according to the type of interest feature. Accordingly, the relevant principles from Part 1 of the Guidelines have informed the more detailed feature-specific guidelines in Part 2 of the Guidelines. The Supporting Information document sets out how Natural England has selected the SSSI, its interest features and its boundary, with reference to the relevant selection guidelines and informed by the evidence set out in that same document.

Natural England’s failure to take a reasonable and proportionate approach

In light of the responses above and the consideration of the more detailed points summarised in Table 5, we are satisfied that the approach we have taken is both reasonable and proportionate, being consistent with the relevant selection guidelines and supported by the robust evidence summarised above. We have set out in the Supporting Information document how the evidence has informed the decision to notify the SSSI according to the Guidelines.

1.12.4 Officers’ recommendation

With respect to the objection from London Resort Company Holdings Limited, the Board is recommended to approve confirmation without modification.

Table 5 Unresolved objections from London Resort Company Holdings Limited

Grounds for objection	Consideration of objection
<p>Recent botanical survey work undertaken in 2020 found that the distribution of the notified vascular plant species is entirely restricted to the grasslands within the 'peninsula', to the north of the London Road (A226).</p> <p>The 2015 survey recorded a small population of Divided Sedge in Black Duck Marsh and a medium population in a part of Botany Marsh East. However in 2020 the population in Black Duck Marsh and its distribution in Botany Marsh East had significantly contracted.</p> <p>Whilst surveys undertaken in 2015 recorded small patches of Yellow Vetchling in selected locations in the central and southern parts of the SSSI, these species were not recorded in this area in 2020.</p> <p>With regard to Bithynian Vetch, Natural England describe the population as being large and occurring mainly on grassland areas of Broadness and the sea wall corridor. This was the case in 2015. However in 2020 this species was only found on the sea wall corridor. The most significant patch of habitat containing this species in 2015 has become scrubbed over and it was not recorded in 2020.</p> <p>Natural England have failed to assess the data carefully, with any forensic rigour and appear to have placed as much, if not more, weight upon historic data from 2015 than information from 2020.</p>	<p>The supporting information details the case for the selection of these species. The habitat continuity and diversity of the site as a whole can continue to maintain sustainable populations of the notified vascular plant species, as well as offer scope for future recruitment.</p> <p>Although the notified vascular plants species form part of the reasons for notification, there is no expectation that each species occurs in every part of the SSSI at any given time. It is not clear to Natural England whether the 2020 LRCH commissioned botanical survey included the southern area of the site. We consider the records from 2015 are sufficiently recent, in particular for the annual species of dynamic open habitats (yellow vetchling and Bithynian vetch) and cryptic annual species with a limited optimum survey season (slender hare's-ear).</p> <p>Additional evidence was submitted in a representation by Tarmac Trading Limited from a survey of its land within the SSSI. This survey was carried out by Alex Lockton, Ecological Consultant in June 2021. It recorded the presence of both yellow vetchling and Bithynian vetch within land owned by Tarmac Trading Limited, which is in the southern part of the site adjacent to Ebbsfleet International Station.</p>

Grounds for objection	Consideration of objection
<p>Slender Hare's-ear was not recorded at the site in 2015. CBA's botanical report (2016) refers to records made by Kent Botanical Recording Group in August 2012. Surveys in 2015 and 2020 did not record this species to be present.</p>	<p>The LRCH Ecology Baseline Report⁵ states that 'a small area of saltmarsh exists between the two existing sea walls (Image EDP A1.5), although this area is no longer regularly inundated, due to the presence of the outer wall, and it is managed for amenity value at its southern extent. Slender hare's-ear <i>Bupleurum tenuissimum</i>, a species with a strong association with upper saltmarsh habitat was recorded here.'</p> <p>Recognising this text was included without revision, with specific reference to the CBA 2016 report, and that not all Phase 1 survey data has been included within the submission, this is considered to be a 2015 survey record. Both 2012 and 2015 records are considered to be sufficiently recent for cryptic, annual species of dynamic habitats, with a limited optimum survey period, as is the case for slender hare's-ear. Natural England is confident that enough habitat is present across the site for the population to be sustainable.</p>
<p>Round-leaved Wintergreen has only been recorded in one small area of the site, a 3m² area amongst Silver Birch and Bramble scrub, on the 'peninsula'. The Supporting Information document states that selection of this species is justifiable on the basis that the population at Swanscombe is the largest sustainable population in the Area of Search.</p>	<p>The selection of round-leaved wintergreen is explained in the supporting information to the SSSI notification. This perennial species has been recorded on this site for 30 years and as of 2020 is extant, with potential for future recruitment in response to management. The population is therefore regarded as sustainable.</p>
<p>The distribution of breeding birds associated with the 'lowland open waters and their margins, lowland fen and lowland damp grassland' mixed assemblage is primarily restricted to marshes on the peninsula, with very limited abundance and diversity of wetland species occurring outside of this area.</p>	<p>All parts of the site contribute collectively to the available habitat resource, and the SSSI supports a number of different interest features, not all of which will occur across all parts of the site.</p>
<p>Of the 20 bird species associated with the mixed assemblage, the 2020 survey found that only two species (Cetti's Warbler and Reed Warbler) occurred in any meaningful numbers to the south of London Road, with their breeding activity noted as being largely restricted to Bamber Pit and Station Quarter South.</p>	<p>The SSSI guidelines do not specify a minimum number of breeding pairs for a species to be included in the scoring for a breeding bird assemblage. The scoring thresholds are used to determine the quality of the site to support an assemblage of birds characteristic of that habitat. Cetti's warbler and reed warbler, are recorded breeding within this habitat in this part of the site. This area is therefore clearly supporting species components of the mixed assemblage.</p>

⁵ Non-Technical Summary of Appendix 12.1: Ecology Baseline Report July 2020 - Annex EDP 1, A1.56 – A1.58

Grounds for objection	Consideration of objection
<p>With respect to the breeding bird assemblage of lowland damp grassland, very low numbers of sightings of four species associated with this assemblage are recorded south of London Road (one sighting each of Grey Heron and Grasshopper Warbler, and two sightings each of Cuckoo and Shelduck). Of the eight bird species associated with the 'lowland scrub' breeding bird assemblage, the three species with the highest scores are Grasshopper Warbler, Cuckoo and Nightingale. These species contribute 8.5 out of the total site score of 14.5. The distribution of these species is largely restricted to the scrub mosaic habitats on the peninsula, with only one sighting of Grasshopper Warbler and two sightings each of Cuckoo and Nightingale noted on land to the south of London Road.</p>	<p>The records cited demonstrate that species components of the assemblages are utilising the habitats in this area. The SSSI selection guidelines do not specify a minimum number of pairs for inclusion.</p>
<p>With regard to the lowland scrub breeding bird assemblage, the guideline threshold score of 14.5 is only just met for the site as a whole. To meet this threshold Natural England are reliant upon the inclusion of Garden Warbler. Only one singing male was recorded in Bamber Pit during surveys undertaken in 2020. The available supporting evidence is inherently limited and it must be questioned whether the SSSI should be notified for this assemblage.</p>	<p>The Guidelines (Part 2, Chapter 17, Annex 1) describe the relevant site threshold value (in this case, for lowland scrub, 14.5) as representing 'an especially good example of the breeding bird community' for the habitat.</p>
<p>Detailed invertebrate surveys have been undertaken in support of the DCO application. The distribution and diversity of the invertebrate assemblages recorded varies considerably throughout the SSSI. Analysis of the data confirms evidence of a decline in invertebrate species associated with 'Open habitats' between 2015 and 2020. Vegetation succession and transition of this habitat has occurred between 2015 and 2020. For each of the 108 species associated with open habitats, their presence/absence recorded across the site in 2015 was compared with the 2020 survey results. Of the 108 species, a total of 31 species were found to have been recorded in fewer sample areas in 2020 compared to 2015.</p>	<p>The assessment of the invertebrate assemblages is based principally on the 2015 data, though as noted in the Supporting Information document, the results of the 2020 surveys, using the provided assemblage scores from Pantheon for each of the 2020 survey areas, are considered consistent with those from 2012 and 2015. Invertebrate surveys are always subject to the impacts of weather, and the context of high temperatures and rainfall experienced before the 2020 survey season may have depressed species abundances, suggesting it may have been a poorer year for invertebrates. Luck in detection, techniques deployed and in what degree, and sampling differences between the 2015 and 2020 surveys also need to be considered when comparing data.</p>

Grounds for objection	Consideration of objection
<p>Natural England have stated that the boundary of Swanscombe Peninsula SSSI has been “drawn to include land supporting the features of special interest and areas required to ensure their long-term sustainability”. However, Natural England fail to provide any further justification regarding the boundary and in particular the inclusion of parcels of land to the south of London Road.</p> <p>In relation to vascular plants, there is no evidence from the most recent survey work that the central and southern parts of the SSSI currently support any of the species for which the site has been notified. Similarly, in relation to the breeding bird assemblages, the inclusion of land in the central and southern parts of the SSSI simply cannot be justified on the grounds of the mixed wetland breeding bird assemblage.</p>	<p>The boundary was established in accordance with the Guidelines. It has been drawn to include a mosaic of free-draining grassland, scrub, wetlands, grazing marsh, transitional grassland, saltmarsh and chalk pits, which collectively support and will maintain the nationally important vascular plant, invertebrate and breeding bird features of special interest.</p> <p>There is no expectation that all features will be present in every part of the SSSI at any given time. All areas within the SSSI boundary collectively contribute to and support the special interest of the site. As part of the overall SSSI, the southern areas support two of the notified invertebrate assemblages, species of both notified breeding bird assemblages and three of the notified vascular plant species, as well as the geological interest.</p>
<p>The notified invertebrate assemblages are reliant upon habitats such as open mosaic, saltmarsh and wetland. As a consequence, the distribution of these habitats has a clear implication with regard to the value of the site for this group. Taking into account paragraph 8.1 of the Selection Guidelines, an informed judgement has to be made in the identification of the area of land which is required to protect and maintain these features.</p> <p>As stated in paragraph 8.2, the SSSI boundary should include land which supports the special features of the site and is necessary to ensure the long-term sustainability of those features. While it is recognised that the invertebrate assemblage requires the mix of habitat types found within the open mosaic habitat, a key judgement that must be undertaken is how much of the habitat is actually required to maintain a “viable population” of the notified feature.</p>	<p>The SSSI selection guidelines for invertebrates provide guidance on the types of habitat mosaics that are valuable for invertebrates. For grassland (and heathland), “<i>adjoining scrub, woodland, tall ruderal and wetland systems, old sand and marl pits</i>” are cited as example types of supporting resources and niches. Paragraph 1.6 of those guidelines advises “<i>many invertebrates require habitat heterogeneity or a mosaic of habitats. These operate at both the large scale, where habitats such as grassland, scrub and woodland are proximal, and small scale, where a variety of structural and topographical conditions is critical. This is a consequence of many species living in situations which may be classed as transitional between habitat types (ecotones) or because they have a need for different habitat types or conditions at different stages of their life history.</i>”</p> <p>There are no metrics for the necessary extents required for each notified assemblage. There is evidence from a Swedish study⁶ around structurally simple sand pits and size, but this is not applicable to complex and structured mosaics. Indeed, it suggests that the species pool increases with structural complexity. In accordance with the Guidelines, supporting habitat has been included in the SSSI to ensure that as much variation, juxtaposition and niche opportunity is available as possible.</p>

⁶ Lönnberg, L. & Jonsell, M. (2012) Sand pits as habitats for beetles (Coleoptera): does area affect species number and composition? *Biodiversity and Conservation* volume 21, pages 853–874.

Grounds for objection	Consideration of objection
<p>It is critical to ensure that the extent of any SSSI notification is reasonable and proportionate. Notification should only consider areas of land which are required to maintain interest features. Natural England have applied a 'blanket' approach in respect of this notification. There is no information, evidence or reasoned justification to demonstrate that Natural England have given any consideration to the extent of land which is required to maintain the interest features. By adopting this approach Natural England must have notified parcels of land which are not required to maintain the interest features. In so doing, they have unnecessarily fettered land which could otherwise come forward for other functional and economically beneficial purposes.</p>	<p>See response above. Natural England is not seeking to take a reductionist approach - all parts of the site contribute collectively to the available habitat resource, and the SSSI supports several different interest features, not all of which will occur across all parts of the site.</p>
<p>There are significant economic and functional implications associated with the ongoing management and maintenance of open mosaic habitats. Designation would lead to a legal requirement for landowners to fund and implement such works. There will be significant socio-economic impacts associated with the notification. As Natural England have not provided any clear explanation for the inclusion of each land parcel they have effectively imposed these impacts without having demonstrated they are necessary. It is notable how similar the notified boundary is to that of the DCO application site boundary. It appears that the notification has been undertaken in order to frustrate the DCO application, rather than to protect and safeguard areas which support and sustain the interest features.</p>	<p>Natural England notes the reference to socio-economic impacts made in these paragraphs. However, the designation of an SSSI is based on consideration of the evidence underpinning the special interest of the site.</p>
<p>Section 3 of the Supporting Information document identifies the current condition of the interest features. All features are recorded to be in 'favourable' condition despite the fact that the most recent survey data has identified a decline in the distribution of interest features particularly in terms of the central and southern areas. This provides further evidence to indicate that not all areas of the notified SSSI are required to maintain the interest features. Otherwise at least some features – such as vascular plants – would either have been assessed to be in 'unfavourable – declining' condition.</p>	<p>The condition for each SSSI feature is based on the professional judgement of Natural England. As an example, for the vascular plants, the presence of adequate habitat and sufficient confidence that the site supports sustainable populations, enabled an initial assessment of favourable condition.</p> <p>The 'Views About Management' document sets out how the distribution and juxtaposition of components of the mosaic of habitats will shift over time in line with vegetation succession, and how periodic, rotational management will contribute to the long-term sustainability of the interest features.</p>

Grounds for objection	Consideration of objection
<p>The evidence supporting the notification principally relies upon data obtained from surveys undertaken in 2012 and 2015. Due to the ongoing process of natural succession, historical data cannot represent an accurate picture of the current situation. It is unacceptable to use historical data to support the notification, mindful of the significant material implications for landowners and other parties. Natural England have been aware of the detailed evidence base regarding the DCO site for a number of years, with a Preliminary Environmental Information Report (PEIR) shared with all consultees, including Natural England, in 2015. Despite this information being available, it was not until March 2021 that the SSSI was notified, immediately subsequent to the submission of the DCO application.</p>	<p>Natural England has been undertaking an assessment of the Thames Estuary area to inform the consideration of possible SSSIs. This has included analysis of the brownfield resource, in order to fully understand the relative importance of sites in this area. The first of these analyses started in late 2017.</p> <p>In addition, the Terrestrial and Freshwater Invertebrates guidelines for the selection of biological SSSIs were being revised to place significantly more interest on assemblages, and were not published until 2019.</p> <p>Consideration of the other SSSI interest features (breeding birds and vascular plants) was also ongoing. The assessment of the full interest was necessary before the site could be considered for notification.</p>

1.13 Objection from the Port of London Authority

The Port of London Authority (PLA) submitted an objection on 12 July 2021.

1.13.1 Objection

As statutory harbour authority, the PLA works to ensure the safety of navigation for commercial and leisure users, promote the use of the River Thames for trade and travel, and protect and enhance the environment. The SSSI boundary encompasses the PLA Broadness lighthouse, access road, radar tower and operational wharves (Bell Wharf, Whites Jetty and Hall's Northfleet). The PLA recognises the benefits to the environment of the notification but is concerned about the potential impacts to existing port and PLA operations as follows:

- the PLA requires clarity on whether the footprint of Bell Wharf and Whites Jetty are included within the SSSI boundary;
- the PLA objects to the inclusion of Hall's Northfleet, operated by Cemex, within the boundary as it is safeguarded through the Kent Minerals and Waste Plan;
- vehicles require access to the above sites to carry out maintenance. The PLA objects to the need to obtain consent for regular vehicle access which occurred prior to notification;
- the PLA requires clarity on whether the notification will result in seasonal restrictions on maintenance works and in particular summer maintenance of access tracks;
- the PLA requires clarity on the definition of engineering works in operation 23 of the list of Operations Requiring Natural England's Consent; and
- the PLA requires clarity on the interaction of the SSSI notification with the conservation objectives for the Swanscombe Marine Conservation Zone.

The points raised in support of PLA's objection and Natural England's responses are summarised in Table 6.

1.13.2 Consideration of objection

Officers met with PLA on 16 August 2021 to discuss the points raised in its letter of 12 July 2021. Officers wrote to Tanya Ferry (Head of Environment) on 8 October 2021 to confirm the outcome of the discussion on 16 August 2021 and provide clarity on the specific areas raised in the objection. On 25 October 2021, officers responded fully to all of the points raised in PLA's objection.

1.13.3 Scientific justification

The land surrounding Hall's Northfleet has been included due to it being supporting habitat for notified breeding bird and invertebrate assemblages, some of which require a degree of bare ground or disturbed soil for them to thrive. Officers have reviewed the boundary around this area and reached the following conclusions, with respect to each of the areas raised in correspondence by PLA:

- The 'mound' in the north-east of the Hall's Northfleet site – this is included because it provides suitable habitat for the interest features of the SSSI, in particular the brownfield invertebrate assemblages. A recent satellite image (July 2021 – included with the officers' response of 25 October 2021) shows that the area continues to support vegetation, although we appreciate that it has been disturbed in the past, as suggested by the aerial photograph attached to PLA's email of 22 October 2021.
- The north-west edge of the Hall's Northfleet site – officers agree that the SSSI boundary as notified in this area includes small areas of infrastructure. Accordingly, we recommend modifications to remove these areas from the SSSI.
- An area on the western side of the Hall's Northfleet site (described in PLA's 22 October 2021 email as being near the building in the centre) – as described above for 'the mound', this is included because it provides suitable habitat for the interest features of the SSSI, in particular the brownfield invertebrate assemblages. A recent satellite image (July 2021) shows that the area continues to support vegetation.
- The car parking area along the southern edge of the Hall's Northfleet site – officers agree that the SSSI boundary as notified encroaches marginally into areas of a car park. Accordingly, we recommend modifications to remove these areas from the SSSI, and for the boundary of the SSSI to end at the bottom of the slope surrounding this car park.

1.13.4 Officers' recommendation

With respect to the objection from the Port of London Authority, the Board is recommended to approve confirmation with a modification to the boundary to exclude a narrow sliver of land on the north-western edge of the Hall's Northfleet site, a total area of 0.04 ha.

Table 6 Unresolved objections from the Port of London Authority

Grounds for objection	Consideration of objection
The PLA requires clarity on whether the footprint of Bell Wharf and Whites Jetty are included within the SSSI boundary.	The SSSI excludes raised or suspended structures (such as bridge decks, jetties and gantries); however, the site does include any exposed land or water beneath the aforementioned structures. Other structures (not raised or suspended) are included in the site as mapped. Accordingly, the structures at Bell Wharf and Whites Jetty are (insofar as they are raised or suspended) excluded from the SSSI, although any exposed land or water beneath them is included.

Grounds for objection	Consideration of objection
The PLA objects to the inclusion of Hall's Northfleet, operated by Cemex, within the boundary as it is safeguarded through the Kent Minerals and Waste Plan.	Cemex was notified on 11 March 2021 and has not submitted an objection. Natural England notes the concerns raised regarding the Kent Minerals and Waste Plan. We do not consider that these planning matters represent a reason to not designate the SSSI, as designation is based on consideration of the evidence underpinning the special interest of the site (see section 1.13.3). The planning process enables the consideration of socio-economic issues, amongst other matters, and we will continue to work with and advise all relevant stakeholders to ensure the SSSI is fully considered in planning proposals. Activities granted under pre-existing planning permission may continue to be undertaken in a SSSI. The 'mound' within the SSSI at the north of Hall's Northfleet falls under the ownership of a separate landowner, who has stated no objection to the boundary in this area.
Vehicles require access to the above sites to carry out maintenance. The PLA objects to the need to obtain consent for regular vehicle access which occurred prior to notification.	On 7 September 2021, officers provided assent for five years for routine operations including access to the radar tower and lighthouse by vehicles, including the transport of operational lifting machinery using pre-existing routes.
The PLA requires clarity on whether the notification will result in seasonal restrictions on maintenance works and in particular summer maintenance of access tracks.	Officers have confirmed that maintenance of the tracks specified is the responsibility of Swanscombe Development LLP. On 19 May 2021 Natural England issued a consent to Swanscombe Development LLP for this maintenance. The consent does not impose any seasonal restrictions.
The PLA requires clarity on the definition of engineering works in operation 23 of the Operations Requiring Natural England's Consent.	On 7 September 2021, officers provided assent for five years for routine operations including several types of 'engineering works'.
The PLA requires clarity on the interaction of the SSSI notification with the conservation objectives for the Swanscombe Marine Conservation Zone	Natural England gives equal importance to the MCZ and SSSI. Where the designations overlap, any major project proposed within the MCZ would need to address the MCZ features alongside those of the SSSI. In this case, the ecological needs of both designations are complementary by providing protection for the intertidal mudflats that support both marine and terrestrial species.

1.14 Objection from Swanscombe Development LLP

Arwel Owen of David Lock Associates submitted an objection on behalf of Swanscombe Development LLP on 12 July 2021.

1.14.1 Objection

Swanscombe Development LLP is freehold owner of a significant proportion of land within the SSSI. In particular it owns land which previously formed part of the Associated Portland Cement Manufacturers Ltd/Blue Circle works. This land is subject to intensive management including

managing surface runoff, leachate and invasive species. In 2015 an option was signed allowing the promoters of the London Resort to acquire land on notice. Swanscombe Development LLP objects to the notification on the following grounds:

- Natural England has underestimated or disregarded the scale and cost of management which will be required to maintain the condition of habitats within the SSSI. Consideration of the designation should be subject to full management costing and a clear funding structure and package identified and guaranteed;
- the designation is in conflict with the provisions of the adopted development plan which provides for the regeneration of Swanscombe Peninsula. The site is also subject to a submitted Development Consent Order application for the London Resort. The notification makes no reference to the impact and consequence of designation upon these nationally significant planning considerations. This context is relevant to the notification and its future prospects; and
- the inclusion of six areas or parts of areas within the boundary which comprise hardstanding/compacted bare ground in active use as haulage yards or car/lorry storage, an earth bund and a leachate lagoon.

The points raised in support of Swanscombe Development LLP's objection and Natural England's responses are summarised in Table 7.

1.14.2 Consideration of objection

The site was visited with Mark Heeley and Graham Stone of Swanscombe Development LLP on 30 March 2021 and officers corresponded regularly with them during March-June 2021 to agree routine management and consents. Following receipt of the formal objection, officers liaised with Arwel Owen regularly during August-October 2021 to discuss the concerns raised and to explore possible boundary modifications. Officers wrote to Arwel Owen on 22 October 2021 to respond to all of the issues raised and to confirm a recommendation will be made to Natural England's Board that Areas 1-4 and 6, as detailed below, be removed from the SSSI boundary.

1.14.3 Scientific justification

Area 1 – an area of concrete slab hardstanding used as a haulage yard and associated access to this area and another area which is not included within the boundary. The area of hardstanding did not appear to be in active use at the time of the site visit and other than the footprint of the slabs has no fenced boundary. However, it is agreed that both this area and the access track are unlikely to support the interest features and therefore do not merit inclusion within the SSSI boundary.

Areas 2 and 3 – small areas on the boundary of a gravel surfaced and fenced car, van and lorry storage yard. These areas are part of the storage yard and within the fence line. They do not support the interest features and therefore do not merit inclusion within the SSSI boundary.

Area 4 – an area of compacted bare ground used as a haulage yard since February 2021. This area did not appear to be in active use when the site was visited prior to notification. However satellite imagery from 17 July 2021 shows it is now in use as a haulage yard. The yard is only partially fenced. GPS coordinates have been provided to allow a boundary revision. It is agreed that this area is unlikely to support the interest features and therefore does not merit inclusion within the SSSI boundary.

Area 5 – a small parcel of land adjacent to a commercial area. This area was previously open scrub habitat. In May 2020 surface debris and earth was cleared from the adjacent commercial area and deposited on this area in the form of an earth bund. The vegetation on this bund will support some of the interest features. It is therefore recommended that it is retained within the SSSI boundary.

Area 6 – a leachate lagoon which forms part of the pollution control system which treats leachate arising from the cement kiln dust tips within the peninsula. This lagoon does not support the interest features and therefore does not merit inclusion within the SSSI boundary.

1.14.4 Officers' recommendation

With respect to the objection from Swanscombe Development LLP the Board is recommended to approve confirmation with modifications to the boundary to exclude a leachate lagoon and four areas used for car, van and lorry storage, a total area of 1.69 ha.

Table 7 Unresolved objections from Swanscombe Development LLP

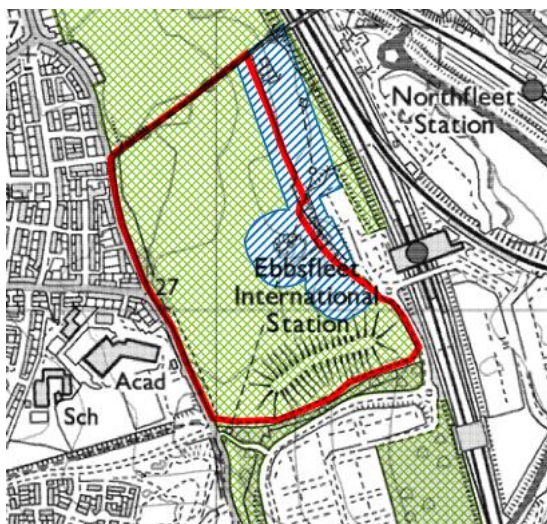
Grounds for objection	Consideration of objection
Natural England has underestimated or disregarded the scale and cost of management which will be required to maintain the condition of habitats within the SSSI. Consideration of the designation should be subject to full management costing and a clear funding structure and package identified and guaranteed.	The courts have been clear that Natural England cannot take account of socio-economic issues when forming the opinion whether an area of land is of special interest or not.
The designation is in conflict with the provisions of the adopted development plan which provides for the regeneration of Swanscombe Peninsula. The site is also subject to a submitted Development Consent Order application for the London Resort. The notification makes no reference to the impact and consequence of designation upon these nationally significant planning considerations. This context is relevant to the notification and its future prospects.	This is a matter for the relevant planning authority and in the case of the London Resort for the Planning Inspectorate. The courts have been clear that Natural England cannot take account of socio-economic issues when forming the opinion whether an area of land is of special interest or not.
The inclusion of six areas or parts of areas within the boundary which comprise hardstanding/compacted bare ground in active use as haulage yards or car/lorry storage, an earth bund and a leachate lagoon.	The Board is recommended to approve confirmation with a modification to the boundary to exclude five of the six areas. See section 1.14.3

1.15 Objection from Tarmac Trading Limited

James Parker of DLA Piper UK LLP submitted an objection on behalf of Tarmac Trading Limited (Tarmac) on 12 July 2021.

1.15.1 Objection

Tarmac owns land adjacent to Ebbsfleet International Station, known as Northfleet Landfill, which has been restored following mineral working and use as a landfill site. Its land ownership also includes parts of the previously notified Bakers Hole SSSI (shaded in blue below).



With the exception of the area previously notified as Bakers Hole SSSI, Tarmac objects to the notification of Northfleet Landfill on the following grounds:

- it is not of special interest and does not support nationally important features. It therefore does not meet the criteria set out in S28C of the Wildlife and Countryside Act 1981 or the JNCC guidelines;
- with regard to the notified breeding bird assemblages Tarmac commissioned a breeding bird survey of Northfleet Landfill. Surveys were carried out from May-June 2021 by Heatons. The survey report concluded that the breeding bird assemblage present does not meet the criteria set out in the guidelines;
- with regard to the notified vascular plants Tarmac commissioned a botanical survey of Northfleet Landfill. The survey was carried out on 10 June 2021 by Alex Lockton Ecological Consultant. The survey confirmed the presence of both yellow vetchling and Bithynian vetch. However, Heatons consider that the IUCN classification of these species is incorrect and that it is therefore not necessary to take action to conserve either species. In addition they state that attempting to conserve them within the SSSI series is unlikely to be successful as they require frequent soil disturbance which is inconsistent with conservation management;
- with regard to the notified invertebrate assemblages Tarmac notes that the habitats supporting these assemblages are not all present on Northfleet Landfill, which is free draining grassland. Tarmac stated that it was carrying out a review of the invertebrate ecological evidence supporting the notification which would be sent under separate cover. Natural England has not received any further information regarding this review;
- with regard to the notified geological interest, with the exception of the previously notified Bakers SSSI Hole, the site is a former landfill site which does not retain any geological interest;
- connectivity – the site does not have a direct relationship with the habitats on the peninsula from which it is severed by both infrastructure and development. These factors significantly reduce the value of land in Ebbsfleet valley, as supporting or connected habitat; and
- routine monitoring operations – Tarmac retains monitoring and maintenance responsibilities for the former landfill site. Part of these responsibilities requires the landfill to be cut back to allow access for gas monitoring. Tarmac consider that this activity does not align with the notification.

The points raised in support of Tarmac's objection and Natural England's responses are summarised in Table 8.

1.15.2 Consideration of objection

Officers wrote to James Parker of DLA Piper UK LLP on 22 October 2021 and responded to the points raised in the objection.

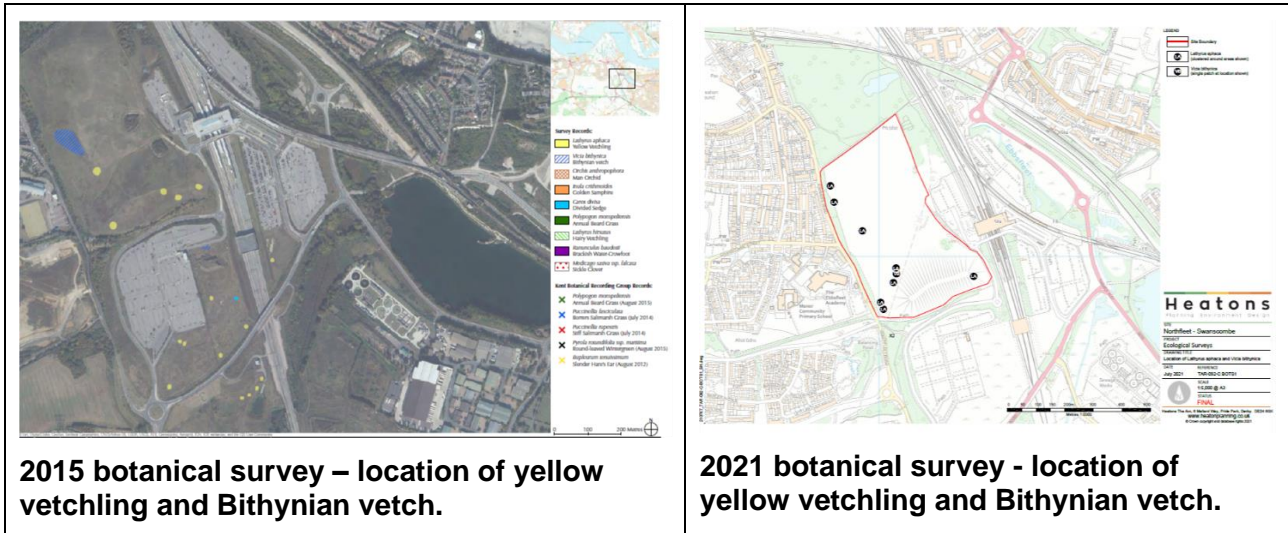
1.15.3 Scientific justification

Breeding birds

The scrub and grassland of the Northfleet Landfill supports species from the lowland scrub breeding bird assemblage (see section 1.3.4) and is contiguous with similar habitats in the wider SSSI. The breeding bird survey report submitted with Tarmac's objection demonstrates use of the land by the following species, which each contribute to the lowland scrub assemblage: linnet, bullfinch and long-tailed tit. It also recorded the following breeding bird assemblage species on immediately adjacent land that falls within the SSSI: sedge warbler, Cetti's warbler and lesser whitethroat. This helps to demonstrate the intricate interplay of the mosaic of habitats and why it is detrimental to break down the site into smaller sections for individual assessment. All areas within the boundary collectively contribute to and support the special interests and are not assessed in isolation.

Vascular plants

The grassland at Northfleet Landfill supports two of the notified plant species: yellow vetchling *Lathyrus aphaca* and Bithynian vetch *Vicia bithynica* (see section 1.3.2). Both species were confirmed as still present in 2021 by the botanical report submitted with Tarmac's objection, which provides support for Natural England's opinion that these species have sustainable. The maps below show the locations of both species in the Northfleet Landfill, as recorded by surveys for LRCH in 2015 and Tarmac in 2021. Although there are five vascular plants species forming part of the reasons for notification, there is no expectation that they each occur in every part of the SSSI at any given time.



In Great Britain, both yellow vetchling and Bithynian vetch are currently given an IUCN threat classification of 'Vulnerable'. The IUCN statuses given are those in the JNCC published GB Red List of 2005 and supported for yellow vetchling in the Botanical Society of Britain & Ireland (BSBI) published England threat assessment of 2014. These are the source documents for threat statuses in GB and England, respectively. The GB assessments are kept under review through annual updates and these two species have remained classified as 'Vulnerable' since 2005.

The management likely to be required to sustain these two plant species, such as periodic soil disturbance and vegetation cutting, is fully compatible with that for other notified features of the site, especially the invertebrates. The notification of an SSSI does not equate to the land becoming a 'nature reserve'. In many cases the current, routine operations of a site may be sufficient to manage for these species.

Invertebrates

Two of the invertebrate assemblages of special interest are represented on the Northfleet Landfill: F111 bare sand and chalk; and F112 open short swards (see section 1.3.3). Free-draining grassland, as found on the Northfleet Landfill, is a supporting habitat for these assemblages. Regular mowing and some soil disturbance may be compatible, if not favourable management, for these invertebrates.

Geology

The Quaternary geology at Bakers Hole remains a notified feature of the Swanscombe Peninsula SSSI (see section 1.3.1). Beyond the area of core geological interest there may be other locations within the former quarry at Northfleet Landfill where geological features may persist, perhaps because they were beneath public rights of way, conveyors or other infrastructure. Further investigations would be required to confirm the presence and value of any such features. Nevertheless, the area of Northfleet Landfill within the SSSI beyond the area previously notified as Bakers Hole SSSI is part of the special interest of the site for the F111 and F112 invertebrate assemblages, the lowland scrub breeding bird assemblages, yellow vetchling and Bithynian vetch.

Connectivity

The SSSI is an 'archipelago' of closely juxtaposed land parcels, many of which directly abut, and

those that do not are no more than approximately 80m from the next nearest parcel. This close juxtaposition gives us confidence that the more mobile species of birds and invertebrates especially, but also the vascular plants, will be able to disperse regularly between the components of the SSSI.

Many of the species that are part of the special interest are considered highly mobile at the scale of this SSSI, and their dispersal is not necessarily hampered by short interruptions in suitable habitat or the presence of infrastructure. All of the bird species in the lowland scrub assemblage are capable of flight, as are an estimated one-third of F111 and one-quarter of F112 invertebrate assemblage species. Plants have evolved seed shapes and forms to make the most of longer dispersal opportunities, which can be aided by animals, such as when seeds are caught on fur, feathers or feet, or passed through the gut; by weather events such as seeds blown by the wind and carried in flood water; and in the soil on peoples' boots, equipment and vehicles.

1.15.4 Officers' recommendation

With respect to the objection from Tarmac Trading Limited the Board is recommended to approve confirmation without modification.

Table 8 Unresolved objections from Tarmac Trading Limited

Grounds for objection	Consideration of objection
Land owned by Tarmac is not of special interest and does not support nationally important features. It therefore does not meet the criteria set out in S28C of the Wildlife and Countryside Act 1981 or the JNCC guidelines.	See section 1.15.3.
With regard to the notified breeding bird assemblages Tarmac commissioned a breeding bird survey on their land. Surveys were carried out from May-June 2021 by Heatons. The survey report concluded that the breeding bird assemblage present does not meet the criteria set out in the guidelines.	See section 1.15.3.
With regard to the notified vascular plants Tarmac commissioned a botanical survey of their land. The survey was carried out on 10 June 2021 by Alex Lockton Ecological Consultant. This survey confirmed the presence of both yellow vetchling and Bithynian vetch. However, Heatons consider that the IUCN classification of these species is incorrect and that it is therefore not necessary to take action to conserve either species. In addition they state that attempting to conserve them within the SSSI series is unlikely to be successful as they require frequent soil disturbance which is inconsistent with conservation management.	See section 1.15.3.
With regard to the notified invertebrate assemblages Tarmac note that the habitats supporting these assemblages are not all present on their land supports free draining grassland.	See section 1.15.3.
With regard to the notified geological interest, with the exception of the previously designated Bakers' Hole, the site is a former landfill site which does not retain any geological interest.	See section 1.15.3.
The site does not have a direct relationship with the habitats on the peninsula from which it is severed by both infrastructure and development. These factors significantly reduce the value of land in Ebbsfleet valley, as supporting or connected habitat.	See section 1.15.3

Grounds for objection	Consideration of objection
Tarmac retains monitoring and maintenance responsibilities for the former landfill site. Part of these responsibilities require the landfill to be cut back to allow access for gas monitoring. Tarmac consider that this activity is does not align with the notification.	This activity has been taking place 'for many years'. The continued presence of the notified invertebrate, breeding bird and vascular plant species would indicate that it is not incompatible with notification. Consent has been granted until 2022 and officers have offered to work with Tarmac to consider consent for up to five years.

1.16 Representation of support from Buglife

In addition to a joint representation of support with the RSPB, Kent Wildlife Trust and CPRE Kent, Buglife submitted two further representations of support. The first on 30 June 2021 expressed strong support for the notification for the following reasons:

- it represents a significant step in the conservation of open mosaic habitat on previously developed land (OMHPD). In the face of continued losses of this habitat in the Thames Estuary notification is 'a necessary strong statement that the protected areas network has a role to play in the conservation of the nationally important populations of invertebrates that are supported by OMHPDL and coastal habitats in the Thames Estuary';
- Swanscombe Peninsula supports one of the 'best remaining examples of OMHPD and estuarine habitat' which is irreplaceable and supports 'a nationally important assemblage of terrestrial and wetland invertebrates'; and
- the presence of critically endangered, endangered, vulnerable, near threatened, Section 41 and nationally scarce species contribute to the site's 'outstandingly high value for invertebrates'.

Buglife supports Natural England's assessment of special interest and the use of Pantheon analysis. It notes the level of survey effort and consistently high quality of the site from 2012 to 2020.

Whilst expressing its support for the notification, Buglife considers that the total number of invertebrate species stated in the citation (over 1,700) is an underestimate. Whilst recognising that this number reflects the species recognised by Pantheon it considers the true number of species recorded over the 2012 and 2015 surveys is 1,992.

On 27 July 2021, Buglife submitted additional comments in response to criticism of Natural England's 'analysis of invertebrate data from other stakeholders'. It considers the 2020⁷ invertebrate survey data allows the same conclusions to be reached as the assessment of the 2012 and 2015 surveys. It disputes that the 2020 survey data indicates that 'the invertebrate assemblage of open habitats is in decline' and states that for a number of reasons it is not appropriate to directly compare the 2015 and 2020 surveys. It concludes that the 2020 data alone 'clearly demonstrates that the site supports a nationally important assemblage of invertebrates'.

1.17 Representation of support from the RSPB

In addition to a joint representation of support with Buglife, Kent Wildlife Trust and CPRE Kent, the RSPB submitted a further representation of support on 12 July 2021. The RSPB strongly supports the notification for the following reasons:

- Swanscombe Peninsula SSSI is a nationally important site that clearly meets the selection guidelines. The RSPB referenced the importance of the SSSI series and 'growing body of evidence demonstrating the health and socio-economic benefits derived from designated areas';

⁷ Survey commissioned by London Resort Company Holdings Limited.

- site protection is a 'crucial component of the UK's national and international commitments to halting and reversing the loss of biodiversity' and to meeting the ambitions of the 25 year Environment Plan.

The RSPB recognised the importance of data collected by LRCH and records submitted to the British Trust for Ornithology, Kent Ornithological Society and local records centre by 'dedicated and skilled observers'. It provided recent records for additional (confidential) rare breeding bird species, as well as kingfisher. RSPB considers that one of the rare breeding birds should be included as a scoring species of the lowland scrub breeding bird assemblage. The records provided are however insufficient to demonstrate probable or confirmed breeding in recent years. A recommendation therefore cannot be made for its inclusion within the lowland scrub breeding bird assemblage, although the species would fall within the scope of the assemblage in the event that probable or confirmed breeding occurs in future.

The RSPB requested changes to the statement of Natural England's views about management of the site in order to 'optimise conditions for breeding waders on wet grassland' and to reduce the risk of disturbance of any long-eared owls using the site. RSPB also provided comments on the condition assessment and drafting a monitoring specification for the site.

Officers agree that the RSPB's suggestions for modifications to the 'views about management' would add useful clarity and therefore recommend that the relevant paragraphs be amended as follows (recommended additional text underlined):

The second and third paragraphs under 'wet grassland':

Wet grassland requires active management if it is to retain its conservation interest. Generally, each year's growth of vegetation must be removed. Otherwise the sward becomes dominated by tall, vigorous grasses and rushes which, together with an associated build-up of dead plant matter, suppress less vigorous species and lower the botanical richness of the sward. Traditionally, this management is achieved by grazing. Cattle are often the preferred stock, being relatively tolerant of wet conditions and able to control tall grasses and rank vegetation. They also tend to produce a rather uneven, structurally diverse sward. Grazing usually takes place between late spring and early autumn and should aim to produce a sward averaging 5cm in height by early November. ~~;~~ ~~but~~ The precise timing and intensity will depend on local conditions and requirements ~~such as the need.~~ Introducing grazing before mid-June in areas where breeding waders are present should be avoided, unless at very low densities and with older or more benign cattle to avoid trampling ground-nesting birds. Heavy poaching should be avoided but light trampling can be beneficial in breaking down leaf litter and providing areas for seed germination. Agricultural operations in general, for example topping and hay cuts should be avoided before mid-June to minimise disturbance to breeding birds or the destruction of nests. An element of managed scrub, both within and fringing the grassland can be of importance to birds and invertebrates.

A mosaic of winter flooded and permanently un-flooded grassland is desirable, with both temporary and permanent pools present. By mid-March, between 25-30% coverage of open water across the field area should be aimed for. From April onwards, the area of standing surface water should be reduced to increase the area available for nesting waders and to concentrate aquatic invertebrates in small pools to provide suitable feeding areas for their young. Some shallow areas of flooding should be maintained until late June to provide patches of bare muddy ground on which the birds and their young can feed as raised sward height makes feeding on the drier areas more difficult. The birds using these features are directly vulnerable to disturbance, which can cause them to lose time spent feeding or drive them to areas with a poorer supply of food. Management should seek to minimise any harmful disturbance.

The final paragraph of the statement:

Where scrub supports nesting grey herons *Ardea cinerea* and/or little egrets *Egretta garzetta*, or roosting or nesting long-eared owls *Asio otus*, management should aim to keep areas around the heronry, roost or nesting site quiet and undisturbed.

1.18 Representation of support from Kent Wildlife Trust

In addition to a joint representation of support with Buglife, CPRE Kent and the RSPB, Kent Wildlife Trust (KWT) submitted a further representation of support on 8 June 2021. It stated that:

- the notification is of 'great importance for safeguarding the precious features of the Swanscombe Peninsula but also for progressing the government's target to protect 30% of land and sea by 2030'. It also noted the importance of SSSIs as the backbone of the Nature Recovery Network;
- there has been a widespread loss of terrestrial habitats in the Thames Estuary. As a result fauna and flora have become increasingly dependent on wildlife-rich brownfield sites and semi-natural habitats. Swanscombe Peninsula is one of the few remaining such habitats in north Kent and one of the best examples of open mosaic habitat on previously developed land in the country; and
- the biodiversity value of Swanscombe Peninsula SSSI exceeds that at the neighbouring SSSIs of Canvey Wick and West Thurrock Marshes.

1.19 Representation of support from CPRE Kent

In addition to a joint representation of support with Buglife, Kent Wildlife Trust and the RSPB, CPRE Kent submitted a further representation of support on 8 June 2021. CPRE strongly support the notification stating that it is of exceptional national significance for its biological features, especially invertebrates. It considers the location of the SSSI, 'within a wider area of extraordinary development pressure, makes it doubly important that it is safeguarded in perpetuity'.

1.20 Representation of support from Save Swanscombe Peninsula

Save Swanscombe Peninsula ('SSP') submitted a representation of support on 11 July 2021. SSP is a community group with 664 members, 'founded to protect and enhance the Swanscombe Peninsula as a community asset, due to its very great environmental, social and community value'. SSP strongly supports the notification of Swanscombe Peninsula SSSI for the following reasons:

- the quantity and diversity of species assemblages supported by the mosaic of habitat in the SSSI makes the Swanscombe Peninsula an exemplar site. The site conclusively meets SSSI selection criteria, with regards to typicalness, fragility, size, diversity, ecological coherence, and the rarity of both species and habitats supported;
- there is the potential for further enhancement of habitat and biodiversity with positive management for which the SSSI can provide a framework;
- to provide legal status to the rich biodiversity and habitat, in order that this is given due weight and consideration in future planning processes and decisions;
- this area is living proof that some of our most important species can thrive hand in hand with businesses and transport infrastructure. Special places like this will form the vital backbone of a national nature recovery network. There is a huge opportunity to use the SSSI as a base for a nature recovery network in Dartford and Gravesham. For that reason it is particularly important that the whole SSSI is confirmed, including the Ebbsfleet Valley, to ensure existing species assemblages have a corridor to the wider countryside. If the Ebbsfleet Valley is developed it can be reasonably expected this would impact on habitat connectivity and biodiversity across the Swanscombe Peninsula; and
- the site is an important greenspace. A population of over 500,000 lives within 10 miles of the SSSI (south of Thames) in Dartford, Gravesham, Bexley, Bromley and Medway. This is a part of the country which is already deficient in green space and experiencing unprecedented development pressure. The site provides a significant contribution to quality of life for these local communities and will also offer opportunities for people to connect with nature via the England Coast Path.

1.21 Representation of support from Kent Ornithological Society

Kent Ornithological Society submitted a representation on 5 July 2021. It states that;

- the Swanscombe Peninsula has developed an array of impressive habitats and holds the greatest diversity of bird species along the inner Thames, including several red listed species such as pochard, cuckoo and nightingale;
- the area is significant in County terms for other species such as marsh harrier, bearded tit and Cetti's warbler, as well as hosting one of the counties few colonies of breeding grey herons; and
- to have such an area in Kent so close to London is a cause for celebration and for protection, so it can be enjoyed by the large urban populations nearby. Similar areas have disappeared all along the Thames due to industrial and housing development, so making the Swanscombe Peninsula all the more important to protect as an SSSI.

1.22 Representation of support from the Amateur Entomologists' Society

The Amateur Entomologists' Society (AES) submitted a representation of support on behalf of its amateur and professional entomologist members on 9 July 2021. It states that:

- it has been aware for some time of the importance of this site which supports a nationally important assemblage of terrestrial invertebrates and populations of aquatic invertebrates especially bees, flies, wasps, beetles and spiders;
- the site is one of just two places in the UK where the Critically Endangered distinguished jumping spider is found;
- the Swanscombe Peninsula is one of the last remaining large brownfield habitats in the Thames Estuary. The diversity of habitats, size and position within the Thames Estuary allow it to support an extraordinary rich fauna and flora. Due to the pace and extent of human development of these habitats in the region it is extremely vulnerable;
- notification acknowledges the site's inherent value, variety and a habitat which remains poorly represented within the SSSI series;
- SSSI status will strengthen public attitudes that are important for the conservation and protection of this highly valued brownfield landscape and associated wildlife, and the additional benefits including recreation value, mental respite, noise reduction, green job creation and environmental connections to the wider landscape of the Thames corridor; and
- wildlife populations, particularly of insects, are in steep decline. Many habitats and specialist species are increasingly rare and their fragmented populations are at risk of extinction. Too few wildlife-rich brownfield sites like Swanscombe Peninsula, which are an incredibly important refuge for many species, are protected. They are becoming an increasingly scarce habitat in England as they continue to be lost, especially in the south east, through development pressure. The notification represents a last chance to protect a large-sized Thames Estuary brownfield site before it is too late.

1.23 Representation of support from the British Arachnological Society

The British Arachnological Society submitted a representation of support on 10 June 2021. It states the following:

- approximately a quarter of Britain's 670 spider species are currently Red Listed either as being under threat of extinction or Near Threatened. Many coastal habitats for spiders are under threat, particularly in south-east England. The habitat mosaic of the Swanscombe peninsula, from its post-industrial brownfield habitats to the adjacent saltmarshes, provides refuges for some of our rarest species. Foremost among these is the Critically Endangered distinguished jumping spider, a heat-loving species, normally found in mature dune systems but the ash, sand and clinker areas at Swanscombe very effectively replicate the conditions it needs. Its only other known British site, on the opposite side of the Thames estuary, is fragmented and degraded, and has no protection from ongoing threats from

development;

- two Section 41 species inhabit the site's saltmarsh habitats, the Endangered Duffey's bell-head spider and the Near Threatened yellow-striped bear spider;
- Natural England's collated evidence shows that the peninsula's varied habitats additionally support 13 other spider species that are Nationally Scarce. Most of these are habitat specialists with very restricted distributions; and
- protection of the site as an SSSI is essential to the future not only of the local and regional populations of these species, but to the retention of the rarest of them in the British fauna.

1.24 Representation of support from Swanscombe & Greenhithe Town Council

Swanscombe & Greenhithe Town Council submitted a representation of support on 8 April 2021. It stated that the notification would seek to protect an area that is of great value to local residents both from a recreational perspective and for its ecological significance.

1.25 Other representations of support

In total there were 428 representations of support. The majority of these were submitted by members of the public via Citizenspace and email. One owner occupier (Emily Ryder) expressed support for the notification. 253 of the representations included comments on the respondent's reasons for supporting the notification. These include recognition of the site's special interest, agreement with Natural England's assessment of special interest, worldwide decline in biodiversity, the importance of site protection, access to greenspace for the local community and the benefits of contact with the natural environment. Copies of all representations of support are supplied at Section 5.

1.26 Other representations

Three representations were received which neither support nor object to the notification. Two of these were from members of the public. The remaining representation was from Kent County Council. All of these representations agreed with the scientific assessment of special interest. However, Kent County Council stated that as a strategic planning authority, it recognises and notes that the designation of such a large expanse of land will impact planning in north Kent. It requested that:

- Natural England gives due consideration to Ebbsfleet Development Corporation in respect of land at Ebbsfleet Central and ensures its concerns relating to the evidence for this specific section of the SSSI are addressed; and
- Natural England work with the relevant planning authorities to address impacts on planning so that growth in North Kent can progress in line with a thriving and healthy natural environment.

The remaining 22 representations were made via Citizenspace. They all agreed with the scientific case for designation and made comments in support of the notification. However, they selected the 'object to the notification' option. Given the supportive comments made, officers consider it likely that they selected this option in error but, on a precautionary basis, they are not included in the total number of supporting representations present in section 1.25.

1.26.1 Officers' recommendation

With respect to all neutral and supporting representations the Board is recommended to approve confirmation with a modification to the statement of Natural England's views about management of the site to clarify management recommendations for breeding waders on wet grassland and to reduce the risk of disturbance of any long-eared owls using the site.

1.27 Additional area team recommendations

1.27.1 The pylon lagoon

Following discussions with Swanscombe LLP regarding the inclusion of a leachate lagoon and the

decision to recommend to the Board that it is removed from the boundary (see section 1.14.3) officers reviewed the remaining leachate lagoons within the boundary. Although Swanscombe LLP has not objected to the inclusion of the pylon lagoon within the boundary it is not considered to support the notified features and therefore does not merit inclusion within the SSSI. A total area of 0.4 ha.

1.27.2 Land adjacent to railway south of Caveman Brewery

A mapping error has resulted in the inclusion of a tiny sliver of land on the boundary between the railway and Caveman Brewery. A total area of 0.15m².

1.27.3 Officers' recommendation

With respect to the additional area team recommendations the Board is recommended to approve confirmation with modifications to the boundary to exclude two areas totalling 0.4 ha.

1.28 Legal considerations

Natural England's functions in respect of the designation of SSSIs are set out in sections 28-28D of the Wildlife and Countryside Act 1981(as amended). The statutory provision of particular relevance in this case is section 28C.

1.28.1 Section 28C

Section 28C (enlargement) enables an area to be notified as being of special interest which includes an existing area of special interest. Section 28C(1) provides that:

"Where Natural England are of the opinion that any area of land which includes, but also extends beyond, a site of special scientific interest ("the SSSI") is of special interest by reason of any of its flora, fauna, or geological or physiographical features, Natural England may decide to notify that fact."

To summarise, a notification under section 28C may be given where Natural England is of the opinion that an area of land is of special interest by reason of its flora, fauna or geological or physiographical features and that area includes, but extends beyond, an existing site of special scientific interest.

A notification under section 28C may identify different features by reason of which the larger area is of special interest; it may also identify different operations that appear likely in Natural England's view to damage the features by reason of which the area is of special interest; and it may contain a different statement of Natural England's views about the management of the land.

Section 28C appears to give Natural England a discretion as to whether it notifies the area or not. Natural England has sought Leading Counsel's advice on the scope of its discretion around SSSI confirmation decisions. The advice is clear that there is in effect no discretion if the Board is of the opinion that the site is of special interest.

1.28.2 General legislative duties

In reaching its decision the Board must also have regard to Natural England's other more general legislative duties; these are set out in detail in the legal annex (appendix 1 to this report).

1.28.3 Socio-economic factors

Natural England has taken Leading Counsel's advice on the scope it has to take account of socio-economic issues and the weight, if any, that should be attached to them as part of the designation process. The advice may be summarised as follows:

- (1) There are four elements to the designation process which the Board must consider:
 - (i) whether the land is of special interest;
 - (ii) the specification of the features by which the site is of special interest;
 - (iii) the specification of those operations likely to damage the features; and
 - (iv) the statement of Natural England's views about the management of the land.

- (2) The main question for the Board is a scientific one. The Board must be satisfied that the area of land notified is of special interest. If the Board is of that opinion, having heard the scientific case for notification, it has a duty to confirm the notification of that area as a SSSI. Counsel's advice is absolutely clear on this and points out that if Parliament had intended to confer a discretion on Natural England to withdraw a notification because it was undesirable given its consequences then Parliament could have chosen to do that but it did not. In the absence of any such discretion the scope to withdraw the notification is limited to where the Board is of the opinion that the area notified is not of special interest.
- (3) The Board may not withdraw the notification if they remain of the opinion that the area, or any part of it, is of special interest.
- (4) If it is not open to the Board to withdraw the notification because it is satisfied that the site is of special interest then the only other decision open to it is to confirm the notification with or without modification. In doing so the Board must consider each of the four elements of the notification in the light of any objections, representations or further information that has become available in addition to the information available at the time of the initial notification.
- (5) In considering whether to confirm the specification of any operations likely to damage the special features, Natural England has to decide whether or not such operations are likely to damage those features and to confirm the list with or without modification. The list should be specific and relevant to the site. However where, as here, there is a large site it is recognised that not all the operations have to apply to every part of the site. The specification of the operations may engage a person's rights under the European Convention on Fundamental Rights and Freedoms but in Counsel's opinion the statutory regime which requires a person to apply for consent before carrying out an operation allows a fair balance to be struck, at that point, between likely harm to the nature conservation interests and any likely detriment to the owner/occupier. This coupled with the fact there is a right of appeal if consent is not granted means the regime is not disproportionate and does not infringe the owner/occupiers human right to quiet enjoyment of their possessions.
- (6) When considering whether to confirm the views on management Natural England should seek to promote its general purpose whilst having regard to the purpose of conserving biodiversity (as required by section 40 of the NERC Act) and giving such regard as it considers appropriate in all the circumstances to the needs of agriculture and forestry and to the social and economic interests of any rural area (in accordance with section 37 of the Countryside Act 1968).

1.28.4 Human rights

In determining whether or not to confirm the notification of the Swanscombe Peninsula SSSI, those affected may raise questions about the impact of the designation on their human rights.

Counsel has advised that the notification of the fact that Natural England is of the opinion that an area is of special interest does not, of itself, interfere with a landowner's peaceful enjoyment of their possessions and therefore is not contrary to their human rights.

From a procedural perspective, the obligation is to undertake a fair and public hearing in determination of the civil rights and obligations of all of the owners and occupiers of this area of land.

The courts have endorsed Natural England's approach to designation largely because of the rigorous and comprehensive approach it takes to the designation process.

The case law tells us that the Board Member's role is to consider all the evidence in a fair and open-minded way. The process requires:

*"investigation, consultation and the consideration and analysis of objections. Any suggestion that remaining of the same opinion involves no expenditure of physical or intellectual energy, or that confirmation is an automatic rubber stamp, is plainly wrong."*⁸

⁸ Per Wall LJ in R(Fisher) v English Nature

It is therefore important, to ensure procedural fairness and compliance with human rights requirements, that proper consideration is given to all the evidence and all the objections and representations that have been made.

1.29 SSSI which the Board is recommended to confirm

The SSSI notification that the Board is considering for confirmation is the subject of eight objections all of which remain unresolved. The SSSI notification is also the subject of 453 additional representations, 428 of which support the notification.

With respect to:

- the unresolved objections from Ebbsfleet Development Corporation, Ebbsfleet Investment General Partner, Port of London Authority and Swanscombe Development LLP;
- the representation from the RSPB; and
- the additional area team recommendations;

officers recommend that the Board approves confirmation with modifications to the SSSI boundary to exclude ten areas of land totalling 4.65 ha; to the statement of Natural England's views about the management of the SSSI to clarify management recommendations for breeding waders on wet grassland and to reduce the risk of disturbance of any long-eared owls using the site; and to the citation to amend the area figure as a result of the boundary modifications. The recommended confirmed area of the SSSI is 259.44 ha;

With respect to:

- the unresolved objections from Gillian Charlton, HS1 Limited, London Resort Company Holdings Limited and Tarmac Trading Limited; and
- all other neutral and supporting representations;

officers recommend that the Board approves the confirmation without modification.

The grounds for the objections and officers' recommendations in light of them, as well as the additional area team recommendations, concern modifications to the site boundary, citation and statement of Natural England's views about the management of the SSSI. Accordingly, officers recommend that the Board approves the confirmation without modification of the list of operations requiring Natural England's consent (see pages 18-21 of the notification document in section 2 of this report).

The Board is recommended to approve confirmation of the notification of Swanscombe Peninsula SSSI with modifications to the SSSI boundary, statement of Natural England's views about the management of the SSSI and citation.

Appendix 1 – Legal Annex

Other legislative requirements:

There are a number of general duties and a general purpose that must be considered and taken account of as part of the designation process.

Section 2 of the Natural Environment and Rural Communities Act 2006 (NERC Act) sets out Natural England's general purpose:

“(1) Natural England's general purpose is to ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future generations, thereby contributing to sustainable development.”

Section 33 NERC Act states Natural England:

“...must have regard to actual or possible ecological changes, and the desirability of contributing to sustainable development”.

Section 40 NERC Act states that Natural England must:

“must, in exercising its functions, have regard, so far as is consistent with a proper exercise of those functions to the purpose of conserving biodiversity.

....Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat.”

Section 37 Countryside Act 1968:

“...it shall be the duty of Natural England to have due regard to the needs to agriculture and forestry and to the economic and social interest of rural areas”.

Natural England has taken advice on the weight that should be given to these general provisions. Counsel has advised that effect can only be given to such general provisions if, and to the extent that, doing so is compatible with the specific legislation dealing with such areas.

Section 108 Deregulation Act 2015 (so-called 'growth duty'):

“A person exercising a regulatory function to which this section applies must, in the exercise of the function, have regard to the desirability of promoting economic growth.”

The growth duty is a relatively new duty that only took effect on 29 March 2017. As such there is no case law regarding the breadth of its application however we are satisfied that Counsel's Advice on the general duties would apply equally to the growth duty, i.e. effect can only be given to such general provisions to the extent that doing so is compatible with the specific legislation dealing with such areas.

Further NE has always been of the view, a view that is supported by the case law, that notification in and of itself is not a regulatory function. It is merely the notification of an opinion which, having formed that opinion, we are required to do. Regulatory functions may flow from that, e.g. with respect to the consenting regime where having regard to economic growth may form part of the deliberations on whether consent should be granted, but notification is not of itself a regulatory function.

The Decision:

The issue to be deliberated is a scientific one based on all the evidence. Parliament has not conferred on Natural England a discretion to withdraw a notification simply because it has undesirable consequences or because it may have socio-economic impacts. Natural England is only required, during the designation process, to consider whether a case has been made that a site is of such sufficient interest that it should be designated.

Regard may be had to opinions expressed by those objecting to confirmation and to those who support it, including officers. The weight to be put on those objections and representations is a matter for the Board.

In reaching your decision you should act fairly and be satisfied that an opportunity has been given to make representations to you on the rights that are being affected.

If you are minded to confirm the SSSI, in specifying the operations requiring consent you should seek to ensure that operations are described in no more an extensive way than is required to protect the special interest at this site.

Guidance:

It is the Board's policy to have regard to and place significant weight upon the JNCC guidelines when reaching a decision on the existence of a special interest. Whilst the Board should not be constrained by the guidelines and may depart from them if it feels it is appropriate and reasonable to do so, if the Board decides to depart from them there must be good reason for doing so.

Procedural aspects:

You must satisfy yourselves that the procedural safeguards have been properly carried out i.e.

- that there has been appropriate consultation with owners and occupiers and that they have been given at least three months to make their objections;
- that the owners/occupiers have been given details of the scientific evidence; and
- that objectors have been given the opportunity to emphasise their objections at the Board.

Scope of powers:

You can either:

- (i) withdraw the notification; or
- (ii) confirm the notification (with or without modification).

Should you choose to confirm then there are a number of further decisions that you must make:

- whether to remove land from the area proposed;
- whether to revise the citation and remove features;
- whether to revise the operations requiring Natural England's consent to make them less onerous; and
- whether to revise the views about management statement.

You cannot however:

- add land to the site; or
- add any operations which would make the list of operations requiring Natural England's consent more onerous.