# Dungeness Complex
# Sustainable Access and Recreation Management Strategy (SARMS)

## Supporting Document 1 – Nature Conservation Background and Assessment

Prepared for Shepway District Council and Rother District Council

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# Introduction

## About this Report

This document is one of a suite of documents which together form the Sustainable Access and Recreation Management Strategy (SARMS) for the Dungeness complex of protected sites.

This report is considering the visitor economy because recreation and tourism visits are an identified pathway of impact in the joint Rother and Shepway Habitats Regulations Assessment (2011). Several policies in both local plans could not be screened out as not causing likely significant effect in combination with other plans and projects.

This report provides background to the nature conservation features of the strategy area and an assessment of their potential sensitivity to recreational activity.

The documents which form the complete SARMS are:

- Main Report – this report brings together the findings, draws conclusions and sets out an action plan;
- **Supporting document 1 - Nature Conservation Background and Assessment (this report);**
- Supporting document 2 - Access and Recreation Assessment;
- Supporting document 3 - Policy, Visitor Economy and Strategic Initiatives;
- Supporting document 4 - Visitor Assessment.

*Camber Beach* Photo credit Su__May

# Overview - Potential Recreational Pressures

## Impacts of Recreational Activity on Habitats and Species

Introduction

Different habitats and species have differing levels of vulnerability to recreational activity. Detailed here is a broad overview of the range of impacts which can arise from recreational activity. It is not possible to draw generalised conclusions around the significance of these effects as the severity of impact will depend upon a range of site-specific and local factors. These relate to the combined extent and intensity of impacts and how these interact with species and habitats of the site, see Table 1. Therefore, while some general potential impacts have been listed here, the habitats and species of the strategy area and their potential vulnerability to recreational activity are considered in more detail later (habitats in Table 9 on page 34 and species in Table 8 on page 41).[1]

***Table 1: Intensity and Extent of Recreational Impacts***

| Intensity of Impact | Extent of Impact |
|---|---|
| Frequency of use | Spatial distribution of use (e.g. the proportion of the site which is trampled) |
| Type of use | Spatial distribution of nature conservation interest |
| Behaviour of use (e.g. speed of vehicle or bicycle) | |
| Environmental conditions (e.g. ground wet or dry, slopes) | |
| Period of use - seasonality | |

↓ ↓

The presence of extra-sensitive species, assemblages and communities, their location, extent and current condition.

Sensitive habitats and species which contribute to favourable condition.

↓

Significance of impact

[1] Information has been compiled from a range of sources, see Bibliography.

Trampling

Soils and vegetation can be both directly and indirectly affected by trampling, with further potential impacts on invertebrates and small mammals. Trampling can cause a range of changes in soil condition, including compaction, pH, water content and nutrients. High levels of trampling, particular on slopes, can cause erosion. Over time, the species composition of the trampled area of grassland will change, with tall herbaceous plants and swards of lower productivity more vulnerable. Trampling also has particular impacts on other habitats of relevant to the strategy area; with sand dunes and coastal vegetated shingle being particularly susceptible to damage. Trampling may also put communities of endangered species at risk.

Erosion

Erosion can arise due to trampling, especially on unstable soils or on slopes, but may also occur due to recreational activities other than walking, such as motor vehicles or cycles. In dune systems, for example, trampling can remove vegetation which allows erosion from wind to take place.

Pollution, Waste and Anti-Social Activities

Recreational activity can lead to increases in a range of undesirable effects, including litter proliferation, pollution and other anti-social behaviour such as vandalism or fire-setting. These may not in themselves be highly significant in terms of the conservation features of the site, but may be more significant when considered alongside the range of other impacts which may be present.

Conservation Management Impeded

Recreational activities may lead to secondary impacts which can affect the conservation features of a site. Grazing, for example, may be impeded due to the worrying of stock by dogs or other anti-social activities such as vandalism of fences or fires.

Disturbance to Birds

Disturbance can be defined as a human activity which has an influence on a bird's behaviour or survival. There are many studies researching the effects of disturbance on birds and whether such disturbance affects the population as a whole. While direct mortality may occur in a few circumstances, the disturbance of feeding activity can reduce breeding success. During the non-breeding season, the main impacts of human disturbance is interruption of foraging and sometime roosting. The level of disturbance can vary and will depend upon the species, the time of year and the source of the disturbance. Disturbance may be highly disruptive, for example sudden, noisy or fast events which cause flocks of birds to take flight. Disturbance can also occur at a lower level, which may not cause birds to take flight but can disrupt feeding activity or increase alertness. The location of the disturbance is also important and activities can be highly disruptive if they occur close to high tide roosts or close to the tideline (e.g. bait digging). Breeding birds, especially ground-nesting and beach-nesting species, may also be adversely affected by disturbance or trampling.

Disturbance to other Species

Some mammals may be susceptible to disturbance, with potentially vulnerable species those which gather into large groups at particular stages of their life cycles (e.g. bats and seals) or those which use traditional breeding sites (e.g. otter). Other species such as badger and deer have shown behavioural changes due to disturbance.

## Types of Recreational Activity in the Strategy Area

Several recreational activities which are known to take place in the strategy area could potentially have an impact on habitats and species. The types of recreational activity which are of primary interest in this strategy are shown in Table 2.

***Table 2: Overview of Common Types of Recreational Activity and Potential Impacts***

| Recreational Activity | Potential Impacts |
|---|---|
| Walking | • Trampling;<br>• Erosion;<br>• Disturbance to birds (wintering and potentially breeding). |
| Walking with dogs | • As above; slightly greater levels of disturbance to birds than walkers alone. High disturbance by dogs running loose or actively chasing birds. |
| Jogging | • As for walking; may cause greater disturbance to birds (inconclusive). |
| Horse riding | • Horses exert high pressure on ground per $cm^2$ which may result in trampling or erosion impacts;<br>• Conflicting evidence on disturbance effects – some bird species are more likely to be disturbed by horses; others are less likely, apparently because they perceive the horse and not the rider;<br>• No evidence on effect of 'trotters' on beach but they are fast moving so may cause bird disturbance; also takes place in winter months. |
| Cycling | • Erosion;<br>• May cause bird disturbance effects but limited evidence. |
| Motorised vehicles (on land or intertidal) | • Potentially high levels of erosion;<br>• Damage to vegetation;<br>• Highly damaging to coastal vegetated shingle;<br>• Can create new access routes;<br>• Disturbance to birds. |
| Boats | • Slow moving boats or sail boats cause little disturbance to birds. |
| Jet-skis or speeding boats | • High levels of disturbance caused by fast-moving, erratic or loud craft. |
| Kite surfing, windsurfing and sand yachting | • Can cause disturbance to birds due to speed, proximity to shore and size;<br>• Setting up of kitesurfing equipment |

Some commercial enterprises provide recreational activities based on designated sites (i.e. from their premises, for example on lakes which are designated). These operate with guidance from Natural England and may have entered voluntary management agreements. It is beyond the scope of this strategy to assess recreational impacts arising from these commercial operations. However, there may be opportunities to work with these businesses further to promote the nature conservation importance of their site and the wider area.

There are other commercial operations which use both their own site and the wider area.

- **Golf**: there are two golf courses on designated sites; Rye Golf Club and Romney Warren Golf Club;
- **Watersports**: there are several commercial watersports operations:
    - **Rye Water Sports** - Northpoint Water, New Lydd Road, Camber TN31 7QS;
    - **Action Water Sports** - 1 Dengemarsh Rd, Lydd, Romney Marsh TN29 9JH;
    - **The Kitesurf Centre** - Broomhill, Camber, Rye TN31 7SB. The Kitesurf Centre also runs kite buggy lessons at Greatstone and Littlestone Sands;
    - **The Kent Land Yacht Club** runs from the Varne Boat Club and Greatstone (mainly at weekends and not during the summer holiday);
    - Kite buggy/land yachting (also known as land sailing) is also run by other smaller outfits at Greatstone.

# Overview - Nature Conservation Interest of the Strategy Area

## Designated Areas

The broad area covered by this report relates to the extent of the designations of the Special Protection Area (SPA), the Special Area of Conservation (SAC) and the Ramsar; known collectively as designations forming part of the 'Natura 2000' network.[2] Underlying the Natura designations are designated Sites of Special Scientific Interest (SSSIs), alongside two Local Nature Reserves (LNRs). The designations overlap in in many places and several have a similar name, although they do not cover the same geographic extent. The designated areas are shown in Plans 1 to 5 with a summary in Table 3.

*Table 3: Summary of Designated Sites in the Study Area*

| Designated Site | Size (ha) | Brief Description |
|---|---|---|
| **Local Nature Reserves (LNR)** | | |
| **Romney Warren LNR**<br>Designated 2001 | 10.89 | The LNR is part of Romney Warren Country Park, and hosts part of the Dungeness Romney Marsh Rye Bay SSSI. The site has fixed dune grassland with stands of mature trees and grazing pasture, important seasonal ponds with great crested newts, diving beetles and dragonflies.<br>http://www.kentwildlifetrust.org.uk/reserves/romney-marsh-visitor-centre |
| **Rye Harbour LNR**<br>Designated 1970 | 325.37 | Habitats include vegetated shingle, saltmarsh, saline lagoons, reedbed and open water. Ten species of breeding seabirds, five breeding waders, abundant sea pea, sea heath and sea kale. Wintering bittern and smew with large flocks of golden plover, lapwing and curlew.<br>https://sussexwildlifetrust.org.uk/visit/rye-harbour |
| **Sites of Special Scientific Interest (SSSI)[3]** | | |
| **Dungeness, Romney Marsh and Rye Bay SSSI**<br>Designated 2006 | 9090 | Designated as nationally important. A diverse coastal landscape comprising several habitats which exist today because coastal processes have formed and continue to shape a barrier of extensive shingle beaches and sand dunes across an area of intertidal mud and sand flats. The site contains the largest and most diverse area of shingle beach in Britain, with low lying hollows in the shingle providing nationally important saline lagoons, natural freshwater pits and basin fens. Rivers draining the Weald to the north were diverted by the barrier beaches, creating a sheltered saltmarsh and mudflat environment, which was gradually in-filled by sedimentation and then reclaimed on a piecemeal basis by man. The area still contains relict areas of saltmarsh and an extensive ditch network draining grazing marsh, arable farmland and reedbed. Human activity has modified the site, creating extensive areas of wetland from gravel extraction. This highly unusual coastal landscape has varied soils and shingle deposits. |

[2] The 'Natura 2000' network is a collection of sites which are designated through legislation originating from the European Union. The Habitats Directive (92/43/EEC) requires the establishment of Special Areas of Conservation (SAC) and the Birds Directive (2009/147/EC) requires the establishment of Special Areas of Conservation (SPA). The Natura 2000 network also includes Marine Protected Areas (MPA); either marine SPA (mSPA) or marine SAC (mSAC).

[3] There are also two SSSI designated for geological interest within the wider strategy area:

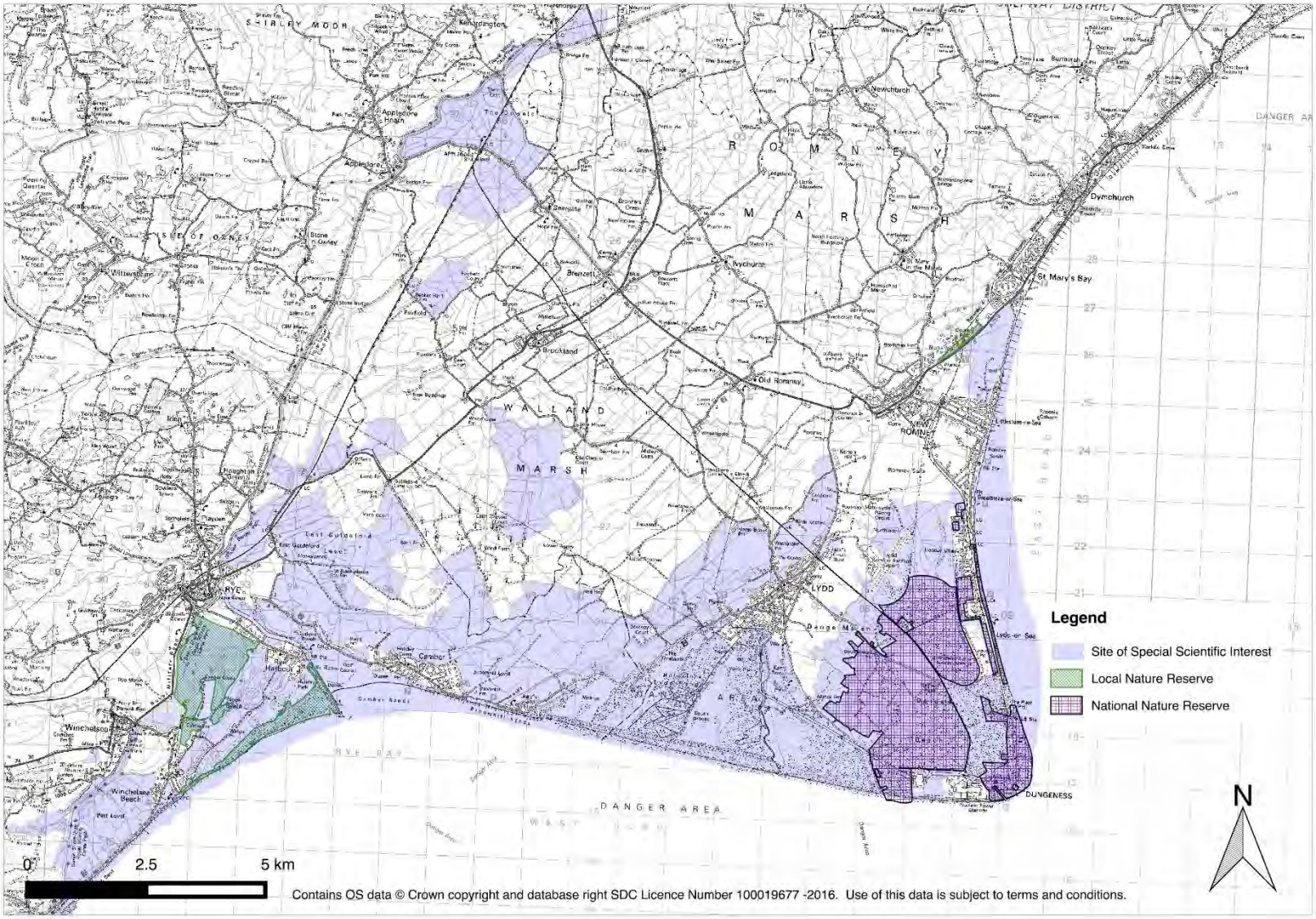
- Houghton Green Cliff SSSI (designated 1990, 0.125 hectares) - Old undercliff exposure of upper division of the Cliff End Sandstone Member of the lower Wadhurst Clay Formation (lower Hastings Beds Group);
- Winchelsea Cutting SSSI (designated 1990, 0.13 hectares) - Roadside exposure of the Hastings Beds Group.

These are not considered to be susceptible to recreational pressure and are therefore not considered further.

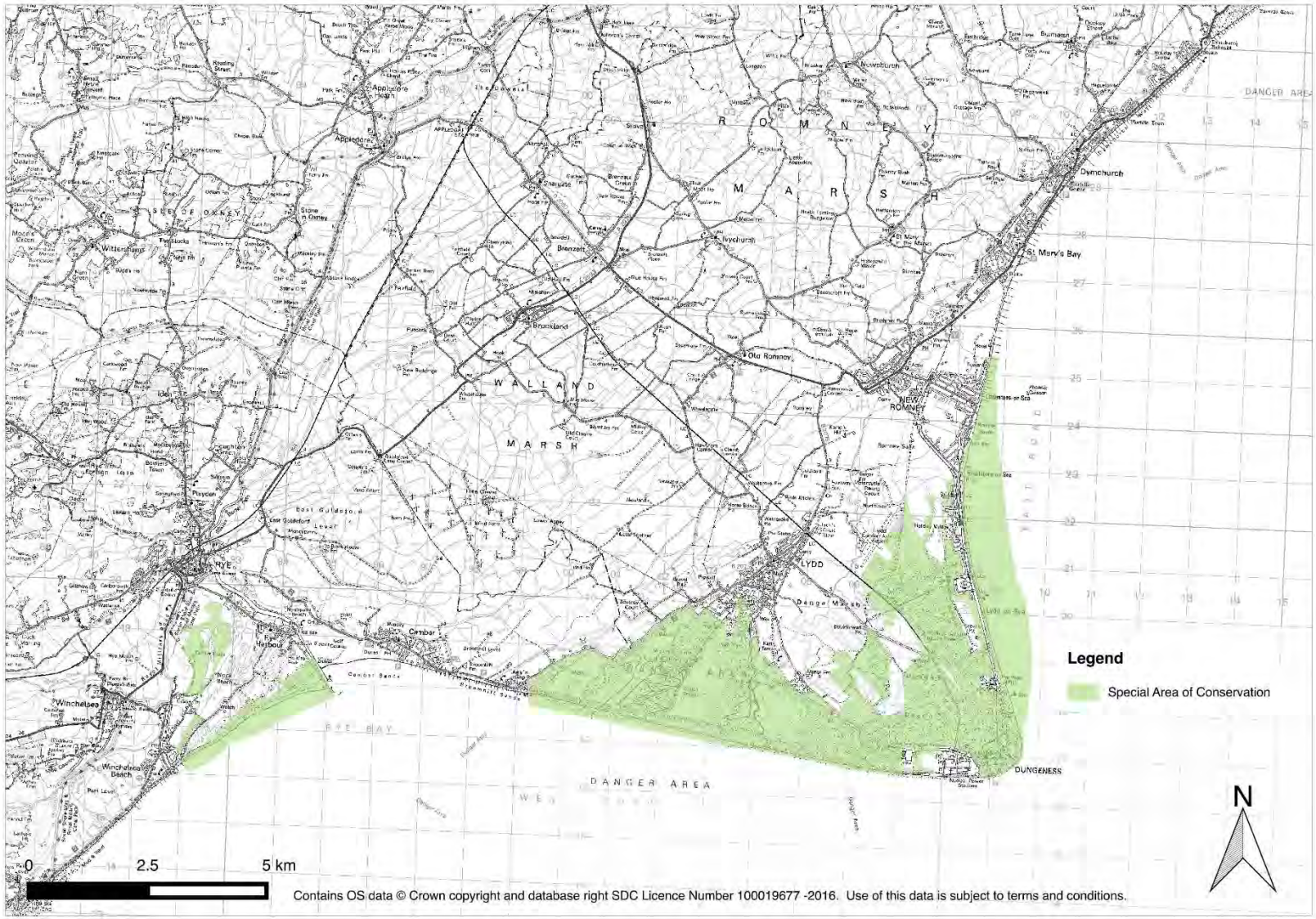
| Designated Site | Size (ha) | Brief Description |
|---|---|---|
| **Hastings Cliffs to Pett Beach SSSI**<br>Designated 1953, re-notified 1990 | 299.4 | Designated for geological and biodiversity interest. One unit (number 2) coincides with the Dungeness, Romney Marsh and Rye Bay SPA and Ramsar and therefore is included within the strategy area. This area consists of vegetation shingle. The SSSI supports a range of coastal plants such as sea kale (*Crambe maritima)*, bittersweet (*Solanum dulcamara*) and sea beet (*Beta vulgaris)*, with nationally rare plants such as the sea pea (*Lathyrus japonicas)* and yellow vetch (*Vicia lutea)*. |
| **National Nature Reserve (NNR)** | | |
| **Dungeness NNR**<br>Designated 1998 | 1031 | Dungeness NNR covers several parcels of land owned by the RSPB, Shepway Council, EDF and Natural England around Dungeness Point. All of the NNR is also SSSI. |
| **Natura 2000 Network Designations** | | |
| **Dungeness, Romney Marsh and Rye Bay SPA**<br>Designated 1999,[4] extended 2016<br>Site: UK9012091 | 4010<br>21% marine | The site qualifies as an SPA under the Birds Directive as it is used regularly by 1% or more of the Great Britain populations of a range of Annex I birds, both over-wintering and breeding, also 1% or more of the biogeographical population of shoveler (*Anas clypeata*) and as holding an important assemblage, being used regularly by over 20,000 waterbirds (waterbirds as defined by the Ramsar Convention).<br><br>An area of sea adjacent to the SPA; including areas of the marine environment to the east and west of this designation, are being considered as an extension to the existing SPA due to its importance as foraging grounds for the bird species of the SPA. Consultation on the proposed extension closed on 17th January 2017. |
| **Dungeness SAC**<br>Designated 2005<br>Site: UK0013059 | 3223.56 | The site qualifies as an SAC under the Habitats Directive as it hosts the habitats listed in Annex I: Annual vegetation of drift lines and perennial vegetation of stony banks (coastal shingle vegetation outside the reach of waves), along with qualifying species Great crested newt *Triturus cristatus*, listed in Annex II. |
| **Dungeness, Romney Marsh and Rye Bay Ramsar**<br>Designated 2016 | 7529.24 | The site qualifies under several Ramsar qualifying criteria:<br>• Criterion 1 - it contains representative, rare, or unique examples of natural or near-natural wetland types (annual vegetation of drift lines and the coastal fringes of perennial vegetation of stony banks, natural shingle wetlands: saline lagoons, freshwater pits and basin fens);<br>• Criterion 2 - it supports threatened ecological communities (a complex network of wetland habitats including saltmarsh, natural freshwater pits, fens, ponds, gravel pits, and grazing marsh and ditches, supporting rich and diverse assemblages of bryophytes, vascular plants and invertebrates that are rare, threatened, listed as priority species in the UK Biodiversity Action Plan (BAP) or specially protected under the Wildlife and Countryside Act 1981);<br>• Criterion 5 - it regularly supports more than 20,000 waterbirds (in the non-breeding season the site regularly supports 34,957 individual waterbirds (5 year peak mean 2002/3 – 2006/7);<br>• Criterion 6 - it regularly supports 1% of the individuals in the populations of a number of waterbird species. |

[4] Formerly Dungeness and Pett Level SPA when designated in 1999. Extended and renamed in 2016 to include marine components.

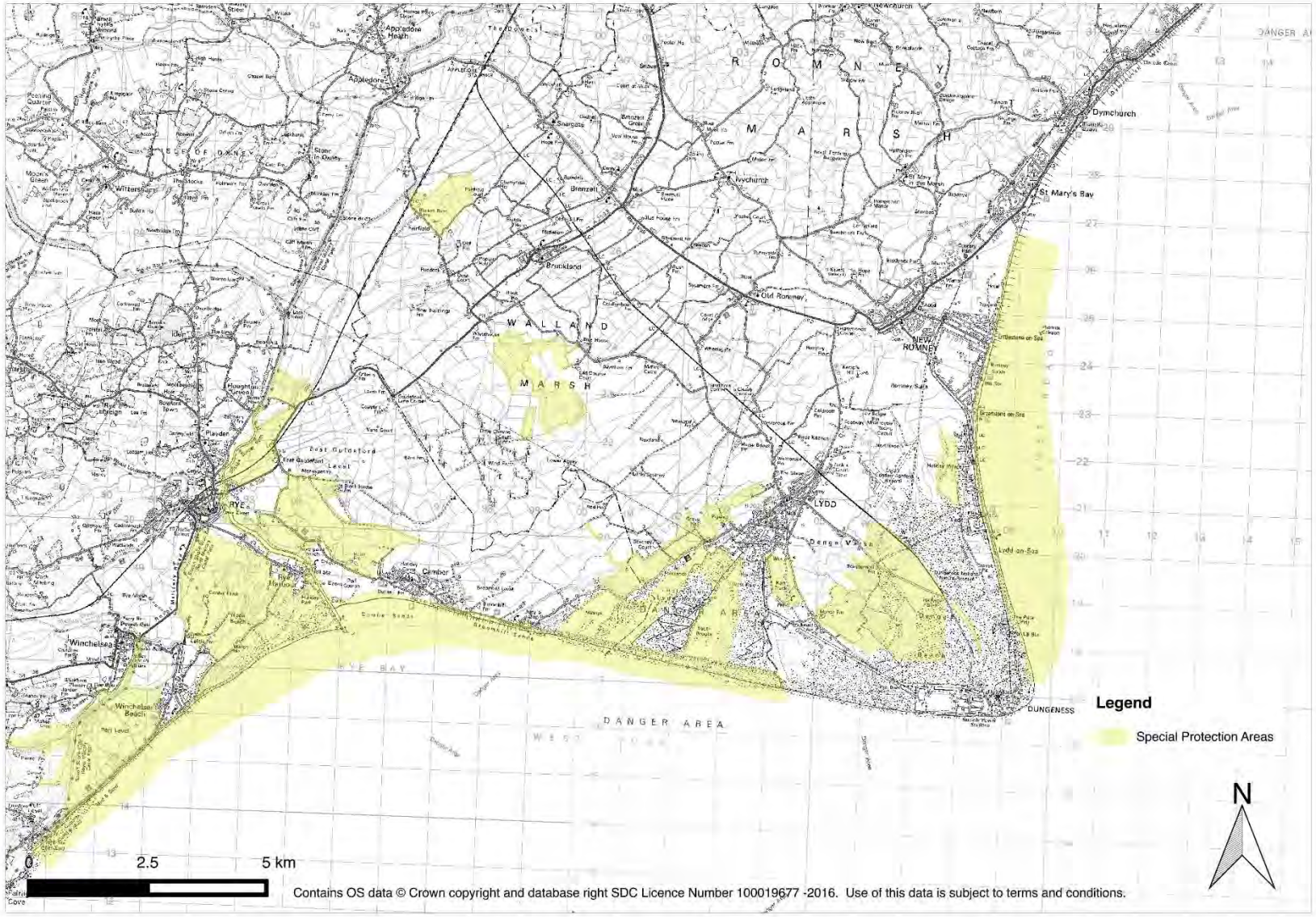
***Plan 1: Nationally Designated Sites – Dungeness National Nature Reserve, Sites of Special Scientific Interest and Local Nature Reserves***



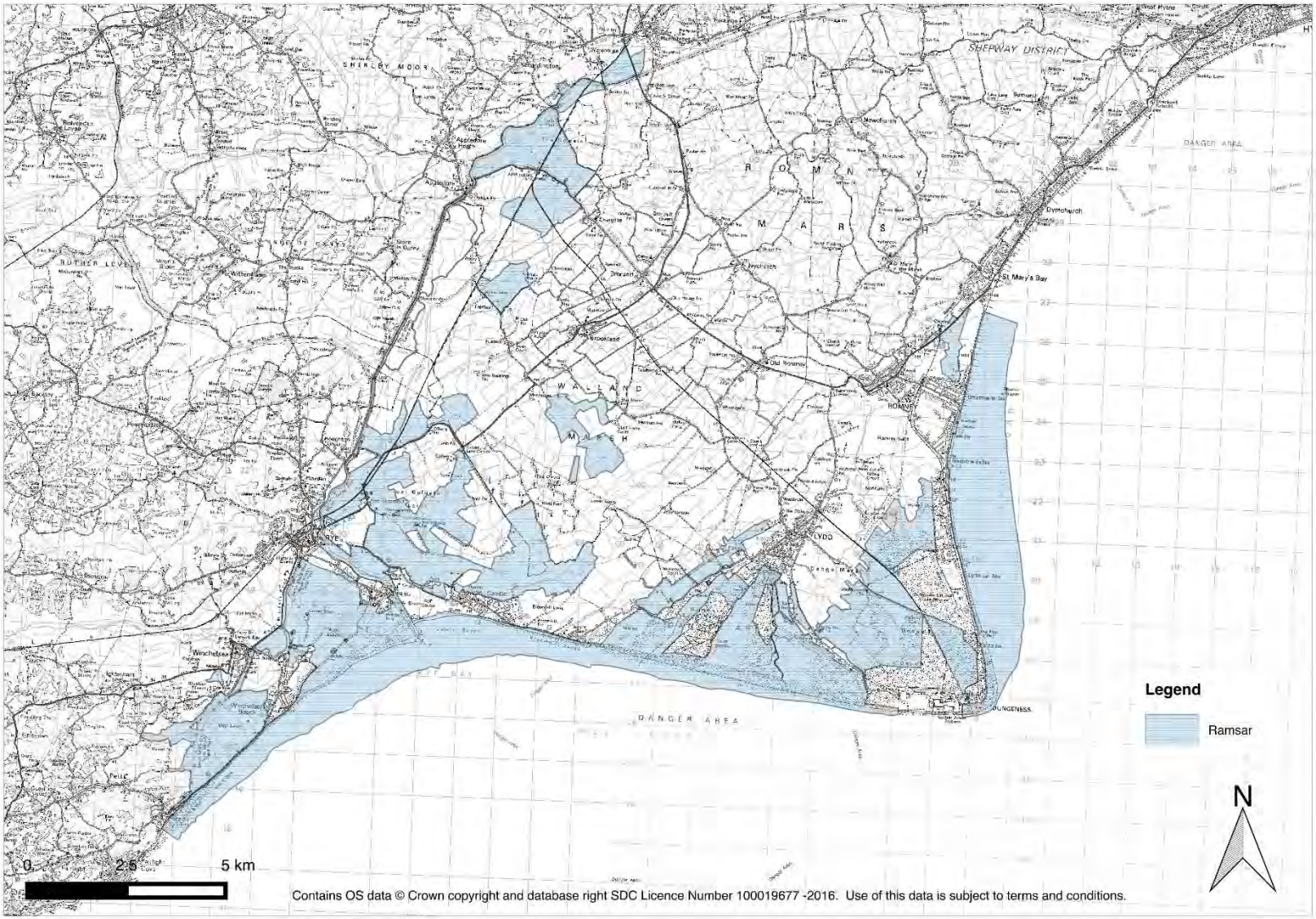
***Plan 2: Natura 2000 Network Sites – Dungeness Special Area of Conservation (SAC)***



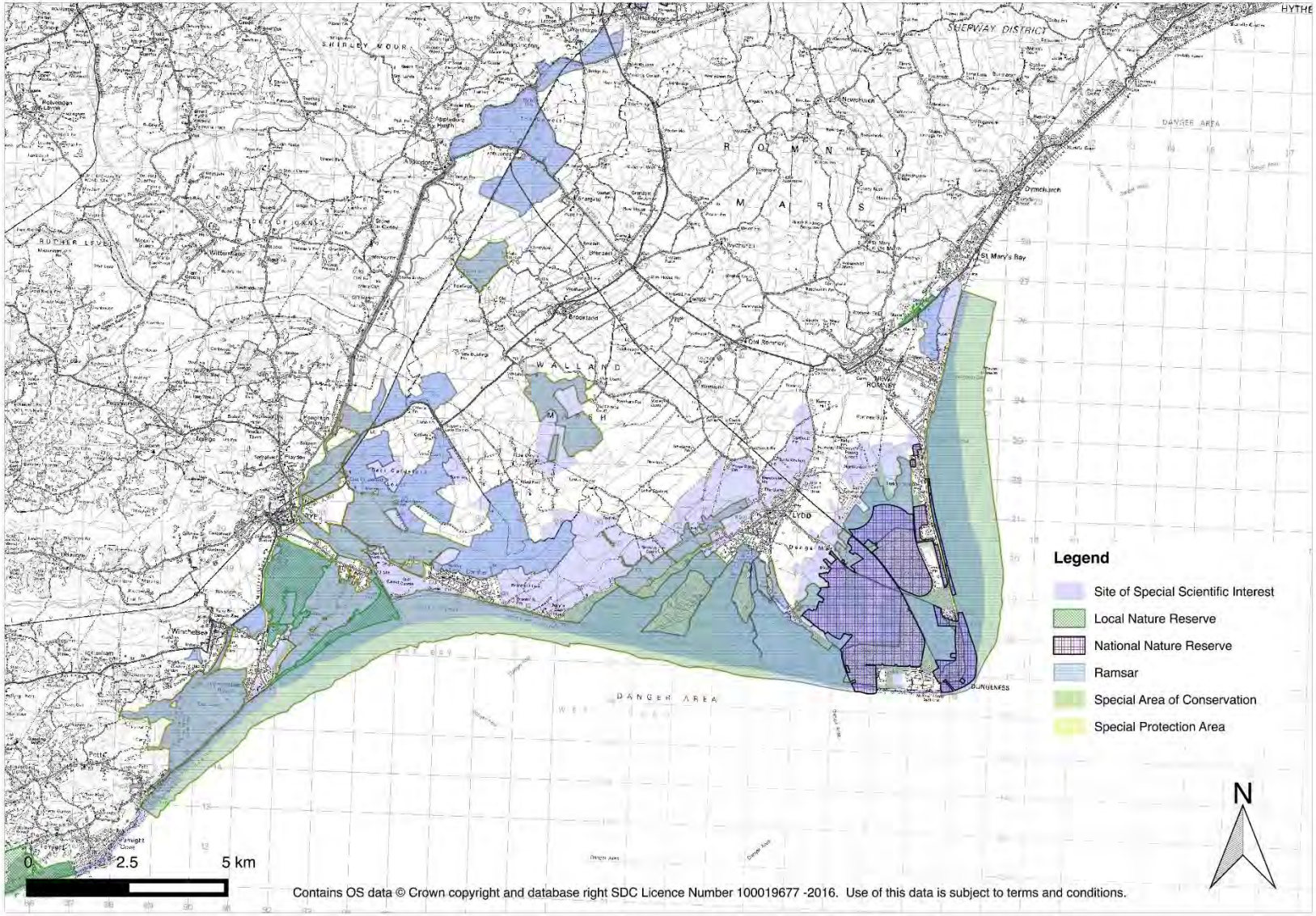
***Plan 3: Natura 2000 Network Sites – Dungeness, Romney Marsh and Rye Bay Special Protection Area (SPA)***



*Plan 4: Natura 2000 Network Sites – Dungeness, Romney Marsh and Rye Bay Ramsar*



***Plan 5: Overlap of Designations***



# Habitats and Species of Interest

There is a wealth of information on the habitats, birds, plants, lichens, mosses and many other areas of scientific interest relating to the strategy area. The area has been the focus and fascination of avid naturalists – amateur and professional alike – for very many years. It is not possible to list all of the many studies and data sources which are available for the area. Provided here is simply a broad overview of the habitats and species of interest of the strategy area.

## SSSI Notified Features

Dungeness, Romney Marsh and Rye Bay SSSI is notified for many habitats and species, giving an overview of the important nature conservation features of the strategy area.

***Table 4: Dungeness, Romney Marsh and Rye Bay SSSI Notified Features[5]***

| Type of Feature | Species or Interest Features | |
|---|---|---|
| Waterbird assemblage | >20,000 Non-Breeding Waterbirds | |
| Aggregations of breeding birds | Avocet, *Recurvirostra avosetta* | Little Grebe, *Tachybaptus Ruficollis* |
| | Bearded Tit, *Panurus biarmicus* | Little Tern, *Sterna albifrons* |
| | Black-headed Gull, *Larus ridibundus* | Mediterranean Gull, *Larus melanocephalus* |
| | Cetti's Warbler, *Cettia cetti* | Pochard, *Aythya ferina* |
| | Common Tern, *Sterna hirundo* | Sandwich Tern, *Sterna sandvicensis* |
| | Gadwall, *Anas strepera* | Shoveler, *Anas clypeata* |
| | Garganey, *Anas querquedula* | Tufted Duck, *Aythya fuligula* |
| | | Water Rail, *Rallus aquaticus* |
| Assemblages of breeding birds | Lowland open waters and their margins | Sand-dunes and saltmarshes |
| Aggregations of Non-Breeding Birds | Aquatic Warbler, *Acrocephalus paludicola* | Little Grebe, *Tachybaptus Ruficollis* |
| | Bewick's Swan, *Cygnus columbianus bewickii* | Mute Swan, *Cygnus olor* |
| | Bittern, *Botaurus stellaris* | Pochard, *Aythya ferina* |
| | Common Sandpiper, *Actitis hypoleucos* | Ruff, *Philomachus pugnax* |
| | Coot, *Fulica atra* | Sanderling, *Calidris alba* |
| | Cormorant, *Phalacrocorax carbo* | Shoveler, *Anas clypeata* |
| | Gadwall, *Anas strepera* | Teal, *Anas crecca* |
| | Golden Plover, *Pluvialis apricaria* | Whimbrel, *Numenius phaeopus* |
| | Great crested Grebe, *Podiceps cristatus* | White-fronted Goose, *Anser albifrons albifrons* |
| | Hen Harrier, *Circus cyaneus* | Wigeon, *Anas penelope* |

[5] Accessed from Natural England website 'Designated Sites View', 1/2/2017 https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s2000533

| Type of Feature | Species or Interest Features | |
|---|---|---|
| Red Data Book species (RDB) | Population of RDB Beetle - *Dibolia cynoglossi*, a Flea Beetle | Population of RDB moth - *Hydraecia osseola hucherardi*, Marsh Mallow Moth |
| | Population of RDB Beetle - *Melanotus punctolineatus*, a Click Beetle | Population of RDB Spider - *Apostenus fuscus*, a Spider |
| | Population of RDB Beetle - *Omophron limbatum*, a Ground Beetle | Population of RDB Spider - *Euophrys browningi*, a Jumping Spider |
| | Population of RDB moss - *Bryum warneum*, Warne's Thread-moss | Population of RDB Spider - *Pellenes tripunctatus* , a Jumping Spider |
| | Population of RDB moth - *Hadena albimacula*, White-spot | |
| Proposed Red Data Book species (pRDB) | Population of pRDB Moth - *Coleophora galbulipennella*, a Micro Moth | Population of pRDB Moth - *Lasiocampa trifolii flava*, Pale Grass Eggar |
| | Population of pRDB Moth - *Ethmia terminella,* a Micro Moth | Population of pRDB True Bug - *Aphrodes duffieldi*, a Leafhopper |
| Species protected under Schedule 5 of the Wildlife and Countryside Act 1981[6] | Population of Schedule 5 leech - *Hirudo medicinalis,* Medicinal Leech | Population of Schedule 5 moth - *Thalera fimbrialis*, Sussex Emerald |
| Species protected under Schedule 8 of the Wildlife and Countryside Act 1981 | Population of Schedule 8 plant - *Gnaphalium luteoalbum*, Jersey Cudweed | Population of Schedule 8 plant - *Lactuca saligna*, Least Lettuce |
| | Population of Schedule 8 plant - *Himantoglossum hircinum*, Lizard Orchid | Population of Schedule 8 plant - *Ophrys sphegodes*, Early Spider-orchid |
| Geomorphological interest | Active coastal geomorphological processes (IA) and no-longer active coastal geomorphological processes (IS) | Earth heritage interest |
| Broad Habitats | Acid grassland - lowland | Littoral sediment |
| | Arable and horticulture | Neutral grassland - lowland |
| | Fen, marsh and swamp - lowland | Standing open water and canals |
| | Inshore sublittoral sediment - cl | Supralittoral sediment |
| Specific Habitats | Lowland ditch systems | SM10 - Transitional low marsh vegetation with *Puccinellia maritima*, annual *Salicornia* species and *Suaeda maritima*. |
| | Percolated saline lagoons | SM11 - *Aster tripolium var. discoides* - saltmarsh |
| | S27 - *Carex rostrata - Potentilla palustris* swamp | SM12 - Rayed *Aster tripolium* on saltmarsh |
| | S4 - *Phragmites australis* swamp and reed-beds | SM13a - *Puccinellia maritima* saltmarsh, *Puccinellia maritima* dominant sub-community |
| | SD1 - *Rumex crispus - Glaucium flavum* shingle community | SM16b - *Festuca rubra* saltmarsh *Juncus gerardii* sub-community |
| | SD11 - *Carex arenaria - Cornicularia aculeata* dune community | SM16d - *Festuca rubra* saltmarsh tall *Festuca rubra* sub-community |
| | SD12 - *Carex arenaria - Festuca ovina - Agrostis capillaris* dune grassland | SM17 - *Artemisia maritima* saltmarsh |
| | SD2 - *Honkenya peploides - Cakile maritima* strandline community | SM24 - *Elytrigia atherica* saltmarsh |

[6] Other species in this table are also protected under the Wildlife and Countryside Act 1981.

| Type of Feature | Species or Interest Features | |
|---|---|---|
| Specific Habitats (cont'd) | SD4 - *Elymus farctus* ssp. *Boreali-atlanticus* foredune community | SM28 - *Elytrigia repens* saltmarsh |
| | SD5 - *Leymus arenarius* mobile dune community | SM4 - *Spartina maritima* |
| | SD6 - *Ammophila arenaria* mobile dune community | SM5 - *Spartina alterniflora* |
| | SD7 - *Ammophila arenaria - Festuca rubra* semi-fixed dune community | SM6 - *Spartina anglica* Saltmarsh |
| | SD8 - *Festuca rubra - Galium verum* fixed dune grassland | SM7 - *Sarcocornia perennis* |
| | SD9 - *Ammophila arenaria - arrhenatherum elatius* dune grassland | SM8 - Annual *Salicornia* Saltmarsh |
| | Standing waters | SM9 - *Suaeda maritima* Saltmarsh |
| Other assemblages | Invertebrate Assemblage | Vascular Plant Assemblage |
| Other species | Water Vole, *Arvicola amphibious*<br><br>Protected under Schedule 5 of the Wildlife and Countryside Act 1981 and a priority conservation species. | Great crested newt, *Triturus cristatus*<br><br>Great crested newts are a European protected species. The animals and their eggs, breeding sites and resting places are protected by law. |

# Natura 2000 Sites - Qualifying Species and Habitats

Some of the nature conservation interest features listed previously are of international importance. Large parts of the strategy area form part of the Natura network due their importance for a range of species and habitats (see also Plan 2, Plan 3 and Plan 4).

Dungeness, Romney Marsh and Rye Bay SPA

The Dungeness, Romney Marsh and Rye Bay SPA (see also Plan 3) qualifies under article 4.1 of the Birds Directive as it is used regularly by 1% or more of the Great Britain populations of twelve species listed in Annex I and under article 4.2 as being regularly used by over 1% of the biogeographical population of shoveler. The populations of qualifying species at the time of the SPA extension is shown in Table 5.[7] The site also qualifies under 4.2 as it is regularly used by over 20,000 waterbirds.

***Table 5: Dungeness, Romney Marsh and Rye Bay SPA Qualifying Species***

| **Annex 1 Species qualifying under article 4.1** | **Count** | **Season** | **% GB population** |
|---|---|---|---|
| Bewick's swan *Cygnus columbianus bewickii* | 155 individuals | Winter | 1.9% * |
| Bittern *Botaurus stellaris* | 5 individuals | Winter | 5.0% * |
| Hen harrier *Circus cyaneus* | 11 individuals | Winter | 1.5% * |
| Golden plover *Pluvialis apricaria* | 4,050 individuals | Winter | 1.6% * |
| Ruff *Philomachus pugnax* | 51 individuals | Winter | 7.3% ~ |
| Aquatic warbler *Acrocephalus paludicola* | 2 individuals | Passage | 6.1% # |
| Marsh harrier *Circus aeruginosus* | 4 females | Breeding | 2.0% # |
| Avocet *Recurvirostra avosetta* | 31 pairs | Breeding | 3.5% # |
| Mediterranean gull *Larus melanocephalus* | 56 pairs | Breeding | 52.2% # |
| Sandwich tern *Sterna sandvicensis* | 350 pairs | Breeding | 3.3% # |
| Common tern *Sterna hirundo* | 273 pairs | Breeding | 2.7% # |
| Little tern *Sterna albifrons* | 35 pairs | Breeding | 1.5% + |
| **Migratory Species qualifying under article 4.2** | **Count** | **Season** | **% NW & C Europe population** |
| Shoveler *Anas clypeata* | 485 individuals | Winter | 1.2% * |
| **Assemblage qualification under article 4.2** | **Count** | **Season** | |
| A range of species[8] | 34,625 * | Winter | - |
| * 5 year peak mean 2002/3 – 2006/7, ~ 5 year peak mean 2000/01 – 2004/5, # 5 year mean 2004 – 2008, + 5 year mean 1992 – 1996 | | | |

[7] Previously the smaller Dungeness to Pett Level SPA qualified for five of these species; breeding Mediterranean gull, common tern and little tern, and wintering Bewick's swan and shoveler.

[8] Including (but not limited to) Bewick's swan (*Cygnus columbianus bewickii)*, European white-fronted goose (*Anser albifrons albifrons)*, wigeon (*Anas penelope)*, gadwall (*Anas Strepera)*, shoveler (*Anas clypeata)*, pochard (*Aythya farina)*, little grebe (*Tachybaptus ruficollis)*, great crested grebe (*Podiceps cristatus)*, cormorant (*Phalacrocorax carbo)*, bittern (*Botaurus stellaris)*, coot (*Fulica atra)*, golden plover (*Pluvialis apricaria)*, lapwing (*Vanellus vanellus)*, sanderling (*Calidris alba)*, ruff (*Philomachus pugnax)*, whimbrel (*Numenius phaeopus)* and common sandpiper (*Actitis hypoleucos).*

Dungeness, Romney Marsh and Rye Bay Ramsar

Dungeness, Romney Marsh and Rye Bay Ramsar (see also Plan 4) qualifies as a Wetland of International Importance under several criteria of the Ramsar Convention.[9]

***Table 6: Dungeness, Romney Marsh and Rye Bay Ramsar Qualifying Features***

| Criterion | Qualifying features |
|---|---|
| **Criterion 1**: contains representative, rare, or unique examples of natural or near-natural wetland types. | Annual vegetation of drift lines and the coastal fringes of perennial vegetation of stony banks. |
| | Natural shingle wetlands: saline lagoons, freshwater pits and basin fens. |
| **Criterion 2**: it supports threatened ecological communities. | The complex network of wetland habitats support rich and diverse assemblages of bryophytes, vascular plants and invertebrates that are rare, threatened, listed as priority species in the UK Biodiversity Action Plan (BAP) or specially protected under the Wildlife and Countryside Act 1981.<br>• Bryophytes: assemblage of wetland thread-mosses (*Bryum* spp);<br>• Vascular plants: assemblages associated with grazing marsh and saltmarsh. At least eight nationally scarce species;[10]<br>• Invertebrates: Rich water beetle assemblage and a suite of reed beetle, snail-killing flies and soldier flies typical of coastal marshes. |
| **Criterion 2**: it supports vulnerable, endangered or critically endangered species. | The site is also of international importance for nine individual wetland species:<br>• Greater water-parsnip (*Sium latifolium)*<br>• Warne's thread-moss (*Bryum warneum)*<br>• Water vole (*Arvicola amphibius)*<br>• Aquatic warbler (*Acrocephalus paludicola)*<br>• Great crested newt (*Triturus cristatus)*<br>• Medicinal leech (*Hirudo medicinalis)*<br>• A ground beetle (*Omophron limbatum)*<br>• Marsh mallow moth (*Hydraecia osseola hucherardi)*<br>• De Folin's lagoon snail (*Caecum amoricum)* |
| **Criterion 5**: because is supports 20,000 or more waterbirds. | In the non-breeding season the site regularly support 34,957 waterbirds.[11] |
| **Criterion 6**: because it regularly support 1% of the populations of waterbirds. | • Mute swan (*Cygnus olor*) 348 individuals, wintering, 1.1% or British population;<br>• Shoveler (*Anas clypeata)* 485 individuals, wintering, 1.2% of NW and C Europe (non-breeding). [12] |

[9] Kampala 2005 criteria.

[10] Including saltmarsh species sea barley (*Hordeum marinum),* Borrer's saltmarsh-grass (*Puccinellia fasciculate)* slender hare's-ear (*Bupleurum tenuissimum)* and sea-heath (*Frankenia laevis)*; grazing marsh nationally rare (and critically endangered) sharp-leaved pondweed (*Potamogeton acutifolius)* and at least six nationally scarce species, including divided sedge (*Carex divisa)* and rootless duckweed (*Wolffia arrhizal)*. Other species are associated with margins of freshwater pits, fens, shingle beaches and saline lagoons.

[11] 5 year peak mean 2002/3 – 2006/7.

[12] Both counts Ibid.

Dungeness SAC

Dungeness SAC (see also Plan 2) qualifies for two habitats contained in Annex I of the Habitats Directive.

- 1210 Annual vegetation of drift lines
  The Dungeness foreland has a very extensive and well-developed shoreline, although with sparse vegetation and in places some human disturbance. It is one of two representatives of Annual vegetation of drift lines on the south coast of England.
- 1220 Perennial vegetation of stony banks
  Dungeness is the UK's largest shingle structure and represents the habitat type on the south-east coast of England. The total area of exposed shingle covers some 1,600 ha, though the extent of the buried shingle ridges is much greater. Despite considerable disturbance and destruction of the surface shingle, the site retains very large areas of intact parallel ridges with characteristic zonation of vegetation. It still has the most diverse and most extensive examples of stable vegetated shingle in Europe, including the best representation of scrub on shingle, notably prostrate forms of broom (*Cytisus scoparius)* and blackthorn (*Prunus spinosa*). A feature of the site, thought to be unique in the UK, is the small depressions formed within the shingle structure, which support fen and open-water communities.[13]

Other Annex 1 habitats are present within the SAC but are not of sufficient area or quality to be qualifying:

- 1150 Coastal lagoons
- 2110 Embryonic shifting dunes
- 2120 Shifting dunes along the shore with Ammophila arenaria (“white dunes”)
- 7210 Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*

Additionally, the SAC qualifies due to the large population of the Annex II species, great crested newt (*Triturus cristatus*).

The conservation objectives for Dungeness SAC are:

> *Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species (see below), and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.*

Subject to natural change, to maintain or restore:

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

[13] Text from http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0013059 accessed 2nd March 2017.

# Broad Description of Habitats

There are a range of habitats in the strategy area. The areas where 'priority habitats'[14] are located is shown in Plan 6 and 7.

Detailed below are broad descriptions of the main habitat types of the strategy area. Each of the geographic areas (Plan 8)[15] are important for a range of species and habitats and are considered in more detail in the section 'Strategy Sub-Areas'.

## Coastal and Floodplain Grazing Marsh

Coastal and Floodplain Grazing Marsh

Coastal and floodplain grazing marshes are periodically inundated pasture or meadow with ditches, which maintain the water levels, and contain standing brackish or fresh water. Most are grazed; some are cut for hay or silage. They contain seasonal or permanent water filled hollows or ponds and emergent swamp communities but not extensive areas of tall fen. They often occur as part of a wider wetland matrix which may include open water, reed bed and wet woodland. Grazing marsh is important for waders and wintering wildfowl. Grazing marsh may contain both species poor improved grassland and floristically rich semi-improved grassland, depending on how the land is managed. The ditches may have a range of salinities and thus support a diverse and interesting mixture of plants and invertebrates including many nationally scarce and threatened species. Kent's coastal grazing marsh is the remaining stronghold in Kent for the declining water vole and is important for the long-term survival of a number of priority invertebrate species including, Fisher's estuarine moth, marshmallow moth, shrill carder bee and others.[16]

The wet grazing marshes and pastures of the Romney Marsh have a long and complex history. Once a large bay covered by the sea, changes in sea level and the human reclamation of the marshes have created a landscape of grazed wet pastures within a criss-cross network of rivers, streams and man-made ditches. The saltmarshes of the Walland, Guldeford and Pett Marshes were enclosed between the late 1400's and the 1800s. Other smaller areas are present in The Dowels and Snargate and Lydd Ranges.

Not all areas which are mapped as priority habitat are within the SSSI. The main areas where this habitat is found are:

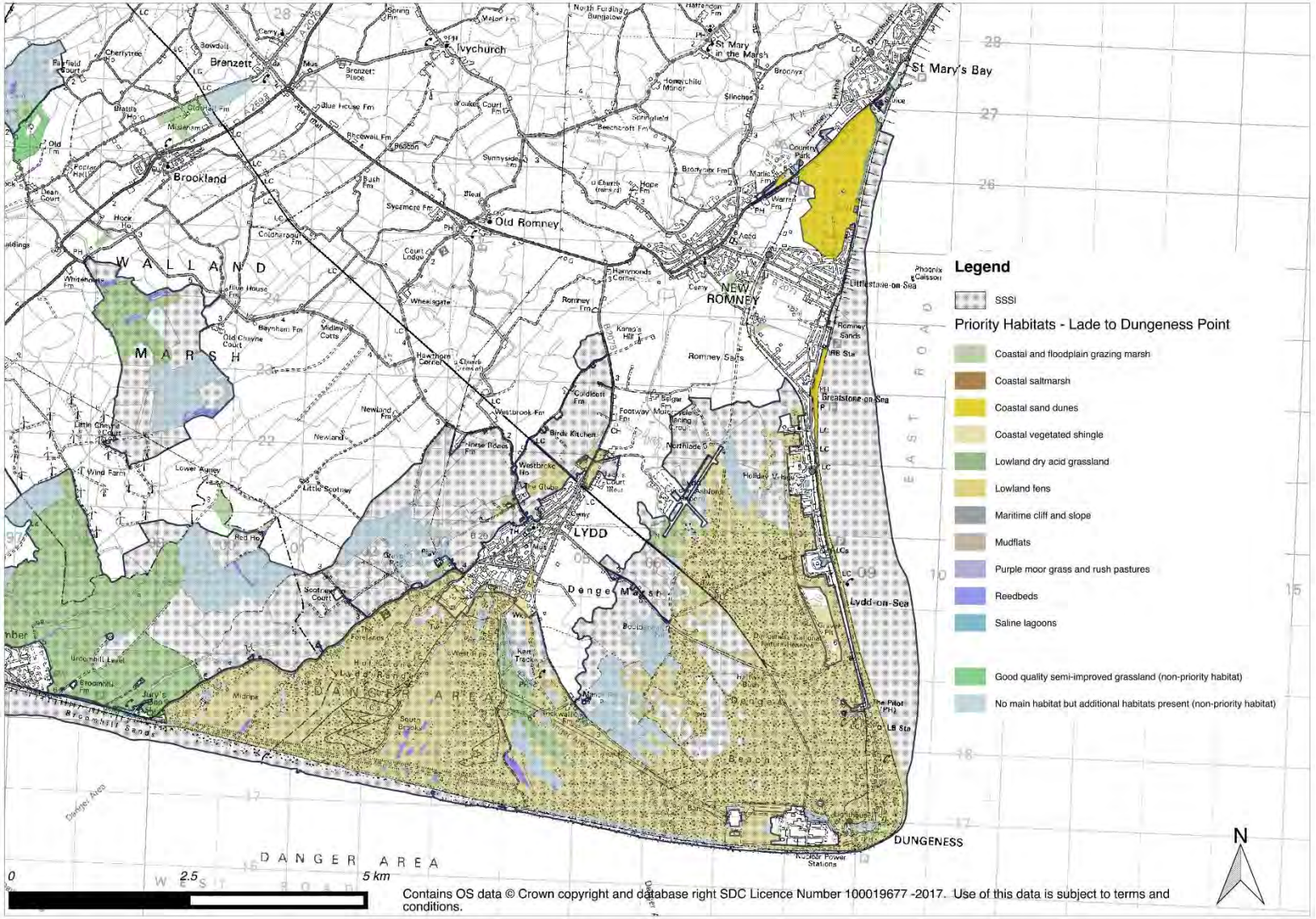
- Pett Level and Pannel Valley;
- Camber Castle: Priority coastal and floodplain grazing marsh also extends to the north west outside of the SSSI across Rye Marsh farm;
- East Guldeford Levels, Wainway Wall and Cheyne Court;
- The Dowels and Snargate.

[14] As required under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

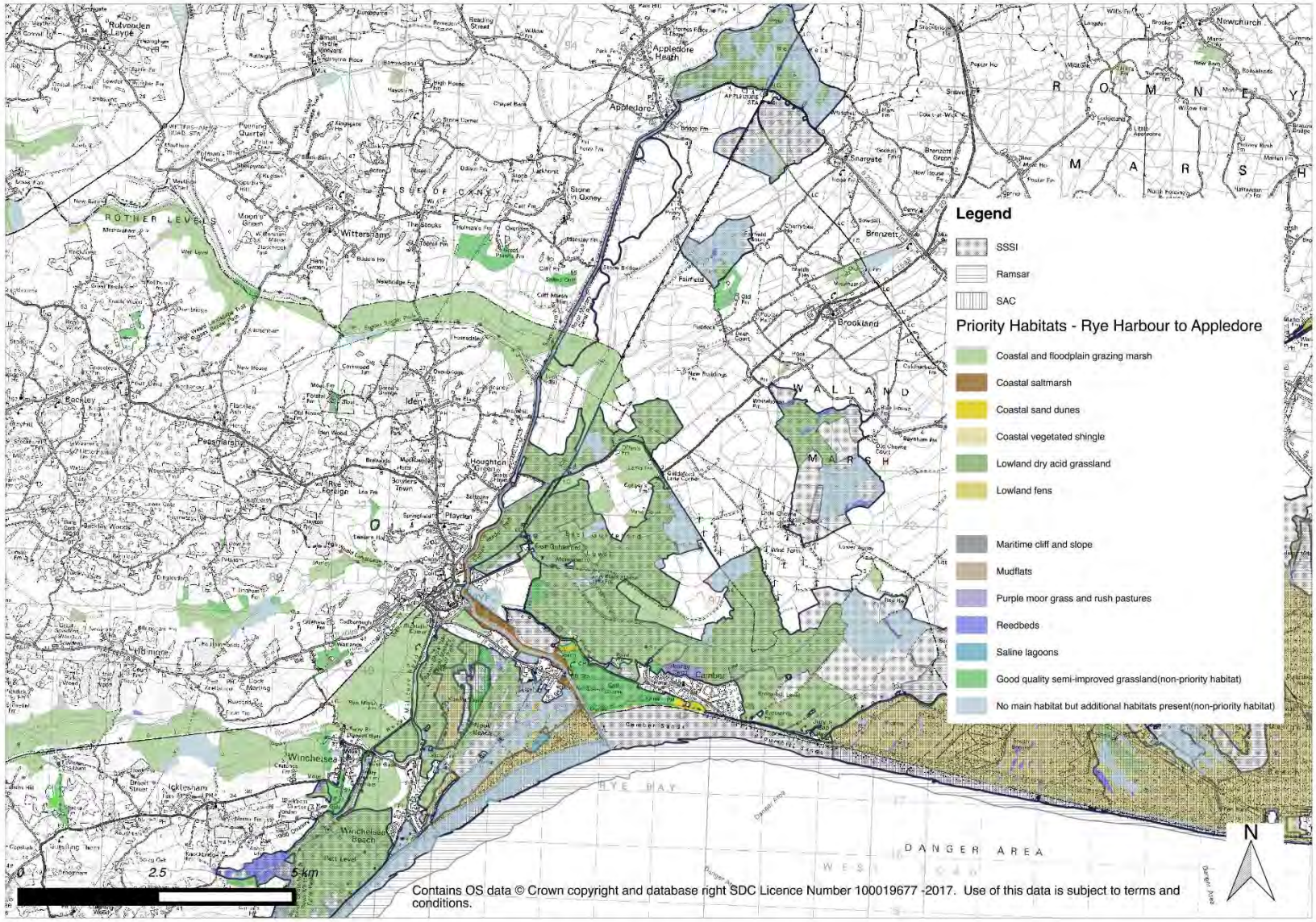
[15] In common with the other reports of this strategy, standard names have been assigned to broad areas.

[16] Kent Biodiversity Action Plan http://www.kentbap.org.uk/habitats-and-species/priority-habitat/coastal-floodplain-grazing-marsh/ accessed 1st March 2017.

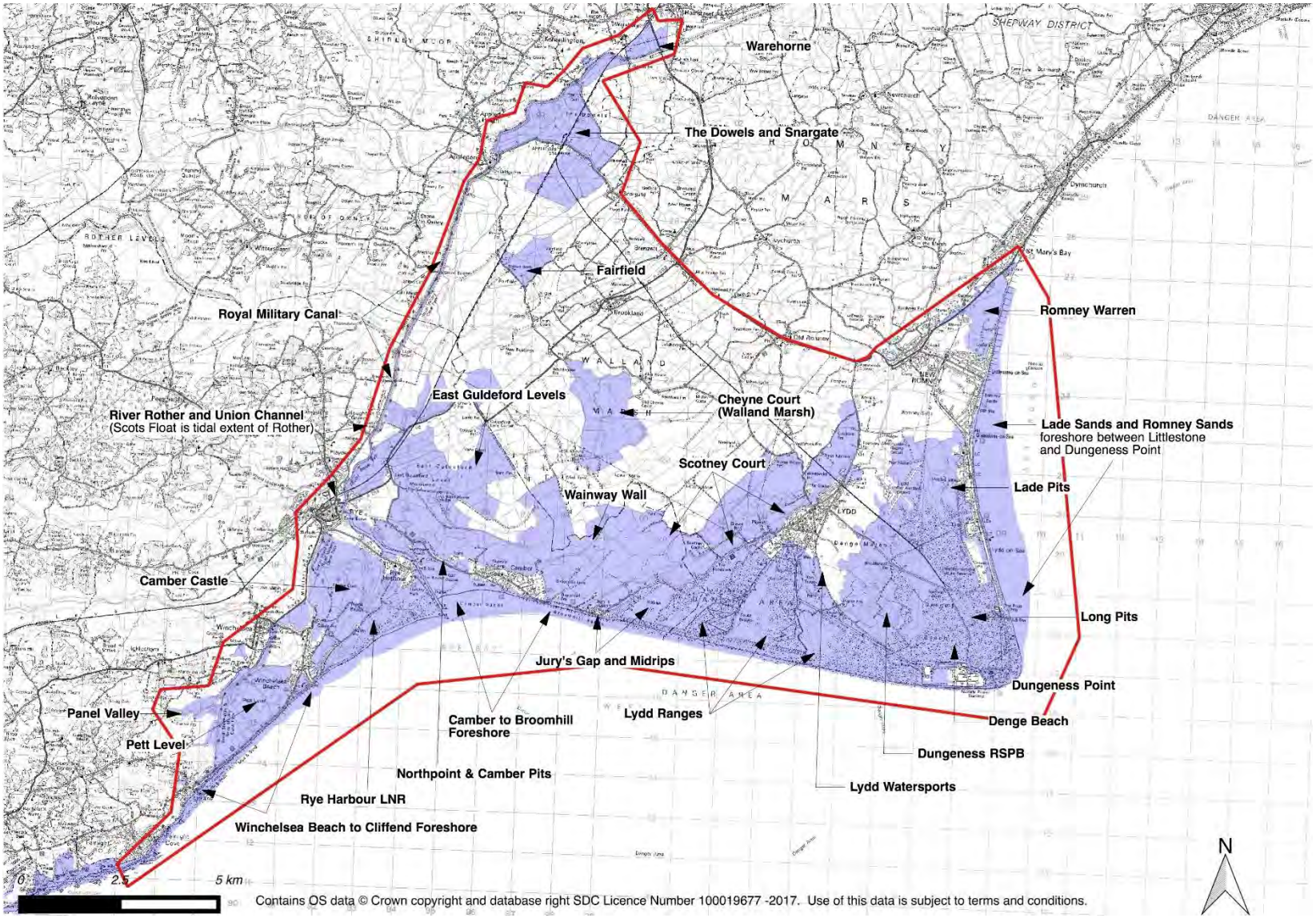
***Plan 6: Priority Habitats and SSSIs – Eastern Strategy Area***



***Plan 7: Priority Habitats and SSSIs – Western Strategy Area***



*Plan 8: Named Areas of the Strategy Area*



Purple Moor Grass and Rush Pastures

Purple moor grass and rush pastures occur on poorly drained, usually acidic soils in lowland areas of high rainfall. Purple moor grass *Molinia caerulea* and rushes, with a range of vegetation communities occurring in a mosaic of other habitats. In the strategy area this habitat is closely associated with the coastal and floodplain grazing marsh, with areas found particularly in the Pannel Valley, north of Camber.

## Coastal Salt Marsh and Mudflats

Coastal salt marsh and mudflats priority habitats are located along the estuary of the River Rother, from the mouth of the river to the tidal extent at Scots Float (A259 bridge), after which point the river is canalised and supports only small areas of saltmarsh along the flood banks. The largest areas of undisturbed saltmarsh are located on the north bank of the river, supporting areas of *Spartina*, pioneer-, mid- and low-marsh closest to the river and upper-marsh communities on raised areas adjacent to the river. The SSSI evidence notes a pure stand of sea-purslane (*Atriplex portulacoides*) near Rye Harbour.[17] Some areas are no longer inundated and therefore the vegetation communities are being replaced by rough grassland.

## Coastal Vegetated Shingle

Vegetated shingle is important both for a range of unusual assemblages of plants (including lichens and bryophytes) and animals which it supports. Shingle areas are also important for birds as roosting and breeding sites, particularly for the ground nesting little tern and ringed plover. Vegetated shingle also commonly borders and protects other important natural habitats, such as sandy beaches, salt marshes or saline lagoons. Coastal shingle is very important for terrestrial invertebrates some of which are unique to the habitat.

There are extensive areas of coastal vegetated shingle across the strategy area, forming a high proportion of the UK's total extent of this habitat. The main areas are:

- Dungeness Point between Jury's Gap and Greatstone, incorporating Jury's Gap and Midrips, Lydd Ranges, Dungeness RSPB, Denge Beach, areas around Lade Pits and the Long Pits, inland to Lydd and Lade Sands and Romney Sands;
- Rye Harbour LNR and Camber Castle and Winchelsea.

## Saline Lagoons

Saline lagoons are a feature of the vegetated shingle. They are areas of marine saline water where the concentration of salts is reduced by ground or surface freshwater input or concentrated by evaporation and connection with the sea is limited by shingle or other barriers. Saline lagoons are an important and relatively scarce habitat due to the special conditions that are required for their formation. They support unique invertebrates, such as the lagoon cockle and ostracods, and are important for waterfowl, marshland birds and seabirds. The presence of certain indigenous and specialist plants and animals make this habitat

[17] (English Nature, 2006)

important to the UK's overall biodiversity and has led to the listing of saline lagoons as a priority habitat under the EU Habitats Directive. There are good examples of natural/semi-natural percolation lagoons at Lydd Ranges, but saline lagoon features are also present at Rye Harbour and Winchelsea Beach.

## Coastal Sand Dunes

Dunes are important for a range of plants, invertebrates and wintering passerines. There are three dune systems; Camber Dunes, Greatstone Dunes and Romney Warren Dunes. These dune systems represent different structural types of sand dune and sand dune formation associated with the shingle structures of Dungeness and Rye Harbour.

Camber Dunes: This ness/cuspate foreland dune system extends from the mouth of the River Rother (where the system is constrained by the seawall) for 2km to Camber village, and includes Rye Golf Club. Camber supports a typical successional sequence of dune habitats. The foredune vegetation contains a classic sequence of sand couch (*Elytrigia juncea)* dune and marram (*Ammophila arenaria)* dune with a mobile dune community of sand couch and red fescue (*Festuca rubra).* There are also areas of sea-buckthorn (*Hippophae rhamnoides)* scrub on the foredune (some of which has been planted). Further inland is semi-fixed marram vegetation leading to the fixed dune grassland of the golf course, which support small patches of lichen-rich open dune vegetation.

Greatstone Dunes: This narrow bay dune system extends around 1.5km along Greatstone-on-Sea frontage and demonstrates a successional sequence of dune habitats from foredune to mobile dune and dune scrub habitats. The transitions between vegetated shingle beach and foredune communities are important features, especially where the dunes meet shingle in the north and south. The dunes are fronted by a non-continuous strandline community with the foredunes supporting a narrow band of sand couch vegetation in front of the marram-dominated mobile dunes which form the majority of the dune system. There are also areas of sea-buckthorn scrub and semi-fixed and fixed dune grassland to the north where the dunes are wider.

Romney Warren Dunes: Romney Warren is a stable ness/cuspate foreland dune system which has developed over ancient shingle ridges. Most of the dunes are now Littlestone Golf Course. There are two main types of fixed dune grassland communities; red fescue grasslands and sand sedge grassland (*Carex arenaria*) in the south and a species-poor sand sedge and sheep's fescue (*Festuca ovina*) sward in the north. This latter vegetation community is important due to its very local representation in south-east England. There is no seaward foredune as this has been destroyed by the concrete seawall.

## Freshwater Habitats

Freshwater habitats are included in the designated sites both because they support important bird, invertebrate and botanical and other interests and because they have special interest in themselves. The two habitats of special interest are ditch systems and freshwater standing waters.

Natural Standing Waters – Open and Fossil Pits

The natural freshwater pits amongst Dungeness's shingle ridges are unique in the British Isles. The Open Pits in RSPB Dungeness and the Fossil Pits in Lydd Ranges are naturally formed pits, each around 60 to70 shingle ridges inland from the coast. Once saline lagoons, they became freshwater as the coast became further from them. The pits have naturally colonised by vegetation and display succession from open water and marginal reed-swamp through to marsh or fen to carr. Some pits contain permanent open water, while others have only temporary standing water or damp peat due to large amounts of organic matter.

Former Excavation areas

Alongside the naturally occurring Open and Fossil Pits at Dungeness are several other freshwater bodies formed by gravel excavation at Dungeness Point. The earliest of these is thought to be the Long Pits, where excavation began in the 1920's. The chronology of extraction is estimated to be:[18]

- Long Pits - c.1920
- Old ARC/Watertower Pits -1920s and 1930 s
- Hamilton Farm Pits (Hookers Pits) - 1950s and 1960s
- ARC Pit (Railtrack Pit) - Late 1950 s and late 1960 s
- Lade Pit (New Romney Pit) - 1940s onwards
- Burrowes Pit - 1970s
- Brett's Pit (Lydd Watersports Centre) - 1948
- New Diggings - 1970s and 1980s

There are also extensive former gravel workings to the north west of Lydd around Scotney Court Farm, extending from Lydd to Jury's Gap. There is also an active gravel pit to the south of Lade (not within the designated areas).

[18] (Ferry & Waters, Dungeness Ecology and Conservation (No. 12), 1985)

## Fen, Marsh and Swamp

Fen

Fens are wetland habitats formed on peaty substrates, fed by moving water from rivers and streams (as opposed to true bogs, which are largely rainwater-fed). The fen habitat in the strategy area is located within Dungeness RSPB Reserve, where a series of natural freshwater pits behind the shingle ridges have been colonised by fen vegetation. These support several uncommon plants, including the regionally scarce great fen sedge, as well as great crested newts and medicinal leeches.

Reedbed

Reedbeds are wetlands dominated by stands of common reed (*Phragmites australis*) where the water table is at or above ground level for part of the year. They tend to incorporate areas of open water and ditches also small areas of wet grassland and carr woodland may be associated with them. Reed swamp habitat is permanently waterlogged. In the strategy area it is associated closely with coastal and floodplain grazing marsh and purple moor grass and rush pastures. There are extensive areas of reedbed in the Panel Valley with some fringing the Colonel Body lakes at Pett Level. Smaller areas of reedbed fringe many of the ditches and water courses across the Walland Marsh and areas in Lydd Ranges and the Midrips.

## Birds across the Strategy Area

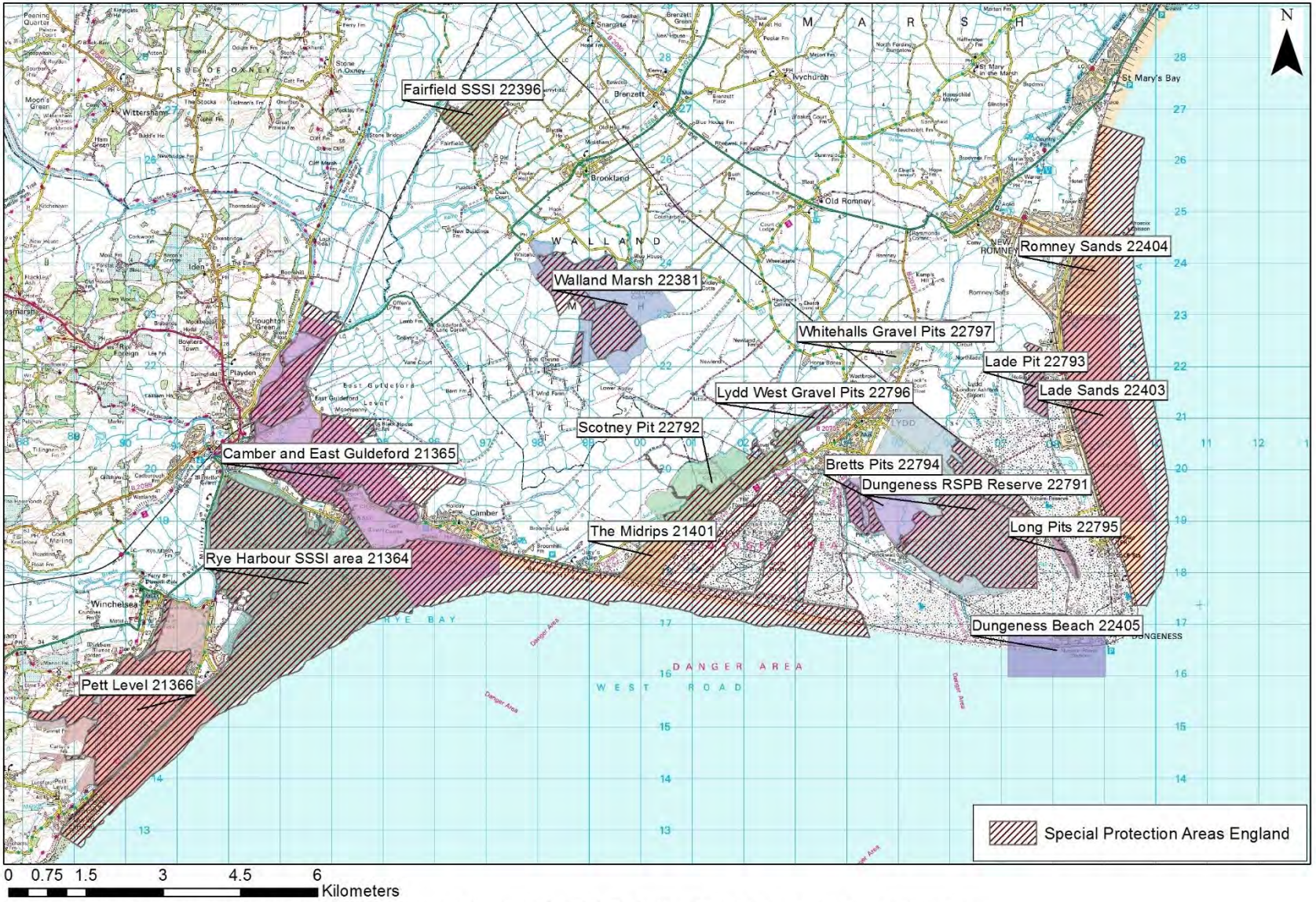
The WeBS sectors and relationship with the SPA are shown in Plan 9. The WeBs sectors do not precisely coincide with the coverage of the SPA and, in addition, data for some years are not available. The distribution of birds at the time of the SPA extension and Ramsar designation is shown in Plan 10 (based on WeBS core counts of 2002/3 – 2006/7).

More recent WeBS data has also been viewed. The five year means for those Natura qualifying species and SSSI species detailed in the SPA designation extension evidence base[19] are shown in Table 8 (also in Appendix). Complete five year data were not available for all sectors, as indicated in the table. In addition, no data at all were available for Walland Marsh or Romney Sands sectors due to no surveys having taken place. The former held 36% of the total birds of the SPA at the time of the extension of the designation, therefore the absence of any recent data is significant and will affect the understanding of bird distribution across the Natura sites. This lack of data means that it is also not possible to compare distribution of species at the time of the SPA designation with distribution at the present time. The SPA designation extension also used data from additional sources which were not available for this report, making direct comparison unfeasible and beyond the scope of this work. Romney Sands sector has not been recorded for several years. This sector is within the extended SPA and the lack of data for this sector is also a significant omission in the ongoing monitoring of the SPA features. Also of significance is the lack of complete data for Lade Sands as sanderling numbers in this sector have shown a decline.

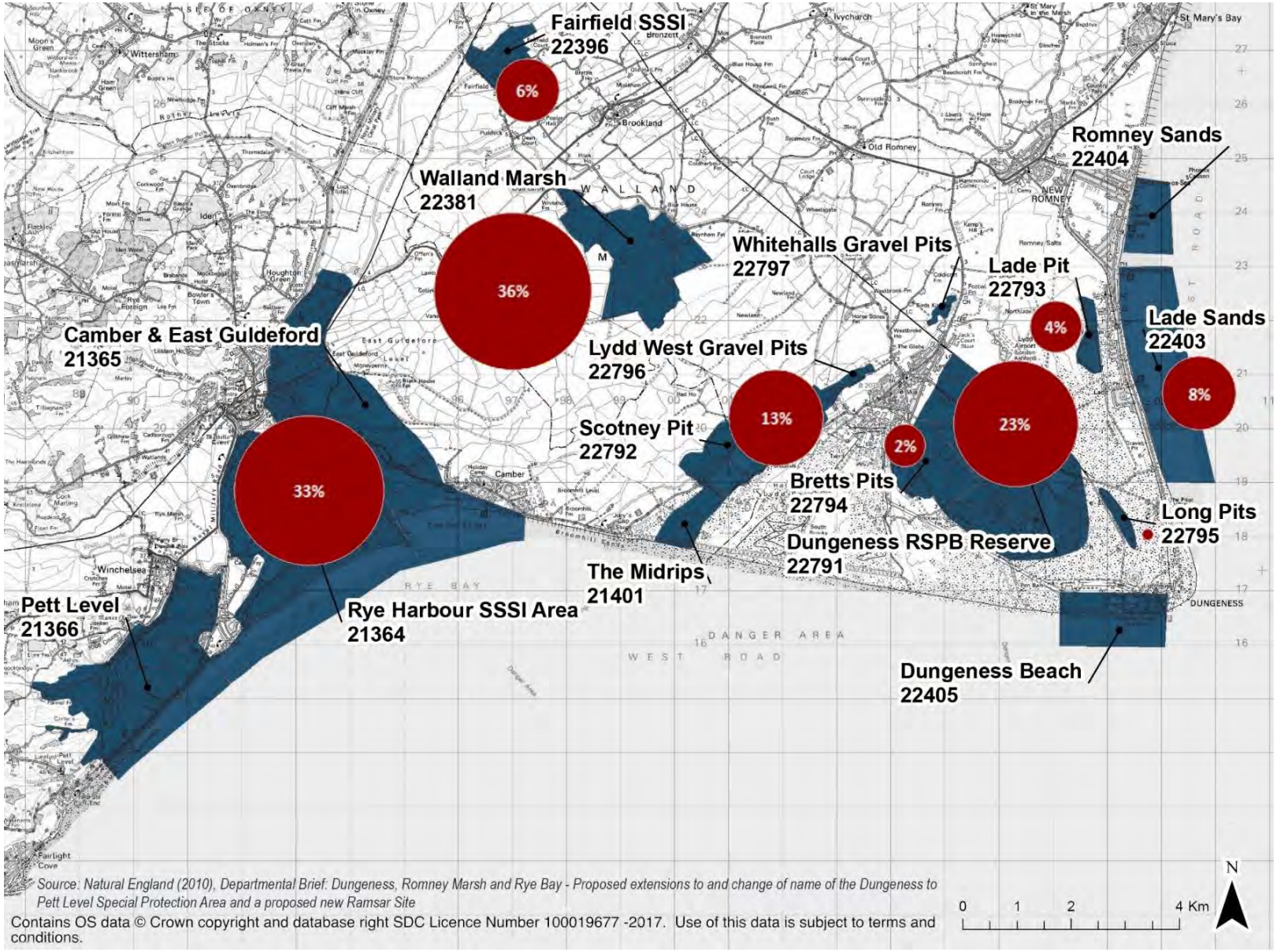
A workshop with representatives from the RSPB, Dungeness Bird Observatory, Natural England and local bird recorders was held on 21st February 2017. Participants were asked to note roosting and feeding areas of birds, movement of birds during the day/night, areas of disturbance and other features of interest to the strategy. The main information on bird locations is mapped in Plan 11. This should not be viewed as a definite statement of bird features of interest but, rather, it captures what was of interest to the participants. The information provided on bird disturbance is included in the information for each sub-area later in this document.

[19] (Natural England, 2010)

*Plan 9: WeBS Sector Areas and SPA*



*Plan 10: Total counts in each WeBS count sector within the SPA and Ramsar at time of SPA designation extension (based on WeBS core counts 2002/03 - 2006/7)*



***Plan 11: Notes on bird distribution – workshop 21st February 2017***

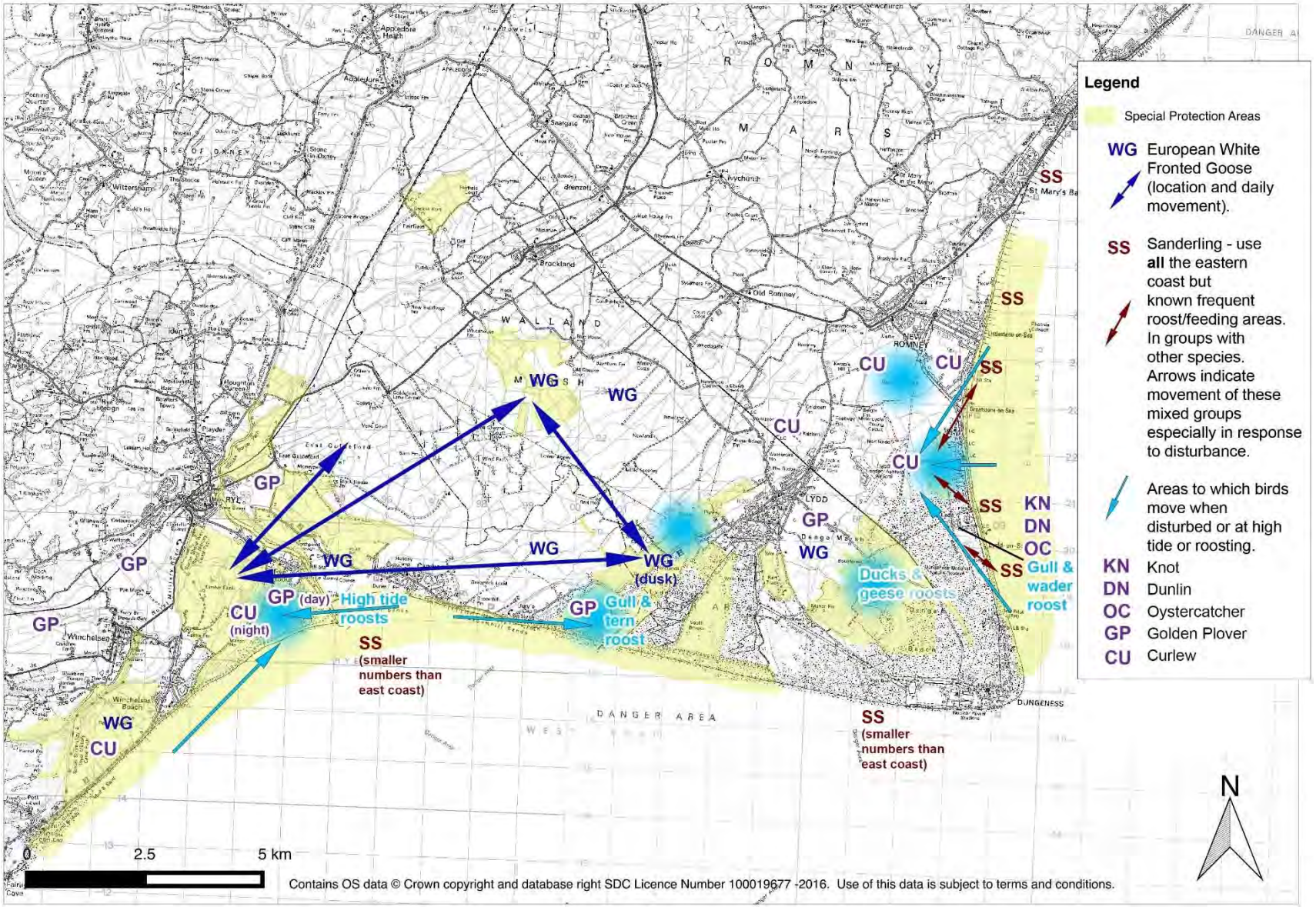


*Table 7: Importance of WeBS count sectors*[20]

| | Mute Swan | Berwick's Swan | European White Fronted Goose | Greylag Goose | Wigeon | Gadwall | Teal | Mallard | Pintail | Shoveler | Pochard | Tufted Duck | Goldeneye | Little Grebe | Great Crested Grebe | Cormorant | Moorhen | Coot | Golden Plover | Lapwing | Sanderling |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pett Level | | | | | | | | | | | | | | | | | | | | | |
| Camber & East Guldeford | | | | | | | | | | | | | | | | | | | | | |
| Rye Harbour SSSI | | | | | | | | | | | | | | | | | | | | | |
| Walland Marsh | | | | | | | | | | | | | | | | | | | | | |
| Fairfield SSSI | | | | | | | | | | | | | | | | | | | | | |
| Scotney and Lydd West | | | | | | | | | | | | | | | | | | | | | |
| Dungeness RSPB | | | | | | | | | | | | | | | | | | | | | |
| Lade Pit | | | | | | | | | | | | | | | | | | | | | |
| Bretts Pits | | | | | | | | | | | | | | | | | | | | | |
| Long Pits | | | | | | | | | | | | | | | | | | | | | |
| Lade Sands | | | | | | | | | | | | | | | | | | | | | |

Cells are colour coded to indicate sectors that hold a substantial proportion of the SSSI total for the species arbitrarily defined and in order of priority as follows:
dark blue – sectors with a mean of peak counts over the last five winters [report dated 2010] that is at least 20% of the total mean of peak counts for the site over the same period;
mid blue – sites with a mean of peak count over the last five winters that is between 10% and 20% of the total mean of peak count for the site over the same period.

[20] Adapted and summarised from Austin & Calbrade, 2010.

*Table 8: WeBS Sectors 5 Year Means (unless otherwise indicated) 2012-2016[21] important species*

| WeBS Sector | Bretts (4 year mean) | Camber and East Guldeford | Dungeness RSPB | Fairfield (2 year mean) | Lade Pit | Lade Sands (3 year mean) | Long Pits | Pett Level | Rye Harbour | Scotney and Lydd West | Midrips (3 year mean) | Dungeness Beach |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Webs code | 22794 | 21365 | 22791 | 22396 | 22793 | 22403 | 22795 | 21366 | 21364 | 22792 | 21401 | 22405 |
| Bewick's Swan[22] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Coot | 42 | 390 | 3287 | 10 | 3425 | 0 | 60 | 1039 | 2648 | 944 | 4 | 0 |
| Cormorant | 9 | 63 | 661 | 2 | 61 | 0 | 0 | 354 | 1684 | 70 | 2 | 677 |
| Gadwall | 0 | 8 | 1063 | 3 | 1155 | 0 | 0 | 281 | 929 | 26 | 1 | 0 |
| Golden Plover | 0 | 83 | 502 | 55 | 0 | 0 | 0 | 38 | 2458 | 799 | 91 | 0 |
| Great Crested Grebe | 25 | 7 | 155 | 0 | 142 | 267 | 0 | 135 | 155 | 16 | 6 | 2346 |
| Lapwing | 78 | 1741 | 2504 | 225 | 0 | 0 | 0 | 3009 | 4685 | 2750 | 5 | 0 |
| Little Grebe | 4 | 13 | 30 | 0 | 101 | 0 | 0 | 62 | 148 | 17 | 0 | 0 |
| Mute Swan | 20 | 41 | 182 | 8 | 153 | 0 | 5 | 69 | 282 | 168 | 28 | 0 |
| Pochard | 51 | 2 | 795 | 0 | 684 | 0 | 1 | 84 | 323 | 469 | 0 | 0 |
| Ruff | 0 | 10 | 5 | 0 | 0 | 0 | 0 | 12 | 27 | 1 | 0 | 0 |
| Sanderling | 0 | 0 | 0 | 0 | 0 | 554 | 0 | 0 | 88 | 0 | 0 | 0 |
| Shoveler | 1 | 1 | 1530 | 5 | 257 | 0 | 0 | 347 | 650 | 67 | 16 | 0 |
| White-fronted Goose (European) | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 13 | 0 | 13 | 0 | 0 |
| Wigeon | 0 | 42 | 2276 | 98 | 313 | 0 | 0 | 1880 | 1816 | 3024 | 41 | 0 |

[21] Superscript adjacent to the species name indicates the designation for which this is a qualifying species in its own right. **NB,** species indicated as SSSI (along with other species without annotation) will also form part of the SPA/Ramsar winter assemblage qualifying feature and are therefore also Natura qualifying features in this regard.

[22] In the evidence for the SPA designation extension, 100% of Bewick's swan were recorded in the Walland Marsh sector, for which there are no recent data, as previously outlined.

# Potential Sensitivity of Conservation Features to Recreational Impacts

## Habitats and Earth Heritage

Evidence reports published by Natural England[23] and other sources indicate the potential sensitivities of broad habitat types to a range of recreational activities. A range of rare species are also associated with the designated areas[24] and their habitats which are also potentially susceptible to recreational activity. The same evidence reports published by Natural England, along with other sources indicate the potential sensitivities of some species to a range of recreational activity.

The significance of recreational impacts depends on the intensity of impacts and their extent, combined with the sensitivity of the habitats and species concerned. The extent to which recreation presents a problem therefore needs to be determined on a case-by-case basis. In addition, across the strategy area, species and habitats occur together. Each part of the strategy area is detailed in the section 'Strategy Sub-Areas'.

Each of the habitats in the strategy area and their potential vulnerability to recreation impacts are considered in Table 9: Habitats and Earth Heritage of Strategy Area and Potential Sensitivity to Recreational Activity.

[23] (Lowen, Liley, Underhill-Day, & Whitehouse, 2008) (Natural England, 2009) (Natural England, 2009a)

[24] Rare species include saltmarsh species sea barley (*Hordeum marinum),* Borrer's saltmarsh-grass (*Puccinellia fasciculate)* slender hare's-ear (*Bupleurum tenuissimum)* and sea-heath (*Frankenia laevis)*; grazing marsh nationally rare (and critically endangered) sharp-leaved pondweed (*Potamogeton acutifolius)* and at least six nationally scarce species, including divided sedge (*Carex divisa)* and rootless duckweed (*Wolffia arrhizal)*. Other species are associated with margins of freshwater pits, fens, shingle beaches and saline lagoons.

*Table 9: Habitats and Earth Heritage of Strategy Area and Potential Sensitivity to Recreational Activity*

| Broad Habitat | General Vulnerability of Habitat to Impacts arising from Access | Features of Moderate-High Vulnerability[25] | Application to the Strategy Area |
|---|---|---|---|
| **Grasslands**<br><br>Marshy grassland, rush pasture and coastal grazing marsh<br><br>Neutral un-improved grassland<br><br>Semi-improved grassland<br><br>Acid grassland | **Direct Impacts**<br>• Low productivity grasslands more sensitive to trampling;<br>• Some species are resilient to trampling and can increase, but tend to be common pasture herbs;<br>• Light trampling can be beneficial in unmanaged grassland;<br>• Litter, flowering, biomass, cover, broad-leaved plants are all reduced at moderate-high levels of trampling;<br>• Impacts greater on wet ground or steep slopes;<br>• Sensitive species disappear on and beside paths; impacts can extend 50m on either side of the path;<br>• Available phosphorus increased in zones adjacent to paths (10-65m wide) in some studies;<br>• Significant effects of even light trampling on invertebrates in unmanaged grassland;<br>• About 400 passages/year can result in 50% loss of cover and species;<br>• Some species benefit from trampling.<br><br>**Indirect Impacts**<br>• Those with associated species which could be disturbed, e.g. bird species;<br>• Reduced conservation management e.g. reduced grazing due to impacts on livestock by dogs.<br><br>**Types of Site with Particular Vulnerability to Access Related Issues**<br>• Small;<br>• Support rare or special species;<br>• Are on steep slopes or wet;<br>• Have the lowest productivity;<br>• Those sites receiving large numbers of visitors. | **High Vulnerability**<br><br>• Marshy grassland – trampling<br>• Lichen rich grassland – trampling<br><br>**Additional Vulnerability**<br><br>• Neutral grassland – trampling<br>• Associated species - breeding and wintering raptors - disturbance<br>• Associated species - wintering birds - disturbance<br>• Marshy and neutral grassland indirect impacts – management. | • Grazing marsh and wet grassland is extensive across area and could be sensitive to trampling if there are high numbers of visitors. Evidence from discussion at workshop of 21/2/17 indicates that levels of visitors is low. Access to these areas is mainly constrained to footpaths;<br>• Breeding and wintering raptors present in Walland Marsh and wider Romney Marsh (locations confidential).<br>• Lichen-rich grassland present on coastal vegetated shingle and is highly sensitive (see later in table);<br>• Natural England reporting suggests that water vole could lose suitable habitat if use is intensive and destroys marginal vegetation and bank structure, but that this extent of damage is likely to be uncommon.[26] |

[25] Taken from assessment made for broad habitats in (Natural England, 2009). Vulnerability of habitats and species in the study area may differ from the assessment given. Vulnerability predicated at moderate to high levels of activity.

[26] (Natural England, 2009) para 10.3.11

| Broad Habitat | General Vulnerability of Habitat to Impacts arising from Access | Features of Moderate-High Vulnerability[25] | Application to the Strategy Area |
|---|---|---|---|
| **<u>Open Water</u>**<br><br>Ponds and pools<br><br>Saline lagoons[27]<br><br>Ditches and streams<br><br>Rivers<br><br>Reedbeds | **Direct Impacts**<br>• Trampling of sensitive water-side vegetation;<br>• Areas around otter holts;<br>• Reedbeds are included as associated with open water; however, these areas are largely inaccessible and therefore there are no unique detrimental impacts resulting from recreation associated with this habitat alone.<br><br>**Indirect Impacts**<br>• Sites where overwintering or breeding birds are key features and susceptible to disturbance from a range of recreational sources;<br>• Possible transfer of alien aquatic plants;<br>• Introduction of diseases which could affect native fish or other aquatic species.<br><br>**Types of Site with Particular Vulnerability to Access Related Issues**<br>• Those with wintering and breeding birds;<br>• Those with rare or vulnerable species on margins;[28]<br>• Those with high levels of access and other recreational activities, e.g. fishing, watersports. | **High Vulnerability**<br>• Disturbance of breeding birds.<br><br>**Additional Vulnerability**<br>• Disturbance of wintering birds;<br>• Trampling of soft bank edges on species of importance. | • Saline lagoons are uncommon and were not included in the earlier Natural England evidence document, but the latter evidence document suggests there are relatively few issues relating to saline lagoons and public access.[29] The saline lagoons in the strategy area are largely inaccessible. There are some saline lagoons near the coast to the south of Lydd Ranges. Access to Lydd Ranges is restricted, but access is permitted along the coastal strip where the saline lagoons are located when the warning flags are not flying. However, the opportunity for public access is limited and the volume of visitors is low. Saline lagoons are also located in the RSPB Dungeness Reserve but not on the route of the nature trail. There are some saline lagoons to the south of Lydd Ranges and in Rye Harbour Reserve. The footpath across Denge Beach passes close to the Open Pits but this has low levels of use.[30]<br>• Fishing takes place on several of the lakes and pools – at Lade Pits and around Scotney and Lydd pits.<br>• Watersports primarily operate in the summer in the strategy area at present, but greater conflict with wintering bird interest could occur if the watersports season is extended. |

[27] Although a coastal habitat, the pressures on saline lagoons identified in the latter Natural England evidence (Lowen, Liley, Underhill-Day, & Whitehouse, 2008) indicate a greater similarity with other open water habitats rather than with coastal habitats and is therefore included under the open water category.

[28] The site is also of international importance for nine individual wetland species:
Greater water-parsnip (*Sium latifolium),* Warne's thread-moss (*Bryum warneum),* Water vole (*Arvicola amphibius),* Aquatic warbler (*Acrocephalus paludicola),* Great crested newt (*Triturus cristatus),* Medicinal leech (*Hirudo medicinalis),* A ground beetle (*Omophron limbatum),* Marsh mallow moth (*Hydraecia osseola hucherardi),* De Folin's lagoon snail (*Caecum amoricum)*

[29] (Lowen, Liley, Underhill-Day, & Whitehouse, 2008) para 11.12.

[30] Pers comm Dungeness RSPB, 18th January 2017.

| Broad Habitat | General Vulnerability of Habitat to Impacts arising from Access | Features of Moderate-High Vulnerability[25] | Application to the Strategy Area |
|---|---|---|---|
| **Fens** | **Direct Impacts**<br>There has been little research on the effects on access on fens:<br>• Tall grass fen on wet soils are more susceptible to trampling than tough-leaved sedges on drier mineral soils;<br>• Species-rich fen on wet peat is very sensitive to trampling damage;<br>• Fens are largely self-protecting by their impenetrability.<br>• Some trampling can break down dominance and open the sward up to other species.<br>• There is little information on the effects of access on animals but the low levels of accessibility should avoid impacting animals. | **Additional Vulnerability**<br>• Habitat occupies wet ground and therefore vulnerable to trampling damage, although most vulnerable types may be protected due to being impenetrable. | • Fen priority habitat is located within the RSPB Dungeness Reserve and in small areas near Snargate (adjacent to railway line) and other locations on the marsh. These areas are largely inaccessible or, in the case of RSPB Dungeness, visitor management measures are in place. |
| **Coastal Habitats**<br><br>Coastal Vegetated shingle | **Direct Impacts**<br>The little research available shows that:<br>• Shingle vegetation is easily damaged;<br>• Plant diversity is reduced by trampling;<br>• The main causes of damage is breaking up of the surface layers of vegetation and the fine humic layer that may take many years to be deposited. This damage to vegetation may not be possible to reverse;<br>• Damage to rare flora associated with shingle vegetation.<br><br>**Indirect Impacts**<br>• Disturbance of shingle nesting birds<br>• Damage to rare invertebrate habitats.<br><br>**Types of Site with Particular Vulnerability to Access Related Issues**<br>• Sites with presumed or *de facto* access;<br>• Sites with no visitor management in place;<br>• Sites where other detrimental pressures are also acting on the conservation features. | **High Vulnerability**<br>• Lichen communities in particular highly vulnerable. Damage may take many years to reverse (if at all);<br>• Other shingle grassland vegetation (*Crambe maritima* and *Arrhenatherum*) is also highly vulnerable to trampling.<br>• Rare nesting birds associated with shingle highly vulnerable.<br><br>**Additional Vulnerability**<br>• Other vegetation communities;<br>• Rare associated species – flora and fauna (some). | • Extensive areas of coastal vegetated shingle supporting vulnerable vegetation communities;<br>• Limited access management being implemented;<br>• Evidence of damage to shingle from access – current and historic (some dating to World War II and previously);<br>• Dungeness Natura sites – Site Improvement Plan states: *"Public access throughout the SAC allows direct access to the vegetated shingle. The resultant trampling disturbs and damages the SAC habitats Annual Vegetation of Drift Lines (AVDL) and Perennial Vegetation of Stony Banks (PVSB) Annex 1 habitats (vegetation) all year round. Public access/disturbance by Illicit vehicles crossing the vegetated shingle habitats causes direct impacts to the surface geomorphology and vegetated shingle habitat. Vegetation (SAC features) is lost through the churning up the shingle surface by vehicle wheels. There is serious permanent loss if this occurs in areas of shingle that have not previously been disturbed"* (Natural England, 2014d)<br>• Dungeness Natura sites – Site Improvement Plan states: *"Disturbance during the bird breeding season from public accessing the territories of sensitive breeding bird species could impact on breeding success*." (Natural England, 2014a). |

| Broad Habitat | General Vulnerability of Habitat to Impacts arising from Access | Features of Moderate-High Vulnerability[25] | Application to the Strategy Area |
|---|---|---|---|
| **Coastal habitats**<br><br>Sand Dunes | **Direct Impacts**<br>• Under light trampling plant diversity can increase;<br>• Under moderate to high trampling:<br>- bare ground develops;<br>- increased soil compaction;<br>- more sensitive species reduced or lost;<br>- trampling tolerant species increase in zone by paths;<br>- height, diversity, flowering and seed production all reduced;<br>- bare ground used by some annual plants;<br>- marram very susceptible to trampling damage.<br>• Densities of path networks can be very high where access is not controlled;<br>• On rank dune grassland, 800 passages are possible without loss of plant cover. Dune heath is twice as vulnerable. Marram dunes are ten times as vulnerable;<br>• Lichen-rich, strandline and marshy soils in slacks highly sensitive;<br>• Low level trampling impact on invertebrates can be severe in rank dune grassland;<br>• Destruction of vegetation through trampling, along with actions such as creating sun-traps and sand-sliding where there is less vegetation cover and no sand fencing in place, increase sand movement and erosion.<br><br>**Indirect Impacts**<br>• The beach cleaning required to ensure beach is attractive for visitors can remove strandline vegetation, creates compaction and removes invertebrates;[31]<br>• Sites where overwintering birds are a conservation feature and susceptible to disturbance;<br>• Introduction of sea buckthorn in attempts to stabilise erosion caused by recreation;<br>• Sand dune invertebrate fauna of unmanaged grassland litter may be reduced across by trampling. | **High Vulnerability**<br>• The least resilient dune habitats are:<br>- Yellow marram dunes.<br>- Shingle habitats.<br>- Lichen-rich communities.<br>- Wet areas in slacks.<br>- Saltmarshes.<br>- Steep slopes used for access;<br>• Foredunes are particularly vulnerable.<br><br>**Additional Vulnerability**<br><br>• Fixed dune grasslands (with the exceptions of wet areas in slack and lichen communities which are highly vulnerable);<br>• Sites with rare or scare species and/or important assemblages of species (may also be high vulnerability depending on species present). | • Camber dunes and Greatstone Dunes have high levels of recreational use;<br>• Yellow and mobile dunes at Camber and Greatstone, potentially high vulnerability marram vegetation;<br>• Also potentially high vulnerability shingle vegetation at Greatstone Dunes in transitions from dune grassland;<br>• High levels of paths and extended trampling zones evident at Camber and Greatstone;<br>• The fixed dune habitats of Camber and Romney Warren are within golf courses. Although there are potentially highly and moderately vulnerable vegetation communities, this strategy only includes areas which are accessible to visitors and are not chargeable visitor attractions;<br>• The foreshore at Camber requires regularly beach cleaning to cater for visitors. |

[31] (Doody J. P., 2013)

| Broad Habitat | General Vulnerability of Habitat to Impacts arising from Access | Features of Moderate-High Vulnerability[25] | Application to the Strategy Area |
|---|---|---|---|
| | **Types of Site with Particular Vulnerability to Access Related Issues**<br>• Sites where access could expand off-path and with a high degree of off-path use, high density of path network, the extent of trampled zones and erosion problems. If the path density is high, and trampled zones broad, a significant part of a site could be damaged;<br>• Sites with assemblages of sensitive vegetation – marram, lichen-rich, shingle communities;<br>• Sites with high recreation but limited or no access management in place;<br>• Sites where other detrimental pressures are also acting on the conservation features. | | |
| **Coastal Habitats**<br><br>Saltmarsh and mudflat | **Direct Impacts**<br>Although limited evidence, there are indications that:<br>• Saltmarsh is sensitive to trampling;<br>• The infaunal community is affected by trampling;<br>• Plant composition may change as a result of trampling;<br>• Saltmarshes are partly self-protective because of the difficulties of traversing them.<br><br>**Indirect Impacts**<br>• Sites where feeding birds are a conservation feature and susceptible to disturbance. | **High Vulnerability**<br>• Saltmarsh and mudflat high vulnerability but partly protected through being difficult to access. | • Saltmarsh and mudflat habitat is confined to the River Rother estuary. Access to the riverside is limited. On the western bank there is access close to the access track at Rye Harbour Reserve. On the eastern bank there is a footpath close to the saltmarsh. |
| **Earth Heritage** | **Direct Impacts**<br>• The shingle ridges and associated earth heritage features are damaged through mechanical disturbance – through trampling but particularly through vehicles driving off-road. Once damaged, the ancient ridges cannot be repaired. | **High Vulnerability**<br>• Serious permanent loss if vehicles cross shingle which has previously been undisturbed. | • Illicit vehicles (motor vehicles and motor bikes) cross the shingle at Dungeness in areas which are not designated routes (both visitors and residents).<br>• There is no public access for vehicles at Rye Harbour Reserve. |

## Birds

Evidence reports published by Natural England[32] and other sources indicate the potential sensitivities of birds to a range of recreational activities. Species and assemblages in the strategy area, trends and information significant to understanding the potential impact of recreation are considered in Table 8.

After extensive search and discussion steering group partners, it was concluded that data on actual levels, areas or vectors of disturbance on birds were not in existence.

A 2010 report for Natural England[33] assessed the trend of the 21 Dungeness, Romney Marsh and Rye Bay SSSI species for which sufficient WeBS data were available for a period of 15 years (1991/92 to 2007/08). These species are included in Table 10.[34,35] While the report analysis suggests that overall the SSSI is in a favourable state for most of the species examined, it does highlight some overall downward trends. Some of these reflect broad-scale regional or national patterns (e.g. Bewick's swan, European white-fronted goose and pochard). Others may be due to local adverse pressures and, although the report cannot attribute these declines to specific causes, it indicates that a range of factors are operating across the designated area which influence the suitability of particular areas for species and assemblages. The report provides the following site overview:

> *"Certain parts of the SSSI give particular cause for concern, especially Walland Marsh and Fairfield where numbers of most of the wildfowl species assessed have declined. There is also an indication that birds are under pressure on Lade Sands and Long Pits, although only three species are found on these latter two sectors in sufficient numbers to make an assessment of the trend. Numbers of the grassland plovers have declined on Dungeness Gravel Pits complex suggesting that land surrounding the waterbodies has become less attractive as roosts for these two species. The waterbodies themselves, however, remain in favourable condition as demonstrated by the increase in numbers for most of the dabbling ducks, grebes, coot and cormorant.*
>
> *Areas of the SSSI where the number of birds has increased include Lydd West Gravel Pits and Pett Level where the majority of species with sufficient data to generate trends have either remained stable or increased."*[36]

As some areas become more or less favourable for a particular species, individuals may move to other parts of the designated area. Disturbance which may be caused by recreational activity is another factor which needs to be considered alongside the overall trends and distribution of species: even if recreational activity is

[32] (Lowen, Liley, Underhill-Day, & Whitehouse, 2008) (Natural England, 2009) (Natural England, 2009a)

[33] (Austin & Calbrade, 2010)

[34] Mute swan, wigeon, cormorant, bewick's swan, gadwall, moorhen, european white-fronted goose, teal, coot, greylag goose, mallard, little grebe, pintail, great crested grebe, shoveler, golden plover, pochard, lapwing, tufted duck, sanderling, goldeneye.

[35] "*Species not assessed from the initial list include non-waterbirds (passerines, game birds and raptors) that are not covered by WeBS counts, waterbirds that occur too infrequently or in numbers too low to allow meaningful interpretation of trends (including Pink-footed Goose Anser brachyrhynchus, Bittern Botaurus stellaris, Ruff Philomachus pugnax and Whimbrel Numenius phaeopus) including rare breeding species (Garganey Anas querquedula, Avocet Recurvirostra avocetta), colonial breeding species (gulls and terns) and species with particularly cryptic behaviour that does not lend itself to monitoring of trends by standard WeBS methodology (Snipe Gallinago galinago, Woodcock Scolopax rusticola, Water Rail Rallus aquaticus).*" (Austin & Calbrade, 2010) p13.

[36] (Austin & Calbrade, 2010) p33

not the direct cause of a decline (either spatially or temporally) in a specific site, birds may move into areas where there is more recreational activity. In addition, a consistent pattern of decline across multiple species may be indicative of adverse factors affecting a particular sector. The species showing decline may provide insight into potential causes e.g. are the species are particularly sensitive to disturbance or have similar ecological requirements. It is important that further research and examination of the evidence into trends and distribution of birds across the designated sites is repeated and that it is viewed alongside what is now known through this strategy about recreational activity in the area.

The 'functional land' outside the designated sites, i.e. land which is not designated but which is used by bird species for which the site is designated e.g. for feeding or roosting, is also important for the bird populations. Natural England is undertaking an ongoing study into the use of the wider area including both the designated areas and functional land. This study was not complete at time of drafting this strategy and therefore could not be considered, but will provide a useful evidence base for further updates to the strategy.

WeBS[37] data from 2012 – 2017 were also examined. Five year winter mean population numbers are presented to bring numbers up-to-date.[38] No further analysis of these data was carried out to attempt to determine any changes in bird numbers temporally or in relation to regional or national fluctuations in bird populations as this degree of analysis was beyond the scope of this strategy.

<u>WeBS Alert - Dungeness to Pett Level SPA[39]</u>

Two species are evaluated in this alert: Bewick's swan and shoveler. There are no WeBs alerts for the SPA. Bewick's Swan occurs too infrequently for any meaningful trend to be evaluated. Numbers of shoveler over-wintering on Dungeness to Pett level SPA have been increasing long term. Consequently, no alerts have been triggered for this species.

[37] Wetland Bird Survey, the monitoring scheme for non-breeding UK waterbirds.

[38] Full five year data were not available for all sectors.

[39] This covers smaller geographical extent of SPA prior to re-notification.

*Table 10: Birds of Strategy Area and Potential Sensitivity to Recreational Activity*

| Species or Assemblage[40] | General Vulnerability to Impacts Arising from Recreation and Access (where information available) | Application to the Strategy Area |
|---|---|---|
| **Winter waterbird assemblage**[SPA,RAMSAR] | Humans and their activities may be regarded as threats by birds, eliciting a behavioural reaction in response to the threat. This may be in the form of behaviour changes such as flight from the threat, increased vigilance or reduced feeding. However, not all human activities cause disturbance to birds, and not all birds show an equal level of response to the same activity.<br><br>There is a large body of research around disturbance to birds, which highlights high levels of variation and an area of concern in many protected sites. The Defra European Marine 8 at high risk from recreation and a further 66 at medium risk (Natural England, 2010a) and 44% of Natura 2000 Site Improvement Plans indicated that public access/disturbance is having or is likely to have an impact in the future on site features (Natural England, 2015).<br><br>Some of the pertinent issues around bird disturbance and recreational activity are:<br>• Birds may habituate to frequent and relatively benign events and noises – they may be sensitive to routine activities (such as walking or cycling) in some areas but ignore them in others;<br>• The response from birds may vary temporally, often being more sensitive in early winter;<br>• The response may depend on the habits of the birds – large flocks or those which feed higher on the shore may be more sensitive. The distances from the source of disturbance at which the birds show a response is also variable; | The following issues have been highlighted in the Site Improvement Plan for the Dungeness Natura sites (Natural England, 2014d):<br><br>• Vehicles crossing the SPA and pSPA[42] intertidal areas or off track disturb birds all year but particularly during over wintering season on the foreshore;<br>• Public access onto over-wintering feeding and roosting areas particularly on the intertidal zones on the coast could impact on SPA bird features;<br>• Recreational activities such as dog walking, (particularly if dogs are let off the lead) and sand yachting at low tide across the intertidal areas on the shingle, dune and saltmarsh habitats, may disturb SPA and pSPA birds;<br>• Recreational waterborne activities such as kite boarding, wind surfing throughout the tidal cycle across the large intertidal areas on the dune and saltmarsh habitats may disturb SPA and pSPA birds.<br><br>Defra European Marine Site Risk Review highlights the mud and sandflats and SPA birds of the Dungeness, Romney Marsh and Rye Bay SPA at medium risk from recreation (Natural England, 2010a). |

[40] Natura qualifying species or assemblages are denoted by superscript annotation following the name of the species (or assemblage).

[42] pSPA at the time of this report, now SPA.

| Species or Assemblage[40] | General Vulnerability to Impacts Arising from Recreation and Access (where information available) | Application to the Strategy Area |
|---|---|---|
| | • Birds may be less sensitive when the need to feed is greatest – i.e. they may respond more when they are in better condition;<br>• Human activity may reduce predation from other sources, e.g. from raptors;<br>• Watersports, including kite surfing, sand yachting and kite buggies create disturbance through loud noises through hitting the water, being a presence in the air and using large areas of the foreshore at speed. High responses recorded at Teesmouth and Cleveland Coast European Marine Site (birds took flight or left area c40% of time) (Linaker, 2012).<br>• (references for all above[41])<br><br>Whether the level of human disturbance causes a detrimental impact on individuals or the population is a complex issue. However, the effects of human disturbance may act in unison with other pressures on the site, including changes in ecological conditions, to add to the overall pressures on a species or population.<br><br>Displacement may occur, which may be temporary or prolonged. Habitat which is otherwise suitable may be underutilised if disturbance is sufficiently severe. For example a "weekend effect" has been noted in waterbirds seeking refuge in quieter lake on Sunday, when surrounding lakes busy with recreational activity and watersports (range of species in study: shoveler, mallard, gadwall, pochard, tufted duck, goldeneye, coot and great crested grebe) (Evans & Warrington, 1997). The availability of alternative undisturbed habitat or feeding areas is a factor in determining the | Natural England's All England Coastal Path scoping exercise:<br><br>• Dungeness Romney Marsh and Rye Bay SPA - walkers on the low tide areas (Natural England, 2014a) |

[41] (Beale & Monaghan, 2004), (Davenport & Davenport, 2006), (Gill, 2007), (Hill, et al., 1997), (Madsen, 1995), (Natural England, 2009) (Suffolk Coast and Heaths AONB, Natural England and Wildside Ecology, 2012), (Ruddock & Whitfield, 2007), (Smith, 2004),(Stillman, et al., 2009).

| Species or Assemblage[40] | General Vulnerability to Impacts Arising from Recreation and Access (where information available) | Application to the Strategy Area |
|---|---|---|
| | degree to which this displacement is detrimental to the species or assemblage. The birds may also be able to compensate for feeding loss at other times, for example at night.<br>See also comments under some of the birds listed later in this table. | |
| **Waders** | | |
| **Overall** | • See also above under 'winter waterbird assemblage' for commentary on disturbance of waterbirds and disturbance of birds feeding and roosting on the intertidal areas. | • 2010 report suggested that decreases of golden plover and lapwing at Dungeness Gravel Pits may be due to localised pressure (Austin & Calbrade, 2010). |
| **Ruff**[SPA]<br>*Philomachus pugnax*<br>(wintering) | | • Not included in 2010 report due to insufficient data (low numbers of birds). |
| Sanderling<br>(*Calidris alba)* | • Research shows that sanderlings take avoidance behaviours in response to human approaches but the level of response, distance which they run or fly and the time foraging is reduced depends on many factors, including the distribution of the group and the type of disturbance (e.g. (Roberts & Evans, 1993) (Tarr, Simons, & Pollock, 2010)<br>• The amount of time sanderlings spent foraging was reduced with the number, activity and proximity of people. The most significant negative factor was the presence of free running dogs (Thomas, 2000). | • 2010 report indicated fall in numbers. Fluctuations in numbers (locally and nationally) make interpretation difficult. Evidence of redistribution across SSSI. **Numbers on Lade Sands showing high decline, perhaps indicating adverse pressures on Lade Sands** (Austin & Calbrade, 2010). Concern raised that this fluctuation was due to sea defence work in 2002/3but this could not be directly linked (McMinn, 2006). |
| **Golden plover**[SPA]<br>*Pluvialis apricaria*<br>(wintering) | • Although these birds do feed on intertidal areas, their main feeding habitat is on grasslands. | • Wintering golden plover widely distributed amongst the grazing marshes and other wetlands of the SPA/Ramsar;<br>• 2010 report indicated increase but fluctuations. Significant decline at Fairfield and Dungeness Gravel Pits, increase at Rye Bay. However as there was a regional increase and given the site's importance regionally, any sectors showing declines could be a cause for concern (Austin & Calbrade, 2010). |

| Species or Assemblage[40] | General Vulnerability to Impacts Arising from Recreation and Access (where information available) | Application to the Strategy Area |
|---|---|---|
| Lapwing | | • Lapwing occur widely across the grazing marshes and wetlands of the SPA/Ramsar;<br>• 2010 report indicated fluctuations in numbers which make interpretation difficult, however as there was no regional decline and given the site's importance regionally, any sectors showing declines could be a cause for concern (Dungeness Gravel Pits and Rye Bay) (Austin & Calbrade, 2010). |
| **Dabbling Ducks** | | |
| **Overall** | • Distribution of dabbling ducks can partly result from human disturbance (study showed birds avoiding shooting areas (Madsen, 1995);<br>• Northern **shoveler** and gadwall demonstrated high flight responses to human disturbance (pedestrians, slow and fast moving trucks and bicycles, with higher responses from dabbling ducks to pedestrians and bicycles than to trucks. Birds in closer proximity to road more affected (Pease, Rose, & Butler, 2005);<br>• Teal and **shoveler** flew from pedestrian disturbance within 150m, not returning within 60 minutes. Wigeon were also displaced but lower response behaviour. Teal showed reduced feeding activity. Larger, regular shaped areas recommended with some areas with no access within 150m of birds (Bregnballe, Horsten, & Fox, 2009). | • 2010 report indicated most species of dabbling duck have increased but declines at Walland Marsh and for some species also Fairfield. Increases at Rye Harbour. Report states *"Given the declines on Walland Marsh and Fairfield for all these species in contrast to otherwise stable or increasing numbers, this suggests that dabbling ducks as a group are being displaced from these areas by adverse pressure(s) although currently there appears to be sufficient capacity elsewhere on the SSSI to accommodate these birds. It would be prudent to investigate potential causes for these localised declines further, particularly if there is a possibility that they might have been driven by activities that may impact other parts of the SSSI in the future."* (Austin & Calbrade, 2010). |
| **Shoveler[SPA]**<br>*Anas clypeata*<br>(wintering) | • See above;<br>• Some susceptibility to redistribution apparent in response to recreational activity (Cooke, 1985) | • 2010 report indicated that overall trend of increases since 1990's, but potential redistribution with sharp declines from Walland Marsh, Fairfield and Camber/East Guldeford and increases at Lade Pit and Lydd West Gravel Pits (Austin & Calbrade, 2010); |

| Species or Assemblage[40] | General Vulnerability to Impacts Arising from Recreation and Access (where information available) | Application to the Strategy Area |
|---|---|---|
| Gadwall | • See above;<br>• Marked susceptibility to redistribution apparent in response to recreational activity (Cooke, 1985) | • 2010 report indicated steady increase, movement away from Rye Harbour but SSSI considered favourable for this species (Austin & Calbrade, 2010). |
| Teal | • See above;<br>• Some susceptibility to redistribution apparent in response to recreational activity (Cooke, 1985) | • 2010 report indicated long term increase, although movement from Walland Marsh, Pett Level and Fairfield and increase at Scotney and Lydd West (Austin & Calbrade, 2010). |
| Wigeon | • See above;<br>• Changes in patterns of use of lake due to presence of anglers (Cryer, Linley, Ward, O., & Randerson, 1987) | • 2010 report indicated increase in 1990's and population remaining stable. At time of report decrease at Scotney Pit and Walland Marsh and increase at Lade Pit (Austin & Calbrade, 2010). |
| Pintail | • See above | • 2010 report indicated steady increase over preceding 15 years and SSSI increasingly important for this species. Decline at Rye Bay. (Austin & Calbrade, 2010). |
| Mallard | • See above;<br>• Changes in patterns of use of lake due to presence of anglers (Cryer, Linley, Ward, O., & Randerson, 1987). | • 2010 report indicated that there had been no notable decline in numbers compared with a regional trend of decline for this species (Austin & Calbrade, 2010). |
| **Diving Ducks** | | |
| **Overall** | | • 2010 report indicated declines at Dungeness RSPB Reserve, Lade Pit, Walland Marsh, Camber, East Guldeford, Bretts Pits and Scotney and Lydd. It is unclear to what extent these declines are locally generated as there were also regional declines. However, the report suggests that "*these declines should* [not] *be dismissed and it could be argued that, given the increasing importance of the SSSI to these species in a regional context, any measures that could be taken to prevent further decline should be taken*". (Austin & Calbrade, 2010). |
| Pochard | • Counts of wintering pochard showed that water-based recreational activity displaced birds from lakes with higher use of reserves with restricted bankside access compared to lakes where angling, walking or other bankside activities were | • 2010 report indicated fluctuations but no overall decline in contrast with regional trend. Declines at Rye Harbour, Walland Marsh and Dungeness Gravel Pits, increase at Lydd West Gravel Pits (Austin & Calbrade, 2010). |

| Species or Assemblage[40] | General Vulnerability to Impacts Arising from Recreation and Access (where information available) | Application to the Strategy Area |
|---|---|---|
| | permitted. Lakes with no water-based activity had higher pochard densities (Fox, Jones, Singleton, & Agnew, 1994);<br>• Changes in patterns of use of lake due to presence of anglers (Cryer, Linley, Ward, O., & Randerson, 1987);<br>• Marked susceptibility to redistribution apparent in response to recreational activity (Cooke, 1985) | |
| Goldeneye | • Marked susceptibility to redistribution apparent in response to recreational activity (Cooke, 1985) | • 2010 report indicated low and fluctuating numbers but that SSSI important regionally (Austin & Calbrade, 2010). |
| Tufted duck | | • 2010 report indicated declines at Rye Harbour, Walland Marsh and Dungeness Gravel Pits and increase at Pett Level and Lydd West Gravel Pits (Austin & Calbrade, 2010). |
| **Swans and Geese** | | |
| **Overall** | | • 2010 report indicated Bewick's swan and European white-fronted goose found in small numbers. Declines of both species at Dungeness Gravel Pits and of white-fronted geese at Walland Marsh but likely to be driven by broad-scale patterns (Austin & Calbrade, 2010). |
| **Mute swan**[RAMSAR]<br>*Cygnus olor*<br>(wintering) | • Fishing lines and other fishing litter (e.g. lead weights formerly in use).<br>• Some interruption in foraging from fishing and sailing boats and windsurfing; birds returned after c20minutes (Madsen, 1998). | • **Illicit vehicles and public access/disturbance have been identified as a pressure/threat for Dungeness SAC and Dungeness, Romney Marsh and Rye Bay SPA by Natural England for this species** (Natural England, 2014c);<br>• 2010 report indicated decline in numbers since 1990's, but reflective of regional trends. Also indicated a redistribution of birds from Rye Harbour and Lade Pit (causes are unknown but possibly responding to local pressures); stable at Scotney and Lydd West Gravel Pits (Austin & Calbrade, 2010). |
| **Bewick's swan**[SPA]<br>*Cygnus columbianus bewickii*<br>(wintering) | • Congregate at over-night roosts (also sometimes night-forage), then disperse across fields to forage during the day. Have increasingly taken to foraging on agricultural land and grassland; | • **Illicit vehicles and public access/disturbance have been identified as a pressure/threat for Dungeness SAC and Dungeness, Romney Marsh and Rye Bay SPA by Natural England for this species** (Natural England, 2014c); |

| Species or Assemblage[40] | General Vulnerability to Impacts Arising from Recreation and Access (where information available) | Application to the Strategy Area |
|---|---|---|
| | • Reduced foraging measured in creeks which are open to the public compared to those closed to the public. Flight response to some types of boat (Gyimesi, Frenken, Feige, & Nolet, 2012); | • 2010 report indicated SSSI supports low numbers of this species and only counted at Dungeness RSPB Reserve. Showing high short- and medium-term decline but this is reflective of regional trend (Austin & Calbrade, 2010). |
| European White-fronted Goose | • Species require feeding and roosting areas;<br>• Evidence that birds can be disturbed by human presence, less so by stock. Disturbance from aerial vectors (e.g. small planes) more severe (Owen, 1973);<br>• Smaller flock sizes possibly more vigilant to disturbance (Lazarus, 1978). | • 2010 report indicated declines of this species since 1990's but reflective of regional trends (Austin & Calbrade, 2010). |
| Greylag Goose | • Avoidance behaviour recorded to disturbance by cars, cyclists and pedestrians ('staying a safe distance away') (Steiner & Parz-Gollner, 2002). | • 2010 report indicated increase in species in 15 years of the 2010 report, in line with regional trends. Possible slight redistribution within SSSI (from Scotney and Lydd West to Walland Marsh and Lydd West Gravel Pits). Reflective of this highly mobile species (Austin & Calbrade, 2010). |
| **Others** | | |
| Cormorant | | • 2010 report indicated long term increase (Austin & Calbrade, 2010). |
| Little Grebe | | • 2010 report indicated long term increase but short term decline. Some redistribution of species (Austin & Calbrade, 2010). |
| Great Crested Grebe | | • 2010 report indicated long term increase but short term decline. Some redistribution of species (Austin & Calbrade, 2010). |
| **Bittern**[SPA] *Botaurus stellaris* (wintering) | • Human disturbance and recreational activities can cause damage to the habitat (e.g. trampling in the reeds) and disturbance to the species at critical times. Motorised watersports such as water-skiing or jet skis can also cause noise disturbance and physical damage from the wake of boats etc. (EU Wildlife and Sustainable Farming Project, 2009). | • Main locations Dungeness RSPB Reserve and Rye Harbour LNR. Also occasionally recorded at Pett Level, Brett Pits and Cheyne Court. All areas largely inaccessible to the public and no watersports take place in these areas. There is some fishing occurring on Bretts Pits. |

| Species or Assemblage[40] | General Vulnerability to Impacts Arising from Recreation and Access (where information available) | Application to the Strategy Area |
|---|---|---|
| **Hen harrier**[SPA] *Circus cyaneus* (wintering) | • A range of potential disturbance threats. Aside from shooting, birdwatching, motorcycling and model aeroplane flying were recorded as affecting roosts (Clarke & Watson, 1990);<br>• Habitat requirements predisposes this species to be in proximity to wildfowling activities. | • Traditional winter roost locations across strategy area in areas away from the coast (Natural England and JNCC, 2016). Roost sites are in areas which have no or low numbers of passing visitors and therefore are at low risk of disturbance. |
| **Breeding Birds** | | |
| **Overall** | • There is some evidence of nesting success being reduced due to human disturbance;<br>• Ground-nesting birds may be particularly vulnerable and human disturbance to beach-nesting birds can lead to trampling of eggs and chicks, greater predation of chicks and eggs and reduced foraging (references cited in (Stillman, et al., 2009). | • Site Improvement Plan for Dungeness Natura sites: Disturbance during the bird breeding season from public accessing the territories of sensitive breeding bird species could impact on breeding success. (Natural England, 2014d);<br>• Natural England's All England Coastal Path scoping exercise - Dungeness Romney Marsh and Rye Bay SPA, SSSI and NNR - walkers on the low tide areas, disturbance to breeding birds (Natural England, 2014a). |
| **Marsh harrier** [SPA] *Circus aeruginosus* (breeding) | • Habitat requirements predisposes this species to be in proximity to wildfowling activities.<br>• Nest failures have been attributed to human disturbance but also can show high tolerance of human presence (Fernandez & Azkona, 1993) (Underhill-Day, 1984);<br>• Preferred location of nests (within reedbeds away from land and away from water-reedbed edges), however, may limit risk of human disturbance (Ruddock & Whitfield, 2007). | • Marsh harriers nest at several locations across Romney Marsh, at Dungeness and in the Rye Bay area (Natural England and JNCC, 2016). Nesting sites are in areas which have no or low numbers of passing visitors and therefore are at low risk of disturbance. |
| **Mediterranean gull**[SPA] *Larus melanocephalus* (breeding) | • Ground nesting coastal bird, see above. | • **Illicit vehicles and public access/disturbance have been identified as a pressure/threat for Dungeness SAC and Dungeness, Romney Marsh and Rye Bay SPA by Natural England for this species** (Natural England, 2014c);<br>• The majority of breeding Mediterranean gulls are located at Rye Harbour LNR and occasionally at Pett Level (Natural England and JNCC, 2016). |

| Species or Assemblage[40] | General Vulnerability to Impacts Arising from Recreation and Access (where information available) | Application to the Strategy Area |
|---|---|---|
| **Avocet** [SPA] *Recurvirostra avosetta* (breeding) | • Ground nesting coastal bird, see above. | • The majority of breeding avocet are located at Rye Harbour LNR with small numbers at Dungeness RSPB Reserve and Lydd Ranges (Natural England and JNCC, 2016). |
| **Common tern** [SPA] *Sterna hirundo* (breeding) | • Ground nesting coastal bird, see above. | • **Illicit vehicles and public access/disturbance have been identified as a pressure/threat for Dungeness SAC and Dungeness, Romney Marsh and Rye Bay SPA by Natural England for this species** (Natural England, 2014c)**.**<br>• The majority of breeding common terns between 2004 – 2008 where located at Rye Harbour LNR and Pett Level (Natural England and JNCC, 2016). |
| **Sandwich tern** [SPA] *Sterna sandvicensis* (breeding) | • Ground nesting coastal bird, see above. | • All breeding sandwich terns between 2004 – 2008 where located at Rye Harbour LNR (Natural England and JNCC, 2016). |
| **Little tern** [SPA] *Sterna albifrons* (breeding) | • Ground nesting coastal bird, see above. | • **Illicit vehicles and public access/disturbance have been identified as a pressure/threat for Dungeness SAC and Dungeness, Romney Marsh and Rye Bay SPA by Natural England for this species** (Natural England, 2014c)**;**<br>• All breeding little terns between 2004 – 2008 where located at Rye Harbour LNR (Natural England and JNCC, 2016). |
| **Passage** | | |
| **Aquatic warbler** [SPA] *Acrocephalus paludicola* (passage) | | • Autumn passage migrant in low numbers. Feed in reedbeds and in thick vegetation and very low likelihood for disturbance unless on lakes. Recorded in Pett Level which is largely inaccessible. Possible that occurs elsewhere in designated sites. |

# Strategy Sub-Areas

## Introduction

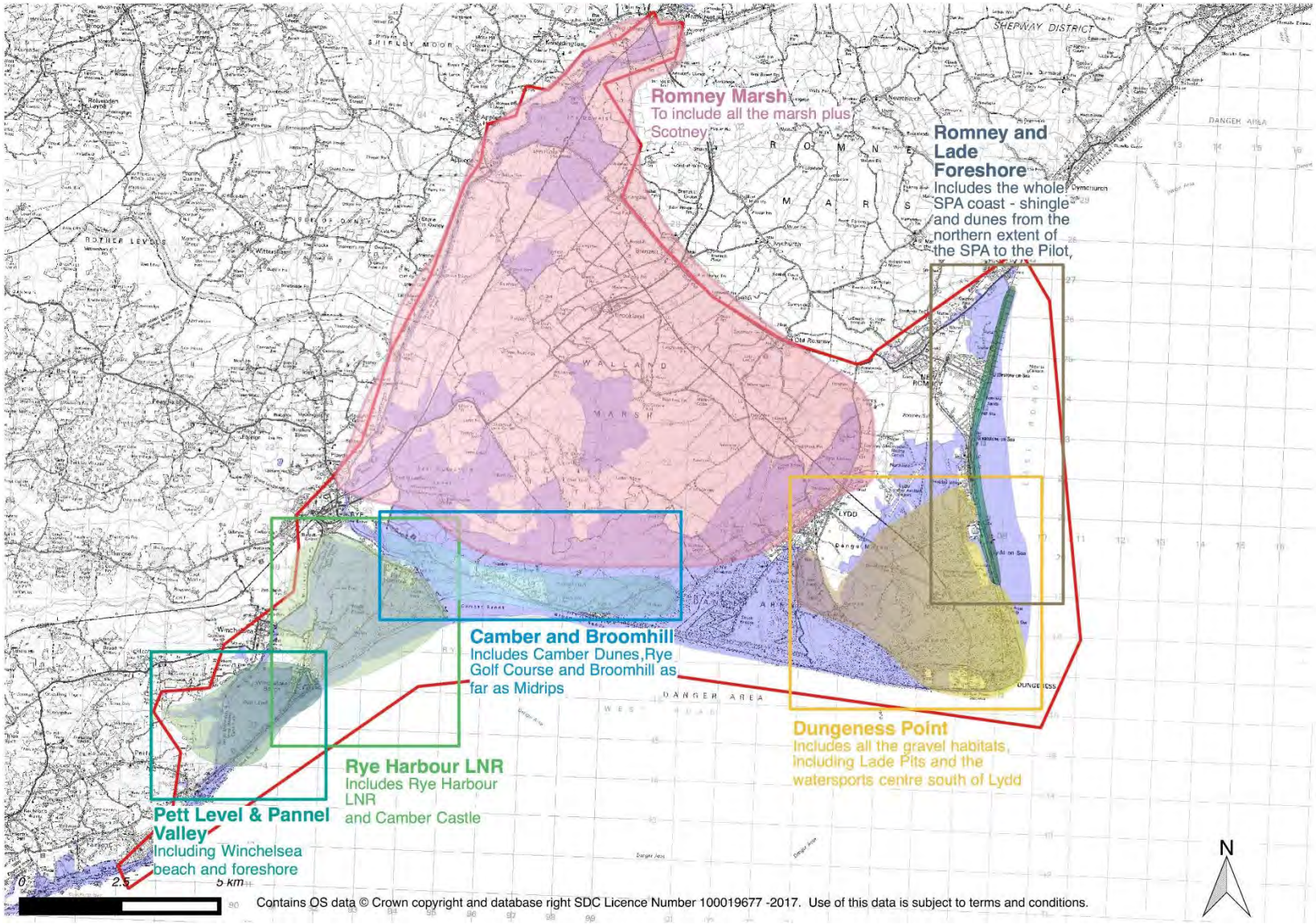
The preceding section outlined those habitats and species which are potentially sensitive to impacts from recreation. As previously outlined, the significance of these impacts in any given site need to be judged on a case-by-case basis to determine the extent to which they might compromise both the conservation objectives and the favourable condition of the key features of the sites (Natural England, 2009a).

The strategy area has been divided into six areas, shown on Plan 12. This section provides an overview of the features of interest of each of these areas alongside the recreation activities which are known to be taking place. This information forms the basis of the actions recommended for each of these areas following consideration alongside the information contained within the additional Appendices supporting the strategy.

### Lydd Ranges

Lydd Ranges has not been included in the detailed assessments. There is a limited network of public and permissive footpaths across Lydd Ranges giving a total linear distance on MoD freehold and leasehold of 27km. There are two restricted byways on MoD land and one restricted byway adjacent (under RSPB ownership). The restricted byways were previously RUPPs and their downgrading has been disputed by local anglers. Public access is permitted within the ranges and along the coastal strip to the south of the ranges but only when military exercises are not taking place. The MoD site management plan (Access and Recreation - Volume 2) states "*in all access provision the least restrictive principle is adopted";* however, in practice, access to the ranges is highly restricted due to military activity and there is very limited open public access. Therefore, the pressure from recreation on the features of interest within the ranges is considered to be limited. There is evidence of localised pressure in favoured angling locations at 'The Galloways' and 'The Lookout'.

***Plan 12: Sub-areas***



# Pett Level and Pannel Valley



*Pannel Valley*

**Overview**

Pett Level is an area of coastal floodplain grazing marsh extending across the low-lying land north of the coast. The Pett Level Preservation Trust (PLPT) manages 18 acres of land near Cliff End village with the remainder of the Level owned and managed by farmers. The Pannel Valley is a small valley running east – west from Wickham Cliff to Pannel Bridge. It is managed as a nature reserve by a local charity, which also owns the Colonel Body Lakes within the Pett Level itself.

This area is important for a range of overwintering birds with the 4th highest number of birds recorded in the latest WeBS five year mean. The area attracts large flocks of wildfowl, feeding waders, birds of prey and evening roosts of starlings. Reedbeds around the pools and in the Pannel Valley attract bearded tit, Cetti's warbler, water rail, barn owl and harriers. In autumn the levels attract great flocks of wagtails, martins and swallows. The area also hosts ground nesting little tern and Mediterranean gull. Water vole are present in the ditches. The Colonel Body Lakes support breeding and wintering waterbirds.

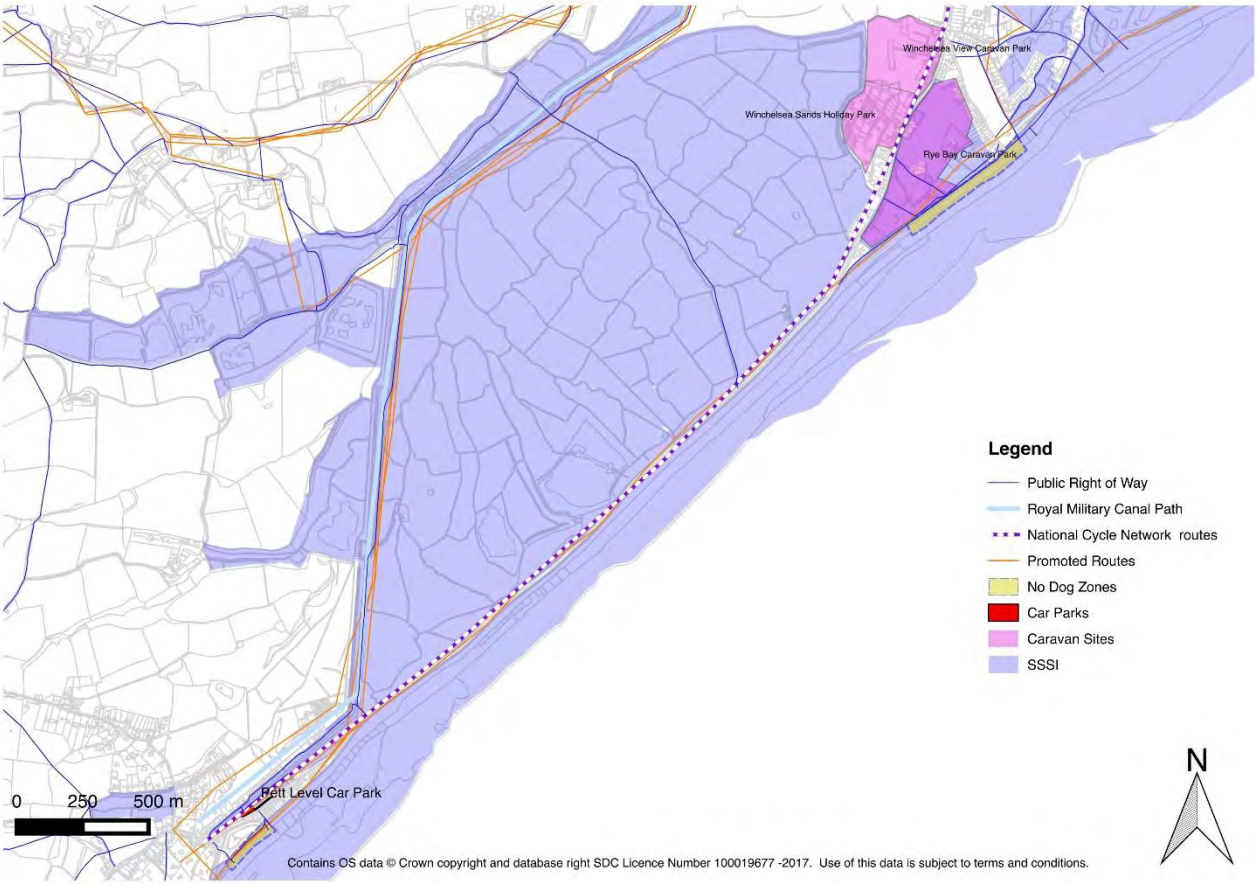
Three out of the six SSSI units which are wholly within this sub-area are in favourable condition, with the remaining three in unfavourable recovering condition. The reasons for unfavourable recovering condition are not due to recreational impacts. There is some evidence of trampling of the annual vegetation of drift lines and perennial vegetation of stony banks as noted in the condition assessment for unit 2 of Hastings Cliffs to Pett Beach SSSI.

Access across Pett Level is limited to rights of way. From discussion with PLPT and other local contacts, few people access the Level and wandering from the rights of way is limited due to the presence of numerous ditches. There is no fishing or wildfowling on the Colonel Body lakes. Most people visit the coast and beach rather than the Level and the Level can be viewed by birdwatchers from the seawall. Pannel Valley is owned by a private Trust and access is restricted.

Pett residents at the workshop of 21st February 2017 indicated that kite surfing was taking place near Winchelsea Beach, although research as not indicated an organised group or club operating from this location. This situation needs to be monitored.

The National Cycle Route 2 hugs the coast around the southern edge of Pett Level, turning inland at Winchelsea. There is a Romney Marsh Countryside Project promoted route number 10 (The Cliff End) around the northern edge of Pett Level. The Royal Military Canal regionally promoted walking route runs around the boundary of this sub-area, joining a section of the Saxon Shore Way.

**Pett Level and Pannel Valley Sub-Area**



| **Pett Level and Pannel Valley** | | | | |
|---|---|---|---|---|
| **Summary**<br><br>Pett Level is particularly important for birds species, but access across Pett Level is generally restricted to rights of way and local evidence indicates that visitor levels are low and that, consequently, levels of disturbance are low. The beach is the most popular area for visitors. There are some areas of vegetated shingle on the foreshore and some evidence of trampling. | | | | |
| **Presence of conservation features known to have potential vulnerability to recreational impacts** | | | | |
| Conservation features known to have potential **high vulnerability** to recreational impacts | Presence/Description | | | Natura qualifying |
| Coastal vegetated shingle communities, including lichen-rich coastal vegetated shingle communities | Vegetated shingle on foreshore | | | ✓ |
| Coastal and floodplain grazing marsh/marshy grassland | Yes – this is the main habitat of the sub-area. Coastal and floodplain grazing marsh and purple moor grass and rush pasture priority habitats. | | | ✗ |
| Breeding ground nesting birds | Ground nesting - little tern[SPA] - avocet[SPA] - Mediterranean gull[SPA]. | | | ✓ |
| Fens | Not present | | | ✓ |
| Dune habitats, especially - Yellow marram dunes, shingle habitats, lichen-rich communities, wet areas in slacks, saltmarshes, steep slopes used for access, foredunes. | Not present | | | ✗ |
| Saltmarsh and mudflat | Not present | | | ✓ |
| Saline lagoons | Not present | | | ✓ |
| Conservation features known to have **some vulnerability** to recreational impacts | Presence/Description[43] | | | Natura qualifying |
| Wintering birds and assemblages and other birds | Bittern[SPA] - mute Swan[RAMSAR] - ruff[SPA] - shoveler[SPA] – golden plover[SPA] - coot[SSSI] - cormorant[SSSI] – gadwall[SSSI] - garganey[SSSI] - great crested grebe[SSSI] – little grebe[SSSI] - pochard[SSSI] - teal[SSSI] – tufted duck[SSSI] – water rail[SSSI] – whimbrel[SSSI] - wigeon[SSSI]<br>Sector important for lapwing. | | | As indicated ✓ |
| Fixed dunes | Not present | | | ✗ |
| Other notable species | Water vole present in ditches | | | ✗ |
| **Condition** | | | | |
| SSSI unit condition | 6 units in sub area (152, 153, 182, 151, 150 of Dungeness, Romney Marsh and Rye Bay SSSI) plus unit 2 of Hastings Cliffs to Pett Beach SSSI. Units 156 and 157 of Dungeness, Romney Marsh and Rye Bay SSSI partially in this sub-area. | 4 units (224ha 40%) favourable condition | 2 units (60%) unfavourable recovering condition | 0 units (%) unfavourable or destroyed |
| Condition from observation or other sources | Dungeness, Romney Marsh and Rye Bay SSSI condition assessment unit 151 (2010): favourable - *"The target for total number of non-breeding birds utilising the site is met. Mean winter peak based upon the WeBs combined total for 2002 to 2007 is 37,387, exceeding the target of 37,000 individuals. Data indicate that the targets for population size of non-breeding birds are exceeded. The only species where data are not currently available is aquatic warbler which has a target of 1 individual. Suitable habitat conditions are present to support this species. For all other species targets for population size are met or exceeded: shoveler, mute swan, Bewick's swan, white-fronted goose, wigeon, gadwall, teal, pochard, little grebe, great crested grebe, cormorant, bittern, hen harrier, coot, golden plover, ruff, sanderling, whimbrel, common sandpiper. Analysis* | | | |

[43] Superscript indicates the designation for which this is a qualifying species in its own right. **NB,** species indicated as SSSI (along with other species not listed) will also form part of the SPA/Ramsar winter assemblage qualifying feature and are therefore also Natura qualifying features in this regard.

<table>
<tr><th colspan="4">Pett Level and Pannel Valley</th></tr>
<tr><td></td><td colspan="3">of data for the last 15 years indicates that, for the 21 species monitored, the site can be considered favourable with regard to wintering bird numbers. Mute swan, greylag, wigeon, gadwall, teal, mallard, pintail, shoveler, little grebe, great crested grebe, cormorant, golden plover have all increased although some have shown declines in parts of the site. Numbers of pochard, tufted duck and goldeneye have fluctuated but there is no evidence of long-term decline. Lapwing and sanderling have also fluctuated and there are signs of re-distribution within site. But numbers are still significant and the site remains important in a regional context for these species. Currently available data do not allow for assessment of breeding bird numbers over the whole site."<br><br><u>Condition assessment Hastings Cliffs to Pett Beach SSSI unit 2 (2009)</u>: unfavourable recovering - "… the `best' most diverse areas PVSB shingle vegetation confined to western end of beach toward cliffs … Groynes built c. 2002-3 at western end beach, some `best' example of PVSB, and notably annual veg (AVDL) <u>Atriplex</u> spp. at this end of site between groynes at tide line toward upper berm, or at top of beach- presumably because beach less disturbed between new groynes (shingle recycling happens further along). Otherwise PVSB in unit confined to back of beach near wall, or as rare individual plants. … Trampling pressure also apparent in some areas."<br><br>Unfavourable status of units not due to recreational activities (due to habitat management and invasive species).<br><br>The pressures noted for the Natura and SSSI sites[44] do not specifically reference Pett Level and the Pannel Valley.</td></tr>
<tr><th colspan="4">Recreation Impacts – Intensity and Extent</th></tr>
<tr><td>Car parking and access points</td><td>There is a free car park at Pett Level, but no numbers. Informal parking along coast road.</td><td>Number of annual visitors</td><td>Not known</td></tr>
<tr><td rowspan="7">Known recreational activities</td><td>Type of Activity</td><td colspan="2">Frequency, seasonality and other comments</td></tr>
<tr><td>Walking and walking with dogs</td><td colspan="2">Access - Royal Military Canal Promoted Walking Route 10 borders Pett Level to the north. Dog walking is allowed on beach, minimally restricted in summer by a Dog Control Order. There is one PRoW across Pett Level.<br>The Phase One survey for this SARMS did not include Pett Level and therefore there is no information on visitors to this sub-area.</td></tr>
<tr><td>Kite-surfing, windsurfing and sand yachting etc.</td><td colspan="2">Possible new kitesurfing operation at Winchelsea beach noted at workshop of 21st February 2017.</td></tr>
<tr><td>Jet skis or speeding boards</td><td colspan="2">Not known (not raised at workshop of 21st February 2017).</td></tr>
<tr><td>Horse riding and cycling</td><td colspan="2">Restricted horse riding is allowed at low tide.<br>NCN Route 2 hugs the coast turning inland at Winchelsea.</td></tr>
<tr><td>Fishing (sea angling or inland)</td><td colspan="2">Not known</td></tr>
<tr><td>Other activities</td><td colspan="2">Wildfowling in Pett Level (not PLPT land)</td></tr>
<tr><td>Evidence of recreational impacts</td><td colspan="3">• Disturbance of birds on foreshore noted at workshop of 21st February 2017;<br>• Disturbance of birds by shooting activity on Pett Level noted at workshop of 21st February 2017;<br>• SSSI condition statement notes trampling pressure on vegetated shingle.</td></tr>
</table>

[44] Trampling pressure especially of annual vegetation of drift lines and early stage of perennial vegetation of stony banks, vehicle pressure, walkers on low tide areas, disturbance to breeding birds (Natural England, 2014a) (Natural England, 2014d).

## Rye Harbour LNR



*Rye Harbour LNR*

**Overview**

This area includes Rye Harbour LNR and Camber Castle. Rye Harbour LNR is maintained by Sussex Wildlife Trust, which also manage Castle Water. The farmland surrounding Camber Castle is owned by private landowners.

This area is very important for a wide range of overwintering birds and has the highest number of birds recorded in the latest WeBS five year mean. It is also the primary location in the strategy area for ground nesting breeding little tern, Sandwich tern, common tern and Mediterranean gull as well as several species of breeding duck and wader. Bittern reliably appear at Castle Water with this area also hosting large flocks of lapwing, golden plover and oystercatcher.

The shingle ridges, although at 500 years old considerable younger than at Dungeness, host coastal vegetated shingle. Ephemeral vegetation is situated near the coast with more established shingle vegetation inland.

There are four main access points into the LNR:

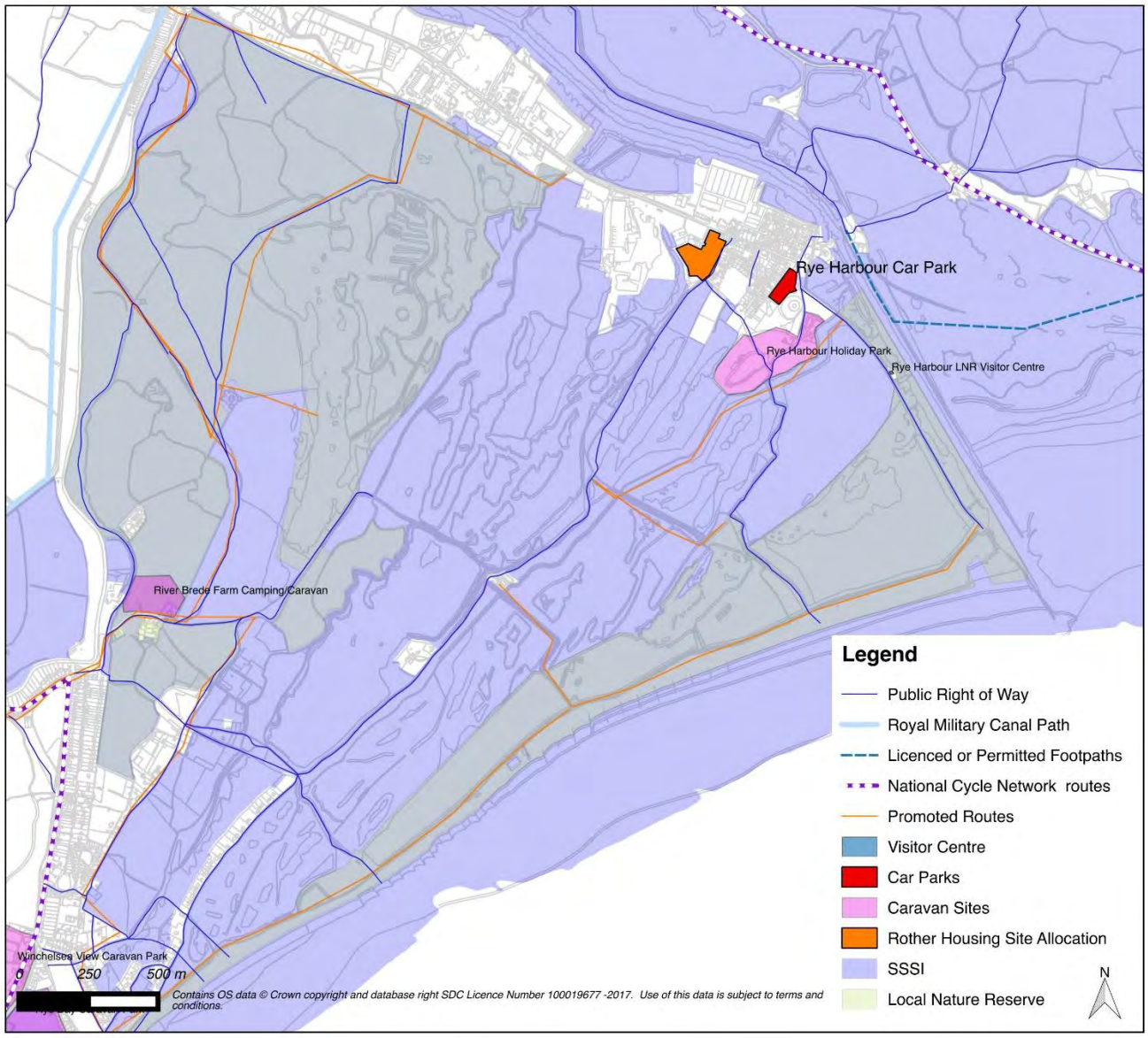
- The main car park (visitors walking past Lime Kiln Cottage) 64.8% of visitors. The track (which is also a cycle route) from the car park to the sea is the busiest part of the site;
- From Winchelsea Beach 15.7%;
- Along the track from Corner Pools (north of Ternery Pool) 13.9%;
- From Rye Harbour Caravan site entrance 5.6%.

Sussex Wildlife Trust produces leaflets and other publications promoting the site. They also run events throughout the year. A detailed report on parking at Rye Harbour by Sussex Wildlife Trust shows that numbers remained fairly stable between 2001 – 2010, with a gradual rise until 2013. Then the figure jumps

sharply, between 2013 to 2015 there was a 20.5% increase in numbers. There are plans to develop a new, larger visitor centre on the site of the existing centre at Lime Kiln Cottage, with greatly enhanced visitor facilities. This will attract more visitors to the reserve and enable more schools and other educational visits to take place.

Public access is permitted in much of the site, with permissive and promoted routes in and around the reserve, as well as PRoW. These are connected to other promoted routes leading to Rye and the Royal Military Canal. RMCP promoted route No 9 'Man the Castle' runs through the reserve, as does the Saxon Shore Way and the Winchelsea Walk. National Cycle Route (NCR) 2 passes close to the site. Cyclists may ride along Harbour Road and along a Sustrans-supported path through the reserve site to Winchelsea Beach under a permissive arrangement with the reserve. No horse riding is permitted. Access is not permitted within fenced areas.

**Rye Harbour Sub-Area**



| **Rye Harbour LNR** | | | | |
|---|---|---|---|---|
| **Summary**<br><br>This site is a very important component part in the Dungeness Complex, both for birds and habitats. It also receives high numbers of visitors and, with when the plans for a new visitor centre come to fruition, this is likely to increase. Despite the high numbers of visitors, access is controlled through fencing and therefore recreational pressure is control and damage is limited. In order to continue to absorb the high number of visitors, this active management needs to continue. There are also opportunities to link this site with the wider Dungeness Complex and to use the high level of visitor interest, plus the new visitor centre, as a location to spread wider messages about the designated sites. | | | | |
| **Presence of conservation features known to have potential vulnerability to recreational impacts** | | | | |
| Conservation features known to have potential **high vulnerability** to recreational impacts | Presence/Description | | | Natura qualifying |
| Coastal vegetated shingle communities including lichen-rich coastal vegetated shingle communities | Vegetated shingle | | | ✓ |
| Coastal and floodplain grazing marsh/marshy grassland | Yes – around Camber Castle | | | ✖ |
| Breeding ground nesting birds | Ground nesting - little tern$^{SPA}$ – Sandwich tern$^{SPA}$ – common tern$^{SPA}$ - avocet$^{SPA}$ - Mediterranean gull$^{SPA}$. | | | ✓ |
| Fens | Not present | | | ✓ |
| Dune habitats, especially - Yellow marram dunes, shingle habitats, lichen-rich communities, wet areas in slacks, saltmarshes, steep slopes used for access, foredunes. | Not present | | | ✖ |
| Saltmarsh and mudflat | Yes, along River Rother. | | | ✓ |
| Saline lagoons | Yes | | | ✓ |
| Conservation features known to have **some vulnerability** to recreational impacts | Presence/Description[45] | | | Natura qualifying |
| Wintering birds and assemblages | Very important site for winter assemblage: bittern$^{SPA}$ - mute swan$^{RAMSAR}$ - ruff$^{SPA}$ - shoveler$^{SPA}$ – golden plover$^{SPA}$ - common sandpiper$^{SSSI}$ - coot$^{SSSI}$ - cormorant$^{SSSI}$ – gadwall$^{SSSI}$ - garganey$^{SSSI}$ - great crested grebe$^{SSSI}$ – little grebe$^{SSSI}$ – pochard$^{SSSI}$ – sanderling$^{SSSI}$ - teal$^{SSSI}$ – tufted duck$^{SSSI}$ – water rail$^{SSSI}$ – whimbrel$^{SSSI}$ - wigeon$^{SSSI}$ – white-fronted goose (European)$^{SSSI}$ | | | As indicated ✓ |
| Fixed dunes | Not present | | | ✖ |
| **Condition** | | | | |
| SSSI unit condition | 4 units in sub area (155-158) (964.9 ha) | 3 units (682.5 ha 71%) favourable condition (155, 156, 158) | 1 units (282.4 ha 29%) unfavourable recovering condition (157) | 0 units (0%) unfavourable or destroyed |
| Condition from observation or other sources | <u>Dungeness, Romney Marsh and Rye Bay SSSI condition assessment unit 157 (2010)</u>: unfavourable recovering – *"This is a very important area for a wide range of designated features including vegetated shingle, saline lagoon, wintering birds, invertebrates and rare plants. Good quality shingle vegetation is present. Parts of the shingle are subject to very low levels of disturbance and are developing the classic range of shingle vegetation types. The saline lagoon and brackish marsh habitats are also in good condition. Part of the unit is currently undergoing* | | | |

[45] Superscript indicates the designation for which this is a qualifying species in its own right. **NB,** species indicated as SSSI (along with other species not listed) will also form part of the SPA/Ramsar winter assemblage qualifying feature and are therefore also Natura qualifying features in this regard.

| **Rye Harbour LNR** | | | |
|---|---|---|---|
| | *major habitat creation to benefit wintering and breeding birds, with some areas grazed, others fenced against predation of large colonies of ground nesting gulls. Grazing is to be expanded across the main area of grassland in the eastern part of the site where the natural topography, short turf with occasional rush tussocks and shallow ephemeral ditches provide very good structure for birds. The wide range of habitats present provide a high diversity of niches for specialist invertebrates of shingle and brackish habitats."*<br><br><u>Dungeness, Romney Marsh and Rye Bay SSSI condition assessment unit 158 (2010)</u>: favourable – *"The target for total number of non-breeding birds utilising the site is met. Mean winter peak based upon the WeBs combined total for 2002 to 2007 is 37,387, exceeding the target of 37,000 individuals. Data indicate that the targets for population size of non-breeding birds are exceeded. The only species where data are not currently available is aquatic warbler which has a target of 1 individual. Suitable habitat conditions are present to support this species. For all other species targets for population size are met or exceeded: shoveler, mute swan, Bewick's swan, white-fronted goose, wigeon, gadwall, teal, pochard, little grebe, great crested grebe, cormorant, bittern, hen harrier, coot, golden plover, ruff, sanderling, whimbrel, common sandpiper.Analysis of data for the last 15 years indicates that, for the 21 species monitored, the site can be considered favourable with regard to wintering bird numbers. Mute swan, greylag, wigeon, gadwall, teal, mallard, pintail, shoveler, little grebe, great crested grebe, cormorant, golden plover have all increased although some have shown declines in parts of the site. Numbers of pochard, tufted duck and goldeneye have fluctuated but there is no evidence of long-term decline. Lapwing and sanderling have also fluctuated and there are signs of re-distribution within site. But numbers are still significant and the site remains important in a regional context for these species. Currently available data do not allow for assessment of breeding bird numbers over the whole site."* | | |
| **Recreation Impacts – Intensity and Extent** | | | |
| Car parking and access points | Rye Harbour Car Park is free and has 180 spaces. Most people access the site from this entrance, although there are three other entrances (see above). | Number of annual visitors | Around 300,000 per annum and increasing. |
| Known recreational activities | Type of Activity | Frequency, seasonality and other comments | |
| | Walking and walking with dogs | There are permissive walking routes through the LNR and there are promoted routes in and around the LNR, as well as PROW. These are connected to other promoted routes leading to Rye and the Royal Military Canal.<br>The visitor surveys carried out part of the Phase One evidence base for this strategy recorded the main activity at Rye Harbour reserve as walking (44% of visitors) (both with and without dogs). Most (51%) visitors come to the site equally all year. | |
| | Kite-surfing, windsurfing and sand yachting etc. | No | |
| | Jet skis or speeding boards | No | |
| | Horse riding and cycling | No horse riding allowed.<br>NCN 2 borders the site.<br>There is a traffic free cycle route from the main car park at Rye Harbour which follows the Harbour Road and the coast and joins NCN at Winchelsea Beach. This route is very popular. | |
| | Fishing (sea angling or inland) | Not known. | |

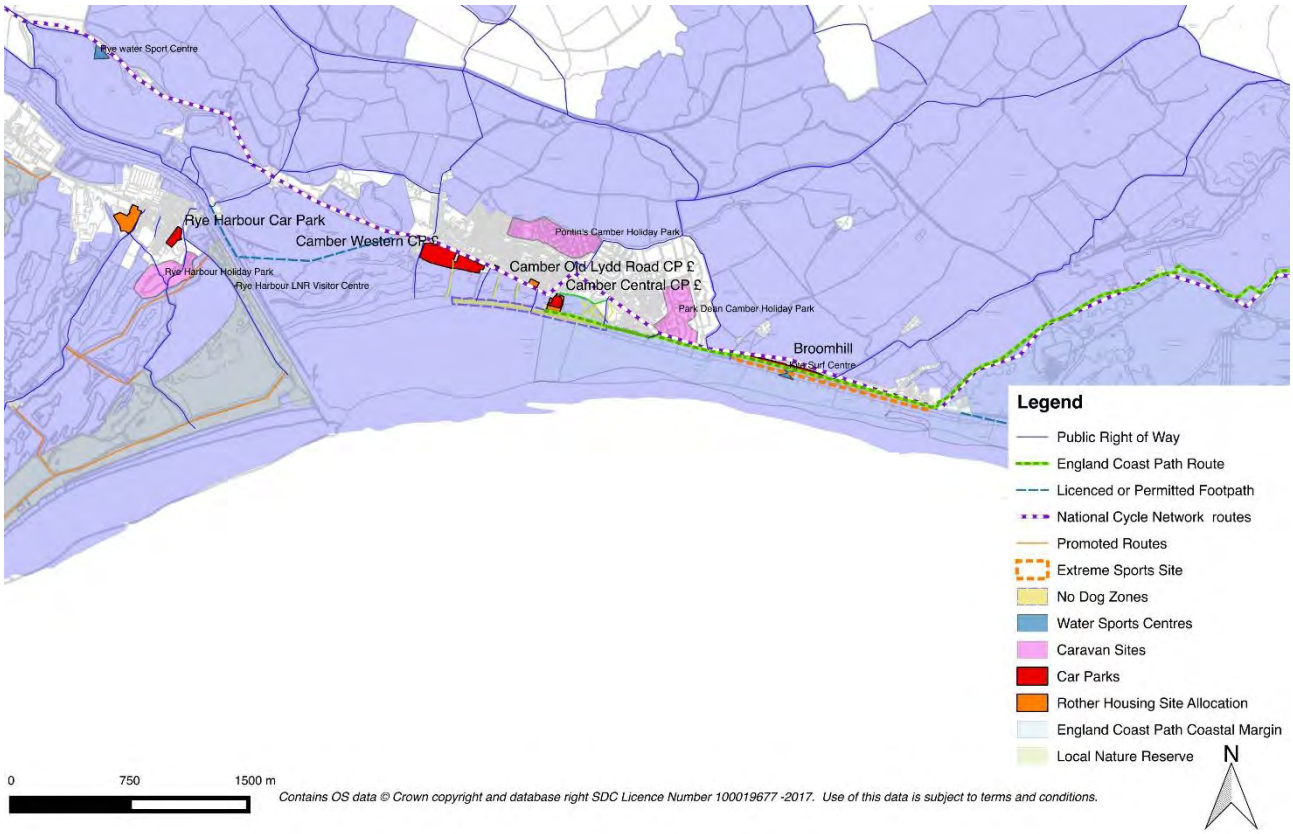
| Rye Harbour LNR | | |
|---|---|---|
| | Other activities | Wildlife watching is a popular activity. 72% of wildlife watchers who responded to the online survey conducted as part of the Phase I evidence base for this strategy went to Rye Harbour and Winchelsea. It was also the main activity at this site, with 54% of respondents to the survey overall stating this as the reason for visiting. |
| Evidence of recreational impacts | • High numbers of visitors but access is controlled through fencing;<br>• Some evidence of access to a small area of saltmarsh near Lime Kiln Cottage. | |

# Camber Dunes and Broomhill

Creative Commons diamondgeezer

*Camber dunes and beach in April*

### Camber and Broomhill Sub-Area



**Overview**

This area includes the coastal hinterland from Rye to The Midrips. It includes Rye Harbour Farm and gravel pits, Rye Saltings and Camber Road (Northpoint) Pits, Camber dunes and Rye Golf Course and the foreshore at Broomhill Sands.

Rye Harbour Farm, Rye Saltings and Camber Road Pits

The saltmarsh, former gravel pits and farmland bordering the River Rother contain saltmarsh and mudflat habitat and are part of the SPA and Ramsar. Intertidal areas are grazed by sheep and are ideal for geese, gulls, ducks and waders. The area is used as feeding and roosting habitat by a wide range of waterbirds, including mallard, pochard, tufted duck, little grebe, cormorant, coot, lapwing, curlew and redshank. Some waders use the site as a roost site and feeding area when nearby estuarine and coastal habitats are covered at high tide.

Camber Dunes

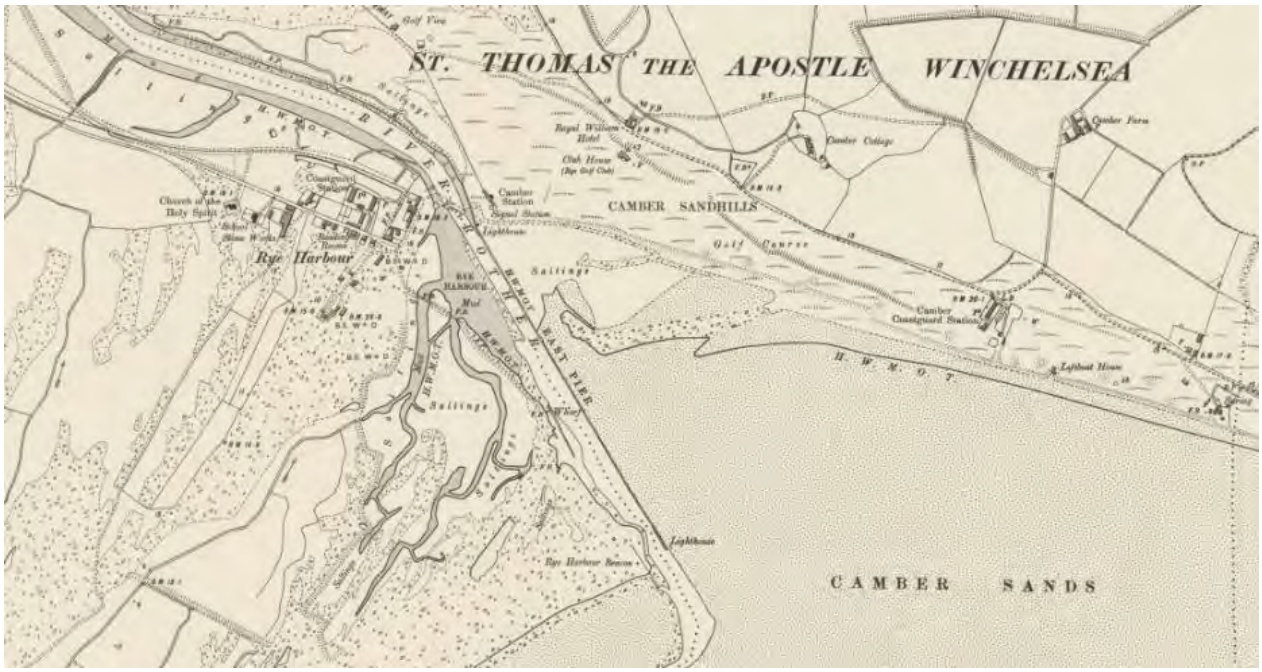
There are two distinct sections to the Camber Dunes system. To the north is Rye Golf Course on the stabilised dunes. This area has a range of species present, with the golf course following a management plan approved by Natural England. Access to this section is limited to rights of way and a permissive path.

The mobile/fore dunes are owned by three landowners. Rye Harbour Golf Club own the western extent, East Sussex County Council the mid-section and Rother District Council the eastern section. There is no structured co-ordination between the three landowners.

The dunes themselves are mainly covered by the SSSI designation, with only a small part falling within the SPA and Ramsar. The SSSI citation notes for the Camber dunes unit (which includes the stabilised dunes at Rye Golf Course): "*This is a very important area of dune grassland supporting a number of scarce plants. The western end of unit is under golf course management and exhibits a variety of stabilised dune habitats with a high degree of botanic diversity and some extreme terrain. Frequent species include lady's bedstraw, wild carrot and devils-bit scabious occasional, with smaller amounts of autumn hawkbit, hare's foot clover, orchids, marsh fern, milkwort, sea holly, sea beet and sea kale. In areas of exposed shingle mosses and lichens dominate with mouse-ear hawkweed. Of note is the occurrence of autumn ladies tresses. There are scattered damp hollows and ephemeral ditches with reed and a range of large sedges. Of note in this community is the uncommon marsh mallow.*"[46]

The dunes are accreting and have advanced sea-wards significantly since the early part of the 20th Century, see below (1897 courtesy of Ordnance Survey). The dunes therefore continue to be a dynamic and mobile system.

[46] https://designatedsites.naturalengland.org.uk/UnitDetail.aspx?UnitId=1029440 accessed 24th January 2017.




The high visitor numbers and consequent erosion causing (sometimes severe) blowouts is an acknowledged issue at Camber Dunes. The 2010 Natural England report[47] states:

> *Two main management issues occur across the Camber dune system; dune deflation causing redistribution of sand into adjacent properties, roads and footpaths, and growth and spread of unwanted sea buckthorn vegetation.*

It further clearly details the causes and consequences of dune destabilisation*:*

> *The main factor contributing to dune deflation at Camber is the large numbers of recreational visitors that enter the dunes each summer. Currently, there is no control on where visitors can access the dune system, resulting in large-scale trampling and loss of the dune vegetation which is essential for dune stabilisation. In addition, many high tides cover the beach and visitors move landward into the dunes. People also shelter from the wind amongst the dunes and children jump and slide down the unvegetated portions of the dunes, causing instability and avalanching.*
>
> *Destruction of the vegetation allows the sand that was previously bound by roots to become mobile again. Wind action erodes the exposed loose sand, forming blow-outs. Relatively large areas of lower-lying, heavily disturbed unvegetated sand occur adjacent to both sides of the main car park, toilets and shops, where most visitor activity takes place and where access to the dunes is convenient and easy ... It is likely that these blow-outs have gradually enlarged and lowered over time and larger areas of dune may be affected in the future. That is, the lowered areas act as wind gaps through which airflow is funnelled. Enlargement occurs by a positive feedback mechanism where the existence of the depression creates additional turbulence and*

[47] (Royal Haskoning for Natural England, 2010)

*wind scour which erodes sand from the edges and bottom of the blowout. Areas elsewhere in the dune system are less disturbed.*

The areas of blow outs are greatest around the Camber Sands Car Park (the car park furthest east) (see photo next page (Royal Haskoning for Natural England, 2010)). Some works were carried out to stabilise the dunes in this area following the publication of the report, but this work has not continued. A recommendation was made to restrict public access around the Camber Sands car park.


Six paths cross the dunes from Camber village. Three of these are public rights of way. The erosion is greatest around the Camber Sands car park, with additional erosion visible around the access paths. Erosion is less on the western extent of the dunes and along the western-most footpath which passes the Coastguard cottages (see below, © Google Earth imagery, 2015).

The beach is also cleaned regularly up to the base of the sand dunes to keep the area clean and safe for visitors, which can potentially add to destabilisation.

Camber to Broomhill Foreshore

The beach to the foot of the dunes is within the Dungeness, Romney Marsh and Rye Bay SPA. Camber Sands is included within the Rye Bay WeBS count sector but the short section of foreshore to the east at Broomhill Sands is not subject to any regular bird surveys. The entire foreshore provides suitable feeding habitat at low tide for wading birds such as oystercatcher, ringed plover, sanderling, dunlin and curlew

Access

Camber beach is a highly visited area, particularly in the summer when numbers can reach 25k visitors per day. Visitors to the Camber (central and Western) car parks totalled 201k in 2016; an increase of 17% between 2013 and 2016.

There are several access points across the dunes to the beach; three PRoWs and two permitted routes. The England Coastal Path is open as far as the main Camber car park, with work to begin the next section of route (which will pass the dunes) due to begin in 2017/18. There is a private road to the riverside/saltings and Harbour Master's Office and from here there is a permissive footpath across the golf course (these are not promoted and are mainly used by local people). There are rights of way following the River Rother. National Cycle Route 2 links Rye with Camber.

There is access via a private road to the riverside/saltings to the Harbour Master's Office and from here there is a permissive footpath across the golf course, mostly used by locals. During the summer months, there are isolated illegal car parking problems – particularly along the private road - and sometimes tourists can be found wandering through the course in an effort to get to the beach. This may be due to visitors trying to avoid the car parking fees at Camber.

Rye Watersports Centre (Northpoint Lake) gives lessons in kitesurfing, windsurfing, dinghy sailing and stand up paddle boarding. Opening in winter is restricted to Wed – Sun, with 7 days a week opening from Easter.

Broomhill Sands is a nationally renowned kite surfing area.

## Camber Dunes and Broomhill

**Summary**

This area is visited all year round and has very high numbers of visitors in the summer. There is clear evidence of damage to the dunes through high visitor numbers, which causes 'blow outs' and erosion. There are very high numbers of kite surfers at Broomhill. Although the Phase One surveys indicate that numbers in the winter are less than in the summer, there is a lack of information on seasonality and whether disturbance events are caused to the birds of the SPA. There may also be impacts in the 'shoulder season' in spring and autumn. Rye Watersports Centre (Northpoint Lake) is also important for overwintering birds. Opening is currently limited in the winter. Access to the saltmarsh alongside the River Rother is difficult and discussion with EA Harbour Master and Rye Golf Club would indicate low numbers of visitors in this area. The Camber SPD is recommending promoted walks into Romney Marsh which would increase visitors to this quiet area (see Romney Marsh sub-area).

| **Presence of conservation features known to have potential vulnerability to recreational impacts** | | | | |
|---|---|---|---|---|
| Conservation features known to have potential **high vulnerability** to recreational impacts | | Presence/Description | | Natura qualifying |
| Coastal vegetated shingle communities including lichen-rich coastal vegetated shingle communities | | Vegetated shingle at Broomhill Sands, around Jury's Gut and in The Midrips (limited accessibility). | | ✓ |
| Coastal and floodplain grazing marsh/marshy grassland | | Yes | | ✖ |
| Breeding ground nesting birds | | Yes in The Midrips (limited accessibility) | | ✓ |
| Fens | | Not present | | ✓ |
| Dune habitats, especially - Yellow marram dunes, shingle habitats, lichen-rich communities, wet areas in slacks, saltmarshes, steep slopes used for access, foredunes. | | Yes | | ✖ |
| Saltmarsh and mudflat | | Yes, along River Rother. | | ✓ |
| Saline lagoons | | No | | ✓ |
| Conservation features known to have **some vulnerability** to recreational impacts | | Presence/Description[48] | | Natura qualifying |
| Wintering birds and assemblages | | mute swan$^{RAMSAR}$ - ruff$^{SPA}$ - shoveler$^{SPA}$ (low numbers) – golden plover $^{SPA}$<br><br>common sandpiper$^{SSSI}$ - coot$^{SSSI}$ - cormorant$^{SSSI}$ – gadwall$^{SSSI}$ - great crested grebe$^{SSSI}$ – little grebe$^{SSSI}$ – pochard$^{SSSI}$ (low numbers) – sanderling$^{SSSI}$ - teal$^{SSSI}$ – tufted duck$^{SSSI}$ (low numbers) – whimbrel$^{SSSI}$ - wigeon$^{SSSI}$<br><br>Winter hen harrier$^{SPA}$ roost and breeding avocet$^{SPA}$ in The Midrips | | As indicated ✓ |
| Fixed dunes | | Yes on Rye Golf Course | | ✖ |
| **Condition** | | | | |
| SSSI unit condition | 5 units in sub area (566 ha) | 3 units (46% 262ha) favourable condition | 2 units (54% 304 ha) unfavourable recovering condition | 0 units unfavourable or destroyed |

[48] Superscript indicates the designation for which this is a qualifying species in its own right. **NB,** species indicated as SSSI (along with other species not listed) will also form part of the SPA/Ramsar winter assemblage qualifying feature and are therefore also Natura qualifying features in this regard.

| Camber Dunes and Broomhill | | | |
|---|---|---|---|
| Condition from observation or other sources | SSSI unit condition statement (Unit 161 – Camber dunes and Rye Golf Course - unfavourable recovering in 2003 and 2010): *There are no negative indicators in this part of the unit* [Rye Golf Course]*. The eastern end of unit has mobile dunes at an early stage of stabilisation with heavy erosion in places. Marram grass planting is taking place to promote stabilisation. The system at this point is backed by a road, buildings and a stabilising wall in places with willow and sea buckthorn scrub. Due to the effects of erosion the unit is considered to be in unfavourable but recovering condition as efforts are being made to remedy this*."[49]<br><br>SSSI unit condition statement (Unit 159 - Camber Foreshore – unfavourable recovering 2013): *"Good number of sanderlings and gulls feeding. Stonemason worms, lugworms and great variety of shells and seaweeds noted. Good strandline. Beach cleaning in summer months by RDC due to litter problems. High recreational pressure."*[50] | | |
| **Recreation Impacts – Intensity and Extent** | | | |
| Car parking and access points | Camber Central Main – 170 spaces, Pay & Display<br>Camber Central Overflow – 130 spaces, Pay & Display<br>Camber Western – 800 spaces, Pay on Entry<br>Old Lydd Road – 80 spaces, Pay & Display<br>Broomhill Sands – no numbers, free. | Number of annual visitors | Total numbers unknown - visitors to the Camber (central and Western) car parks totalled 201k in 2016; an increase of 17% between 2013 and 2016.<br>Up to 25k people each day at Camber Sands in peak season.<br>Camber Western was the busiest (of the all the 8 survey sites) with the highest number of surveys (185) and the greatest number of visitor parties with children. |
| Known recreational activities | Type of Activity | Frequency, seasonality and other comments | |
| | Walking and walking with dogs | There are access points on to the dunes from the car parks and from PROW to the beach in several locations, there are many informal routes through the dunes.<br>The highest number of visitor groups (of all 8 survey sites in the Phase One survey) with dogs was recorded at Camber Western (90). | |
| | Kite-surfing, windsurfing and sand yachting etc. | Kite surfing is allowed in a restricted area on Broomhill Sands.<br>Rye Water Sports Centre runs courses throughout the year at Northpoint Lake.<br>The online survey for Phase One indicated that kite surfers visited less in the winter, but this would warrant further observation. | |
| | Jet skis or speeding boards | There is no information on jet skis. | |
| | Horse riding and cycling | Horse riding on Camber Beach is restricted in summer to early morning and evening at low tide. Traps are not permitted. Horses can access the foreshore beyond Jury's Gap onto the foreshore of Lydd Ranges (anecdotally this sometimes happens).<br>NCN Route 2 runs westward along coast road past golf course and eastward around Lydd Ranges | |
| | Fishing (sea angling or inland) | There is angling at the lake at Rye Water sports (near the golf club) | |

[49] https://designatedsites.naturalengland.org.uk/UnitDetail.aspx?UnitId=1029440 accessed 24th January 2017.

[50] https://designatedsites.naturalengland.org.uk/UnitDetail.aspx?UnitId=1029438 accessed 24th January 2017.

| Camber Dunes and Broomhill | | |
|---|---|---|
| | Other activities | Filming on Camber Sands and the Dunes is mentioned on the visit 1066 country website. It is a useful site for 'desert shots'.<br>The Rother website says barbeques should be held at the western end of beach, and barbeques in the dunes area illegal. |
| Evidence of recreational impacts | • Disturbance of birds by dogs on Camber foreshore noted at workshop of 21st February 2017;<br>• Increase in bait digging at Camber and area noted at workshop of 21st February 2017;<br>• Fewer dogs and walkers from Broomhill eastwards, but dogs run free in The Midrips, noted at workshop of 21st February 2017;<br>• Clear and longstanding evidence of erosion to dunes by visitor pressure – noted in management plan and in SSSI condition statement;<br>• Some kitesurfing takes place in the winter, but this requires further investigation to determine numbers and levels of disturbance. | |

# Dungeness Point



***Dungeness Point***

**Overview**

Shingle Vegetation

All shingle vegetation is sensitive to trampling to some degree. However, lichen-rich vegetation types are highly vulnerable (as previously outlined) and damage may take many years to reverse (if at all). Other shingle grassland vegetation (*Crambe maritima* and *Arrhenatherum*) is also highly vulnerable to trampling. Plans 13 and 14 show the location of the most sensitive shingle vegetation types in the Dungeness Point sub-area. The plans show that highly vulnerable vegetation communities are located across this sub area. The plans also highlight the primary succession of the vegetation, from *Crambe* and strandline vegetation, to *Arrhenatherum* grassland, through to *Cystisus* scrub (not shown on the plans) to the calcifuge, lichen rich vegetation communities. The mapping presented dates from 1989. The vegetation communities and evidence of trampling impact were surveyed in 2015 in order to bring understanding of succession processes, vegetation changes and pressures on the vegetation up to date. The report has not been published and therefore the findings were not available in drafting this strategy (although some limited results and commentary was shared). Examination of this report will be critical in strengthening the evidence base for this strategy.

Based on the evidence available, the areas with highest trampling pressure are:

- Around Dungeness Point - in particular around the RHDR station/café, the lighthouse and the car park. Visitors arrive at 'the end of the line', then walk around this area, often seeking a route to the sea;
- The eastern coast around Lade and Lydd-on-sea – both the shingle between the road and the sea (included in Romney and Lade Foreshore sub-area) and the areas to the west of the houses (inland);
- Other specific locations on the south coast, such as Denge Marsh and the Galloways (angling access points).

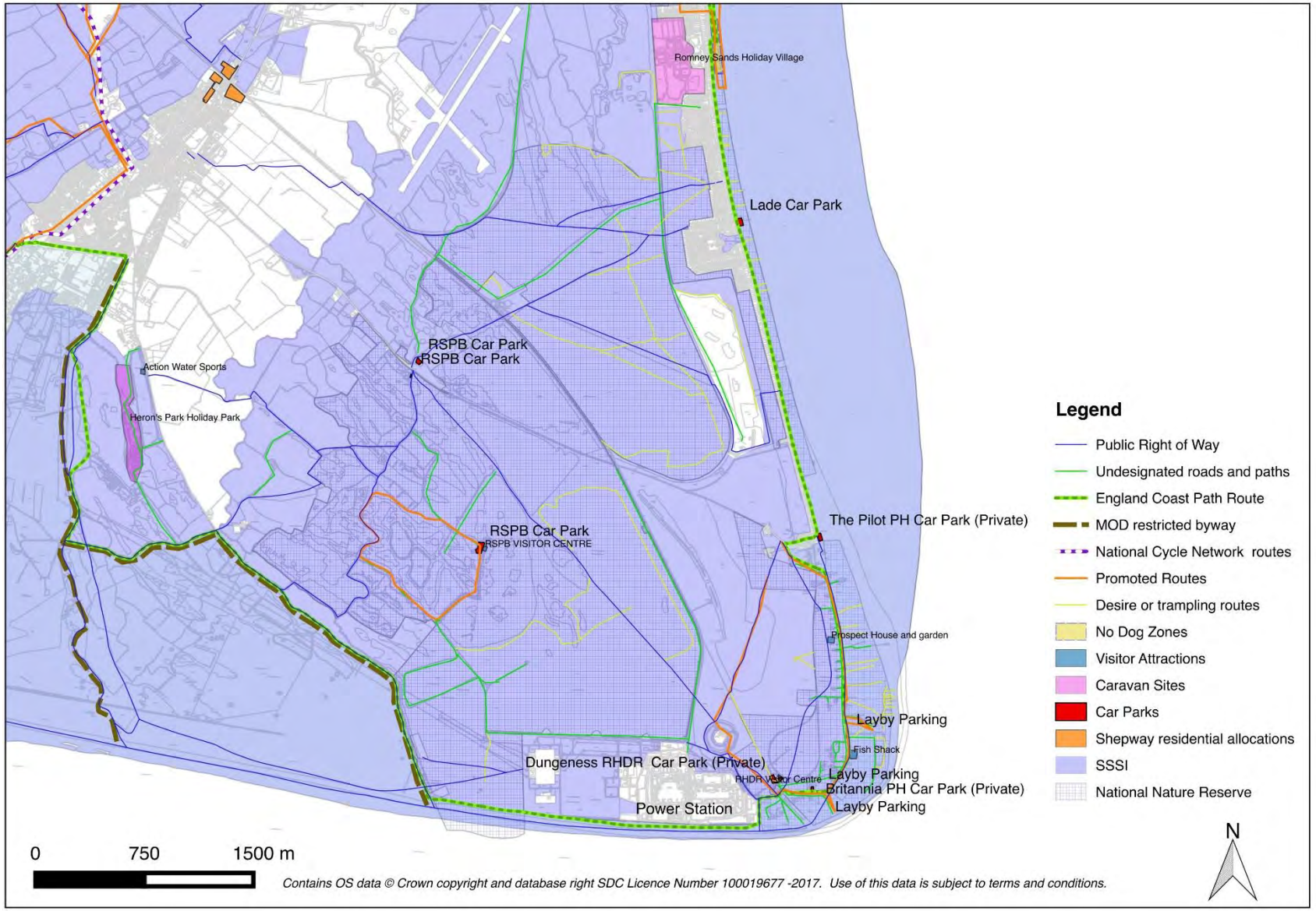
There are many other paths evident, which have been mapped, see plan on next page. Some of these are caused by recreational use while others are historic.

Birds

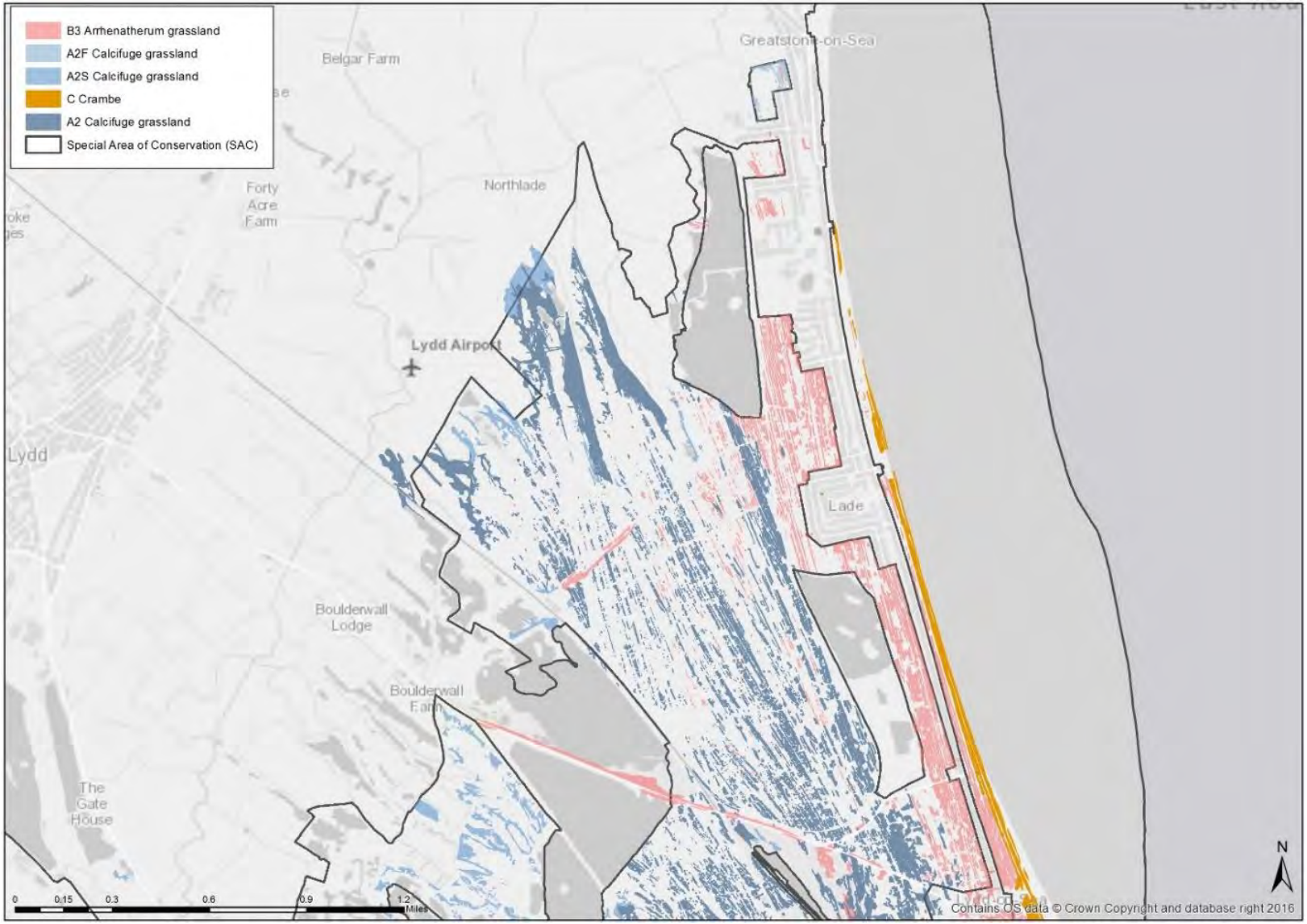
Dungeness Point is also a very important component of the SPA and Ramsar. There are several flooded former gravel workings which are important for waterbirds and ducks which form a complex of waterbird habitat in and around Dungeness Point. The relationship between the pits and the availability of a range of waterbodies contributes to the importance of the area for waterbirds. Within this sub-area are:

- **Lydd Watersports** (Brett's Pits WeBS core count sector; also Heron's Park and Action Watersports) – lakes formed by gravel workings to the south of Lydd, now a watersports centre and campsite. Included in the SPA extension/Ramsar designation due to importance for three species of wintering waterbirds, including 8% (27 individuals) of the cormorants. These species use the open water areas for feeding and roosting. In total, at the time of the SPA extension, Lydd Watersports holds 850-900 waterbirds during the non-breeding season;
- **RSPB Dungeness Reserve** - The RSPB own or manage several parcels of land, including the main RSPB reserve to the south of Dungeness Road and the ARC pits to the north of Dungeness Road. Included with the RSPB reserve are the Open and Fossil Pits, which are naturally occurring waterbodies, plus saline lagoons;
- **Lade Pit** – important for overwintering waterbirds, especially duck species. At the time of the SPA extension, Lade Pit was used by greater than 5% of the Dungeness, Romney Marsh and Rye Bay totals of five species of wintering and passage waterbirds, including 11% (32 individuals) of the gadwall, 14% (68 individuals) of the shoveler and 14% (111 individuals) of the pochard. These species use the open water areas for feeding and roosting. In total, Lade Pit holds more than 1,300 waterbirds during the non-breeding season. Some duck species have increased in Lade Pit since the SPA designation, possibly in response to increased pressure around Walland Marsh and Fairfield (Austin & Calbrade, 2010);
- **The Long Pits** - part of the overall complex of pits, also supports wintering bittern.

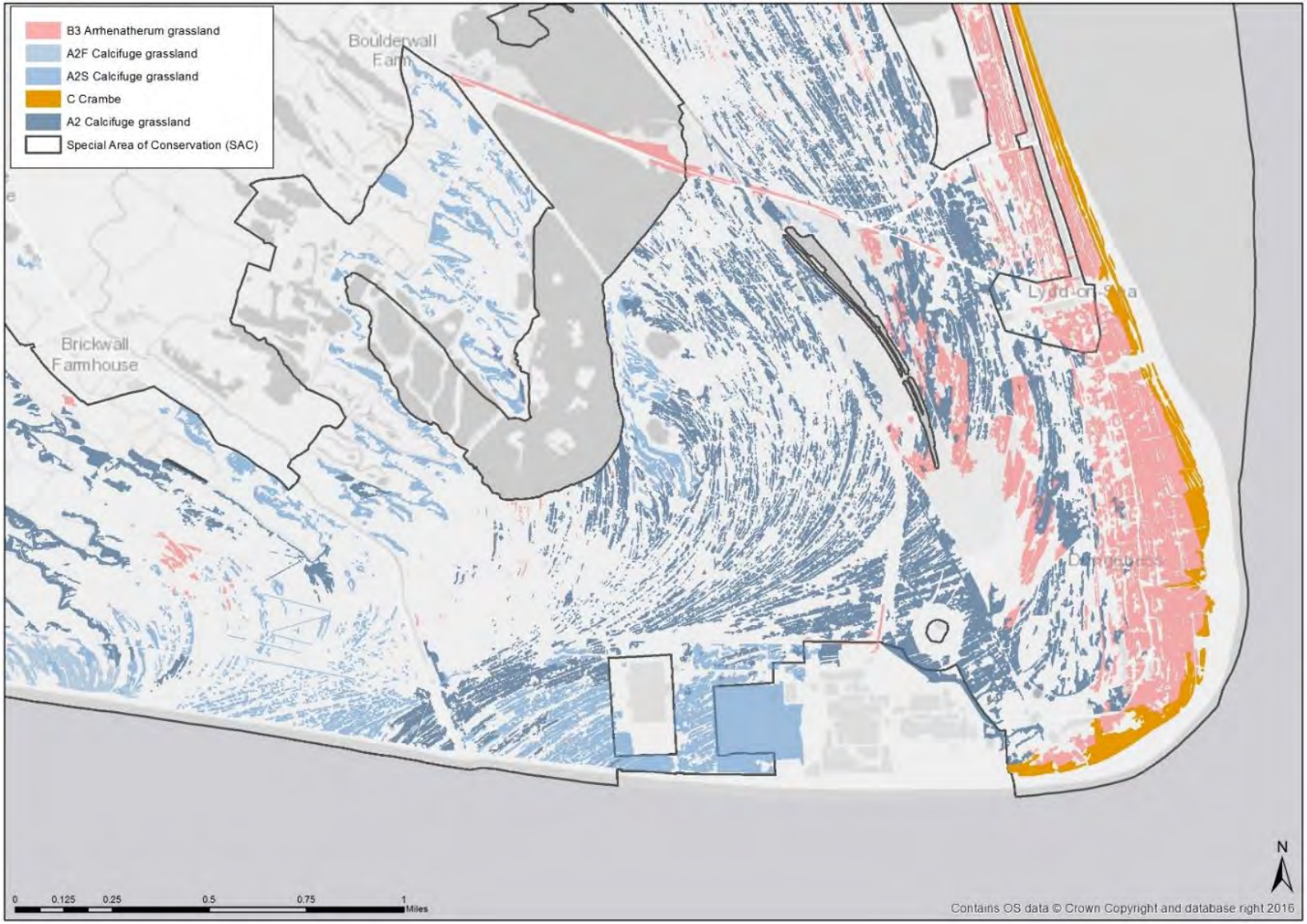
**Dungeness Sub-area**



***Plan 13: Highly Vulnerable Shingle Vegetation – Dungeness North***



***Plan 14: Highly Vulnerable Shingle Vegetation – Dungeness Point***



Access

The main access to Dungeness Point is from the public highway or via PRoW. Visitors may also access on foot from the England Coastal Path or The Pilot. Anglers access coast through a lockable barrier just off the estate road; also along Dengemarsh Road and The Galloways where there are informal parking areas. There are worn tyre tracks along the beach at these points along the coastal frontage of the Ranges and eastwards towards the power stations.

The RSPB Reserve is accessed from Dungeness Road by vehicle along a long, unmade track to the visitor centre and main car park. There is a small satellite car park at the road entrance, and a further car park on the opposite side of the RSPB entrance (the 'ARC' car park). There are visitor trails from the RSPB visitor centre and ARC car park.

The England Coastal Path follows the coast around the sub-area as far as the MoD Ranges where it diverts landward around the perimeter of the Lydd Ranges before returning to the coast at Jury's Gap.

Around Lade Pits there are only two areas where people can recreate and exercise their dogs, and both these areas are sensitive. While there is not yet published evidence to support damage to vegetation in this area, and no local data on visitor numbers, there is visible evidence of trampling.

There are some complex access issues in this sub-area. Dungeness Point is in private ownership[51] and yet it is assumed by visitors to be publicly accessible. This situation has evolved over time and is, in effect, encouraged by an open landscape with no boundary fences or walls, few apparent access restrictions and little evidence of enforcement. There are signboards on the site, but the wording on these is very detailed, and visitors either follow the pattern of others' use or, if they are regular visitors, will be accustomed to free and easy access. Tracks have been worn across the shingle, vehicles park along the estate road, sometimes on the shingle, and some vehicles drive over the shingle. Visitors on foot regularly approach Prospect Cottage and its garden and other residential dwellings. 4x4's and other vehicles regularly park on the side of the road and sometimes drive across the shingle.

[51] Except an area of restricted CROW Act land owned by Natural England.

| Dungeness Point | | | | |
|---|---|---|---|---|
| **Summary**<br><br>A highly sensitive and highly visited area with visitor numbers increasing. Clear signs of trampling lines across the vegetated shingle both to the coast and inland. Known damage from vehicles accessing the shingle. There is a range of complex access issues in this area which need to be addressed. | | | | |
| **Presence of conservation features known to have potential vulnerability to recreational impacts** | | | | |
| Conservation features known to have potential **high vulnerability** to recreational impacts | Presence/Description | | | Natura qualifying |
| Coastal vegetated shingle communities including lichen-rich coastal vegetated shingle communities | Vegetated shingle | | | ✓ |
| Coastal and floodplain grazing marsh/marshy grassland | Not present | | | ✖ |
| Breeding ground nesting birds | Ground nesting - little tern[SPA] – Sandwich tern[SPA] – common tern[SPA] - avocet[SPA] - Mediterranean gull[SPA]. | | | ✓ |
| Fens | Yes but largely in RSPB reserve with few visitors (off the nature trail). | | | ✓ |
| Dune habitats, especially - Yellow marram dunes, shingle habitats, lichen-rich communities, wet areas in slacks, saltmarshes, steep slopes used for access, foredunes. | Not present | | | ✖ |
| Saltmarsh and mudflat | Not present | | | ✓ |
| Saline lagoons | Yes but largely in RSPB reserve with few visitors (off the nature trail). | | | ✓ |
| Conservation features known to have **some vulnerability** to recreational impacts | Presence/Description[52] | | | Natura qualifying |
| Wintering birds and assemblages | Very important site for winter assemblage: bittern[SPA] - mute swan[RAMSAR] - ruff[SPA] - shoveler[SPA] – golden plover[SPA]<br>common sandpiper[SSSI] - coot[SSSI] - cormorant[SSSI] – gadwall[SSSI] - garganey[SSSI] - great crested grebe[SSSI] – little grebe[SSSI] – pochard[SSSI] – sanderling[SSSI] - teal[SSSI] – tufted duck[SSSI] – water rail[SSSI] – whimbrel[SSSI] - wigeon[SSSI] – white-fronted goose (European)[SSSI] | | | As indicated ✓ |
| Fixed dunes | Not present | | | ✖ |
| **Condition** | | | | |
| SSSI unit condition | 48 units in sub area[53] (1774 ha) | 37 units (1399 ha 79%) favourable condition | 10 units (363 ha 20%) unfavourable recovering condition | 1 unit (11 ha 1%) unfavourable declining |
| Condition from observation or other sources | Evidence of trampling and vehicle damage, plus litter.<br><br>Forthcoming condition assessment of vegetated shingle will be essential to provide more evidence (not available for this report). | | | |

[52] Superscript indicates the designation for which this is a qualifying species in its own right. **NB,** species indicated as SSSI (along with other species not listed) will also form part of the SPA/Ramsar winter assemblage qualifying feature and are therefore also Natura qualifying features in this regard.

[53] Does not include areas which are not accessible (e.g. around Lydd Airport) or Lydd Ranges, although it is acknowledged there is some access to the latter.

| Dungeness Point | | | |
|---|---|---|---|
| **Recreation Impacts – Intensity and Extent** | | | |
| Car parking and access points | RH&DR Car Park Station and Visitor Centre – free.<br>Private car parking at the Pilot and Britannia Pubs.<br>RSPB visitor centre.<br>No numbers available. | Number of annual visitors | Around 130k visitors per annum arriving at Dungeness by the RHDR train. Capacity for up to 20% growth.<br>No accurate record of number of visitors at Dungeness Point – estimates in the range of 600k to 1m but no evidence for this number. EDF aiming to install a traffic counter in 2017.<br>The majority of visitors (61% in on-site survey) travel more than 55km to Dungeness Point;<br>And the average distance travelled to the site by day trippers was 82.6km; the furthest was 210km, and the furthest for holiday makers was 381km. |
| Known recreational activities | Type of Activity | Frequency, seasonality and other comments | |
| | Walking and walking with dogs | Fifth Continent promoted route.<br>PROW run through site. England Coastal path.<br>Undesignated routes. Many desire lines and trampling routes. Many visitors walk off-route and onto the shingle and towards the sea.<br>In the onsite Phase One visitor surveys the main activity cited by the most visitors in the on-site survey was walking (without a dog - 22%).<br>When asked why visitors chose to visit this site the highest response (30%) was 'to see the landscape of Dungeness'. Dungeness was also the most popular alternative site for visitors at all the other survey sites.<br>In the Phase One online survey, 15% of respondents visit in the winter (the highest percentage of all the sites in the winter);<br>Dungeness Point was the third most visited site overall by walkers. | |
| | Kite-surfing, windsurfing and sand yachting etc. | No | |
| | Jet skis or speeding boards | No | |
| | Horse riding and cycling | Access - Cycling on roadways but no NCN path.<br>No records of horse riding but thought at low level (shingle difficult for horses) | |
| | Fishing (sea angling or inland) | In the Phase One online survey the most popular main activity at Dungeness Point was fishing (73%), and for Long Pits it was equal for fishing and wildlife watching (31% for each).<br>Of the respondents to the online survey who were fishing from the land, 79% were at Dungeness Point and 8% at Long Pits. | |
| | Other activities | Use of 4x4 vehicles is a problem especially where vehicles move onto the shingle (especially in angling area). | |
| Evidence of recreational impacts | As previous. | | |

## Romney and Lade Foreshore

Creative Commons Pete Tedder

*Greatstone*

**Overview**

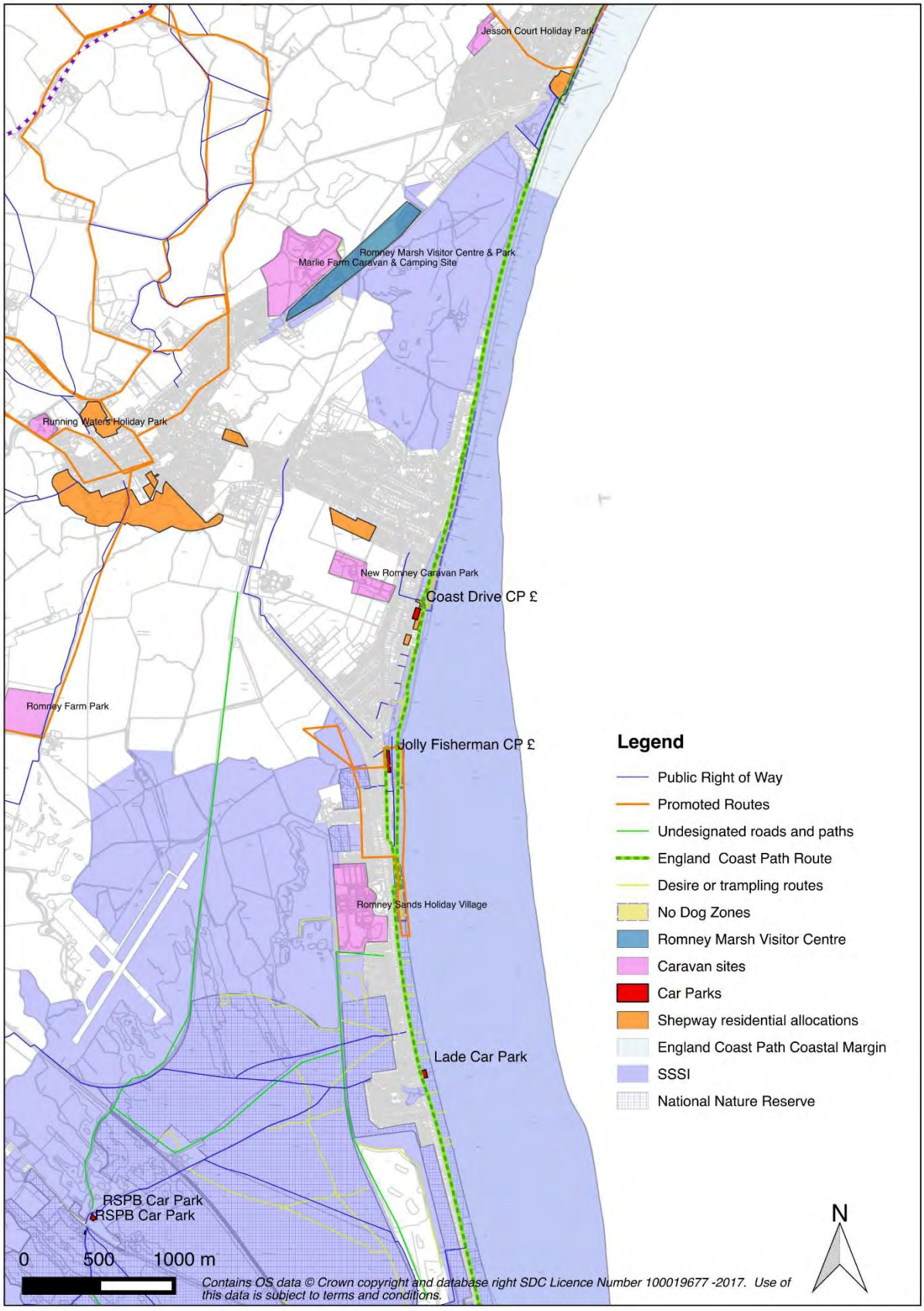
This area incorporates the coastal strip from The Pilot restaurant to the northern extend of the SPA at St Mary's Bay (the coast south of The Pilot and the inland areas area covered in the Dungeness Point section).

Lade Sands is important for the SPA's population of sanderling and great created grebe. Great crested grebes feed in the shallow waters over the intertidal zone at high tide, whilst sanderling feed at low tide on the extensive intertidal mudflats and sandflats. However, numbers of sanderling at Lade Sands have decreased in recent years. Lade Sands also has oystercatcher, curlew, dunlin and knot. There is no WeBS recording for the core sector covering Romney Sands and therefore no data are available for this part of the SPA.

There is a high degree of interconnection between the foreshore and coast and the hinterland, with birds using different areas depending on tides and disturbance. Most waders use the shingle ridge to roost at high tide but the location may depend on disturbance,[54] moving to another temporarily quiet spot if disturbed. Some, including oystercatchers, bar-tailed godwit, grey plover, knot and redshank which will move towards Lade Pit and the surrounding shingle area. Therefore, although Dungeness Point is treated as a separate sub-section in this strategy, this connection in terms of responses to disturbance on the coast is important. Curlew will move to inland the pasture fields on the north side of Dunes Road or all the way across to fields at Caldicot Lane, north of Lydd.

[54] Mostly by general walkers/dog walkers, kite surfing and sand buggies on the mud/sand flats, *pers comm* Dungeness Bird Observatory and S. McMinn Marsh Environmental Ecological Consultants.

**Romney Sands and Lade Sands Sub-Area**



From Lade south to The Pilot the coastline is fringed with coastal vegetated shingle. Along this stretch are several trampled routes linking the road to the sea. There is a short section of boardwalk linking Lade car park to the sea. There is also a wide trampled section from The Pilot car park to the sea.

Greatstone Dunes extend around 1.5km along Greatstone-on-Sea frontage and demonstrate a successional sequence of dune habitats from foredune to mobile dune and dune scrub habitats. The transitions between vegetated shingle beach and foredune communities are important features, especially where the dunes meet shingle in the north and south. The dunes are fronted by a non-continuous strandline community with the foredunes supporting a narrow band of sand couch vegetation in front of the marram-dominated mobile dunes which form the majority of the dune system. There are also areas of sea-buckthorn scrub and semi-fixed and fixed dune grassland to the north where the dunes are wider. Examination of aerial photographs reveals the transition from mobile dunes in the 1940's to more stabilised dunes following the increase of housing along the seafront and the further increase in scrub cover in recent years (see below © Google Earth).

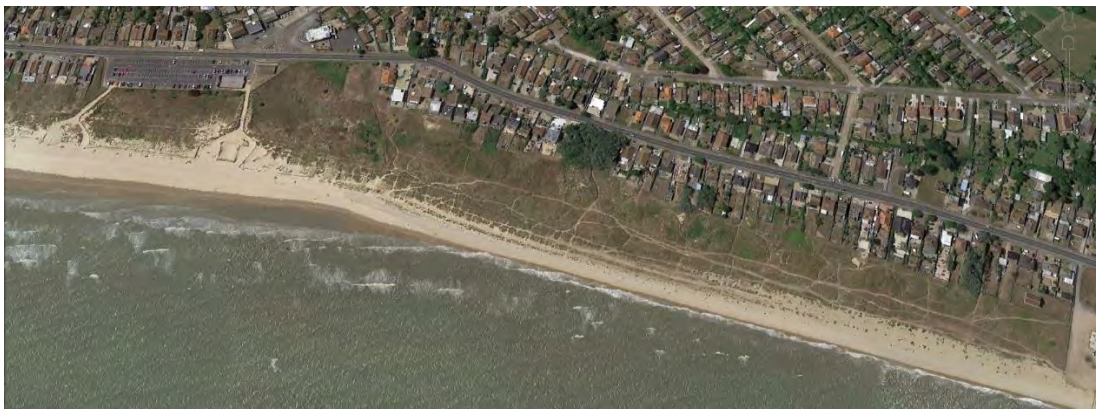
There are several paths through the dunes, especially along the northern section where the dunes are semi-fixed and less undulating so walking is easier and there is less sand fencing to impede visitors. A high proportion of the dunes in this area are covered by trampled paths. The aerial photos also reveal the extensive network of desire lines across the dunes alongside the paths leading from properties adjacent to the dunes. Where the dunes are more mobile around the Jolly Fisherman car park there is evidence of localised erosion around the entrances from the car park where people walking along the dune tops clamber down to the main path linking the car park to the sea, perhaps caused by unclear marking of the footpath. However, sand fencing is preventing extensive access ingress and limiting the impact in this area of high traffic. South of the Jolly Fisherman car park, the dunes are more mobile and potentially more sensitive, but are less easy to access due to sand fencing restricting access, although there is a footpath.

1940

1960

1990

2013



The Greatstone and Littlestone beaches are used by sand buggies, land yachts and land sailing. There are itinerant set-ups who give lessons and provide equipment. The Kitesurf centre at Broomhill offers lessons from here and another group offers lessons based at the Varne Boat Club. It is not known whether all of the operators are registered with The British Federation of Sand and Land Yacht Clubs. One operator states that they operate at weekends and not during the school summer holidays due to visitor numbers on the beach. Greatstone is also used by kitesurfers. Consumer trends show that the appetite for active and adventure leisure experiences is very strong and increasing. The latest Watersports Participation Survey report (Arkenford, 2013) shows leisure time spend at the beach at the highest level since the start of the survey in 2002; and participation in watersports at its highest level since 2007. The Phase One online survey indicated that winter use was low but this requires further investigation.

Dog walking is popular, particularly for local residents who do not have access to local spaces which are not sensitive. In the Phase One on site survey walking with a dog was the main activity for 58% at Greatstone and 42% at Lade.

Signage describing footpath routes (PRoW, England Coastal Path and the promoted 'Greatstone Shingle Trail' ) is poor in this location and there are many different styles of sign which have the potential to confuse the visitor. At the Jolly Fisherman Car Park, the England Coastal Path diverges into two alternative routes for a short stretch to provide an alternative route at high tide.

| Romney and Lade Foreshore | | | | |
|---|---|---|---|---|
| **Summary**<br><br>Activities with the potential to disturb SPA birds taking place - all year round dog walking on foreshore and land yachting, kite surfing etc. Many desire lines on the dunes, especially in the areas which have stabilised to the north of the Jolly Fisherman/around The Varne. Evidence of trampling of vegetated shingle especially around The Pilot and at various points where access is concentrated (e.g. opposite Romney Sands Holiday Park). | | | | |
| **Presence of conservation features known to have potential vulnerability to recreational impacts** | | | | |
| Conservation features known to have potential **high vulnerability** to recreational impacts | Presence/Description | | | Natura qualifying |
| Coastal vegetated shingle communities including lichen-rich coastal vegetated shingle communities | Vegetated shingle from Lade south to The Pilot | | | ✓ |
| Coastal and floodplain grazing marsh/marshy grassland | Not present. | | | ✖ |
| Breeding ground nesting birds | Not present. | | | ✓ |
| Fens | Not present | | | ✓ |
| Dune habitats, especially - Yellow marram dunes, shingle habitats, lichen-rich communities, wet areas in slacks, saltmarshes, steep slopes used for access, foredunes. | Yes – Greatstone Dunes (also stabilised dunes at Romney Warren Golf Course). | | | ✖ |
| Saltmarsh and mudflat | Not present. | | | ✓ |
| Saline lagoons | Not present. | | | ✓ |
| Conservation features known to have **some vulnerability** to recreational impacts | Presence/Description[55] | | | Natura qualifying |
| Wintering birds and assemblages | Lade Sands important site for sanderling$^{SSSI}$ and great crested grebe$^{SSSI}$ | | | As indicated ✓ |
| Fixed dunes | Not present. | | | ✖ |
| **Condition** | | | | |
| SSSI unit condition | 11 units in sub area (1267 ha) | 7 units (1108ha 87.5%) favourable condition | 4 units (159ha 22.5%) unfavourable recovering condition | 0 units unfavourable or destroyed |
| Condition from observation or other sources | No adverse recreational impacts are noted for any of the SSSI units. The reasons for units being in unfavourable recovering condition are due to other reasons (invasive species, too much scrub, too much bare earth due to rabbit grazing).<br><br>There is concern over falling sanderling numbers on Lade and Romney Sands foreshore; although the cause of this is not known.<br><br>There are clear eroded paths across the foreshore in several locations. There is a wide eroded path linking The Pilot car park to the sea.<br><br>High density of paths across Greatstone Dunes and some localised erosion evident around the Jolly Fisherman car park. | | | |
| **Recreation Impacts – Intensity and Extent** | | | | |
| Car parking and access points | Jolly Fisherman – 130 spaces, Pay & Display<br>Lade – 50 spaces, Free | Number of annual visitors | Visitor numbers not known. | |

[55] Superscript indicates the designation for which this is a qualifying species in its own right. **NB,** species indicated as SSSI (along with other species not listed) will also form part of the SPA/Ramsar winter assemblage qualifying feature and are therefore also Natura qualifying features in this regard.

| Romney and Lade Foreshore | | |
|---|---|---|
| Known recreational activities | Type of Activity | Frequency, seasonality and other comments |
| | Walking and walking with dogs | Access – confusing network of paths as described above. Dog walkers use this stretch of beach, these are mostly local users. Two stretches of beach are subject to a Dog Control order 1st May to 30th September, but these are badly signed. |
| | Kite-surfing, windsurfing and sand yachting etc. | Yes – around Lade Car Park and along the adjacent stretch of beach. |
| | Jet skis or speeding boards | Not known |
| | Horse riding and cycling | Horse riding is allowed – the byelaws in Shepway are unclear about restrictions. |
| | Fishing (sea angling or inland) | Not known |
| | Other activities | - |
| Evidence of recreational impacts | • Disturbance of birds by dogs, especially in the northern part of this area and at Lade Sands, noted at workshop of 21st February 2017;<br>• Disturbance of birds by kitesurfing and sand yachting noted at workshop of 21st February;<br>• Increase in bait digging noted at workshop of 21st February 2017;<br>• Many desire lines across Greatstone dunes;<br>• Evidence of trampling of vegetated shingle especially at The Pilot. | |

# Romney Marsh



*St Thomas à Becket – Fairfield*

**Overview**

This area covers the large inland area of Romney Marsh, including areas of SPA and Ramsar at Warehorne and The Dowels and Snargate (near Appledore), Fairfield, Cheyne Court (Walland Marsh), East Guldeford Levels, Wainway Wall and Scotney Court and Lydd West Gravel Pits. The designation covers areas of grazing marsh, wetlands, reedbeds, pools and other waterbodies. The wider Romney Marsh area is also criss-crossed with ditches and streams (extending beyond the sub-area described in this strategy). Romney Marsh, both within and outside of the designated areas, provides important functional land for several birds species, which move across the entire SPA area for feeding and roosting on a daily basis. Birds also move over a longer time period, as areas become more or less favourable to them. This is evident in the movement of duck and waterbirds species between the pools and waterbodies in this area and those in other sub-areas of this report, including Lade Pits, Dungeness RSPB and the waterbodies outside of the reserve and the pools around Camber and Guldeford. The area is of prime importance for the geese, swans, lapwing and golden plover populations of the SSSI in particular.

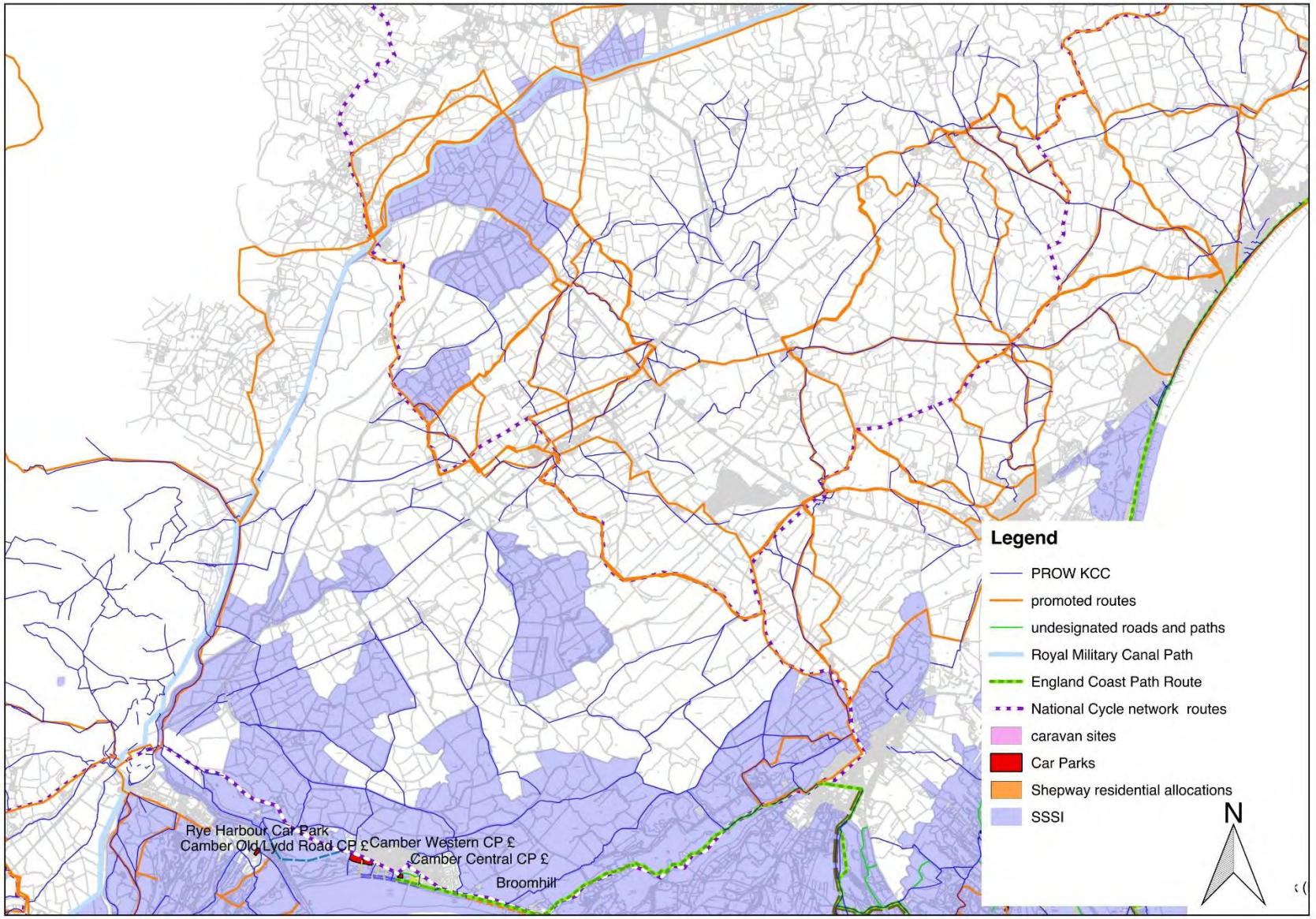
To the north of this area, Warehorne, The Dowels and Snargate and Fairfield form discrete areas of SSSI which are also Ramsar (Fairfield is also within the SPA). The number of birds in Fairfield using the latest 5 year BTO WeBS counts, but further investigation would be required to confirm an overall trend. Further to the south is Walland Marsh, around Little Cheyne Farm. This area held the highest count of birds of all the BTO WeBS core count areas at the time of the SPA extension and Ramsar designation, but there have been no counts here during the last 5 years to assess current numbers. The 2010 review of birds in the SPA showed a decline which was highly significant in wigeon, gadwall, shoveler, pochard, moorhen and coot.[56]

Scotney and Lydd West Gravel Pits run north-east to south-west between Lydd and The Midrips. The former gravel workings had the 3rd highest WeBs count in 2012-2017 5 year mean. It is important for a range of species including golden plover and lapwing, mute swan, and a range of ducks including pochard, wigeon, shoveler, teal, tufted duck.

Hen harriers (winter) and marsh harriers (breeding) are present in this sub-area (location confidential).

[56] (Austin & Calbrade, 2010)

**Romney Marsh Sub-Area**



The Marsh is closely interconnected with the other areas, providing feeding, roosting and refuge areas. If pressure is applied in one area of the Dungeness Complex it will cause an affect in another. This is supported by anecdotal information from local bird recorders, however the Silver Fields Project should be able to provide further information in due course.

There are very few access points into the marsh. The area has few major roads, and access includes small lanes and tracks, PROW and other paths. Access to the Scotney Lakes complex is via PRoW only or private, controlled access to the fishing lakes. The Royal Military Canal Path is the main promoted route which runs around the boundary of the area from west to the north-east. This route is only partly cyclable although there are plans to upgrade the route. There is also permitted angling along various stretches of the RMCP.

NCR Route 2 runs through the area and the Romney Marsh Countryside Partnership promotes several cycle and walking routes. Some promoted routes run along the boundary of or through the SSSI/Ramsar sites. There are currently no routes through or near Walland Marsh and it is recommended that no access developments are permitted in the future. However most promoted routes on the Marsh are not within the designated areas.

Walking and cycling leaflets from the RMCP and some websites:

- Magic of the Marsh – promoted walks and Romney Marsh Meanders – cycle route no 4.
- Explore Kent Appledore Walk along the RMCP.
- www.theromneymarsh.net is a particularly useful website, with comprehensive information about the area. It's sub-title of 'The Fifth Continent' also links it helpfully with the HLF-funded Landscape Partnership Project.

| Romney Marsh | | | | |
|---|---|---|---|---|
| | | | | |
| **Summary of Assessment**<br><br>Some sensitive species and habitats. Low visitor numbers but numbers not known. Promoted routes concentrated to the north east of this sub-area. The accessible areas around Lydd are mostly designated Natura sites, limiting access options for residents to rights of way. However, there is no recorded information on local use including walking and dog walking. Some wildfowling (shooting) takes place close to the Scotney Lakes. | | | | |
| **Presence of conservation features known to have potential vulnerability to recreational impacts** | | | | |
| Conservation features known to have potential **high vulnerability** to recreational impacts | | | Presence/Description | Natura qualifying |
| Coastal vegetated shingle communities including lichen-rich coastal vegetated shingle communities | | | Not present | ✓ |
| Coastal and floodplain grazing marsh/marshy grassland | | | Yes – this is the main habitat of the area. | ✖ |
| Breeding ground nesting birds | | | No | ✓ |
| Fens | | | Not present | ✓ |
| Dune habitats, especially - Yellow marram dunes, shingle habitats, lichen-rich communities, wet areas in slacks, saltmarshes, steep slopes used for access, foredunes. | | | Not present | ✖ |
| Saltmarsh and mudflat | | | Not present | ✓ |
| Saline lagoons | | | Not present | ✓ |
| Conservation features known to have **some vulnerability** to recreational impacts | | | Presence/Description[57] | Natura qualifying |
| Wintering birds and assemblages | | | Very important site for winter assemblage: bittern$^{SPA}$ - mute swan$^{RAMSAR}$ - ruff$^{SPA}$ - shoveler$^{SPA}$ – golden plover$^{SPA}$ common sandpiper$^{SSSI}$ - coot$^{SSSI}$ - cormorant$^{SSSI}$ – gadwall$^{SSSI}$ - garganey$^{SSSI}$ - great crested grebe$^{SSSI}$ – little grebe$^{SSSI}$ – pochard$^{SSSI}$ – sanderling$^{SSSI}$ - teal$^{SSSI}$ – tufted duck$^{SSSI}$ – water rail$^{SSSI}$ – whimbrel$^{SSSI}$ - wigeon$^{SSSI}$ – white-fronted goose (European)$^{SSSI}$ | As indicated ✓ |
| Fixed dunes | | | Not present | ✖ |
| Other notable species | | | Water vole | |
| **Condition** | | | | |
| SSSI unit condition | 88 units in sub area (3425 ha) | 57 units (2609 ha 76%) favourable condition | 30 units (807 ha 24%) unfavourable recovering condition | 1 unit (9ha <1%) unfavourable no change (mineral and waste planning permission) |
| Condition from observation or other sources | No recreational impacts noted for any of the SSSI units. This area has low recreational use. Degradation of habitat in this area may cause birds to move to areas with greater potential disturbance. | | | |

[57] Superscript indicates the designation for which this is a qualifying species in its own right. **NB,** species indicated as SSSI (along with other species not listed) will also form part of the SPA/Ramsar winter assemblage qualifying feature and are therefore also Natura qualifying features in this regard.

| Romney Marsh | | | |
|---|---|---|---|
| **Recreation Impacts – Intensity and Extent** | | | |
| Car parking and access points | There are no official car parks except in villages, although there is some evidence of unauthorised parking scattered across the area. | Number of annual visitors | Not known. |
| Known recreational activities | Type of Activity | Frequency, seasonality and other comments | |
| | Walking and walking with dogs | Access – England Coast Path and several PROW run through housing to beach. Local dog walking, certain stretches of beach are subject to a Dog Control order 1st May to 30th September. | |
| | Kite-surfing, windsurfing and sand yachting etc. | None | |
| | Jet skis or speeding boards | None | |
| | Horse riding and cycling | Horse riding on public rights of way | |
| | Fishing (sea angling or inland) | Fishing at Scotney and Lydd Lakes | |
| | Other activities | - | |
| Evidence of recreational impacts | • Disturbance by gravel extraction, shooting and fishing on southernmost of the Scotney Lakes (Bretts) noted at workshop of 21st February; | | |

# Bibliography


Allies and Morrison Urban Practitioners. (2012). *Sustainability Appraisal Reporting, Camber Village Draft Supplementary Planning Document.* Rother District Council.

Austin, G., & Calbrade, N. (2010). *Within-site Waterbird Trends Relative to Whole-Site, Regional and National Population Trends: Dungeness, Romney Marsh and Rye Bay SSSI.* British Trust for Ornithology for Natural England.

Beale, C. M., & Monaghan, P. (2004). Behavioural responses to human disturbance: a matter of choice? *Animal Behaviour*, (68) pp1065-1069.

Bregnballe, T. C., Horsten, A., & Fox, A. D. (2009). An experimental study of numerical and behavioural responses of spring staging dabbling ducks to human pedestrian disturbance. *Wildfowl*, Special Issue 2 pp 131-142.

Camber Parish Council. (2006). *The Camber Environmental Strategy.* East Sussex County Council, for the Camber Partnership.

Clarke, R., & Watson, D. (1990). The Hen Harrier Circus cyaneaus winter roost survey in Britain and Ireland. *Bird Study*, 37 Issue 2 pp 84-100.

Cooke, A. S. (1985). *Disturbance by anglers of birds at Grafham Water - in Angling and Wildlife in Fresh Waters, Proceedings of a Symposium .* Institute of Terrestrial Ecology.

Cryer, M., Linley, N. W., Ward, R. M., O., S. J., & Randerson, P. F. (1987). Disturbance of overwintering wildfowl by anglers at two reservoir sites in South Wales. *Bird Study*, (34) pp 191-199.

Davenport, J., & Davenport, J. L. (2006). The impact of tourism and personal leisure transport on coastal environments: A review. *Estuarine, Coastal and Shelf Science*, (67) pp280-292.

Defra. (2013). *Impact Assessment: Dungeness, Romney Marsh and Rye Bay - proposed Special Protectioin Area Extension and new Ramsar site, East Sussex and Kent.* Defra.

Doody, J. P. (2013). *Sand Dune Conservation, Management and Restoration.* Dordrecht: Springer.

Doody, P., & Randall, R. (2003). *A Guide to the Management and Restoration of Coastal Vegetated Shingle.* English Nature.

English Nature. (2005). *RX Wildlife: Wildlife sites from Hastings to Romney Marsh.* www.rxwildlife.org.

English Nature. (2006). *Dungeness, Romney Marsh and Rye Bay SSSI, East Sussex and Kent: Supporting Information, A supplement to the notification package.* English Nature Kent Team.

EU Wildlife and Sustainable Farming Project. (2009). *Bittern Botaurus stallaris factsheet.*

Evans, D. M., & Warrington, S. (1997). The effects of recreational disturbance on wintering waterbirds on a mature gravel pit lake near London. *International Journal of Environmental Studies*, (53) pp 167-182.

Fernandez, C., & Azkona, P. (1993). Human disturbance affects parental care of marsh harriers and nutritional status of nestlings. *Journal of Wildlife Management*, 57 pp 602-608.

Ferry, B., & Beck, D. (2004). *Dungeness Before 1960: The Landscape and the People.* English Nature: English Nature Research Reports No. 571.

Ferry, B., & Waters, S. (1985). *Dungeness Ecology and Conservation (No. 12).* Report of a Meeting held at Botany Dept, Royal Holloway and Bedford New College: Nature Conservancy Council.

Ferry, B., Lodge, N., & Waters, S. (1990). *Dungeness: A Vegetation Survey of a Shingle Beach (No. 26).* Royal Holloway and Bedford New College: Nature Conservancy Council.

Fox, A. D., Jones, T. A., Singleton, R., & Agnew, A. D. (1994). Food supply and the effects of recreational disturbance on the abundance and distribution of wintering Pochard on a gravel pit complex in southern Britain. *Hydrobiologia*, 279/280 pp 253-261.

Gill, J. A. (2007). Approaches to measuring the effects of human disturbance on birds. *Ibis*, (149) pp9-14.

Gyimesi, A., Frenken, M. S., Feige, F., & Nolet, B. A. (2012). Human Disturbance of Bewick's Swans is reflected in giving-up net energy intake, but not in giving-up food density. *IBIS*, Volume 154 Issue 4 pp 781-780.

Hill, D., Cokin, D., Price, D., G., T., Morris, R., & Treweek, J. (1997). Bird disturbance: improving the quality and utility of disturbance research. *Journal of Applied Ecology*, Volume 34 pp 275-288.

Joint Nature Conservation Committee . (2015). *Natura 2000 - Standard Data Form, Special Areas of Conservation under the EC Habitats Directive.* JNCC.

Lazarus, J. (1978). Vigilance, flock size and domain of danger size in the White-fronted goose. *Wildfowl*, pp 135-45.

Liley, D., & Tyldesley, D. (2013). *Solent Disturbance and Mitigation Project: Phase III Towards and Avoidance and Mitigation Strategy.* Footprint Ecology and Tyldesley Associates.

Linaker, R. (2012). *Recreational disturbance at the Teesmouth and Cleveland Coast European Marine Site.* The University of York.

Lowen, J., Liley, D., Underhill-Day, J., & Whitehouse, A. (2008). *Access and Nature Conservation Reconciliation: supplementary guidance for England.* Natural England.

Madsen, J. (1995). Impacts of disturbance on migratory wildfowl. *IBIS*, 137: S67-S74.

Madsen, J. (1998). Experimental refuges for migratory waterfowl in Danish wetlands. I Baseline assessment of the disturbabance effects of recreational activities. *Journal of Applied Ecology*, Volume 35 Issue 3 pp 386-397.

McMinn, S. (2006). *Survey of Wintering Sanderling of St Mary's Bay to Greatstone Beaches, October 2005 to March 2006.* Report to the Environment Agency.

Mori, Y., Sodhi, N. S., Kawanishi, S., & Yamagishi, S. (2001). The effect of human disturbance and flock composition on the flight distances of waterfowl species. *Journal of Ethology*, Volume 19 pp 115-119.

Natural England. (2009). *Scientific Research into the effects of Access on Nature Conservation: Part 1: Access on Foot.* Natural England Commissioned Report NECR012.

Natural England. (2009a). *Scientific research into the effects of access on nature conservation: Part 2 Access on Bicycle and Horseback.* Natural England Commissioned Report NECR013.

Natural England. (2010). *Departmental Brief: Dungeness, Romney Marsh and Rye Bay, Proposed extensions to and change of name of the Dungeness to Pett Level Special Protection Area and a proposed new Ramsar site.* Natural England.

Natural England. (2010a). *European Marine Site Risk Review (NERR038).* Natural England.

Natural England. (2014a). *Coastal Access in East Sussex and Kent: Camber to Folkestone - Access and Sensitive Features Appraisal.*

Natural England. (2014b). *Coastal Access - Camber to Folkestone - Natural England's Proposals, Chapter 1: Camber car park to Dengemarsh Gully, Dungeness.*

Natural England. (2014c). *Dungeness, Romney Marsh and Rye Bay UK11023.* Natural England.

Natural England. (2014d). *Improvement Programme for England's Natura 2000 Sites (IPENS): Site Improvement Plan Dungeness.* Natural England.

Natural England. (2015). *Public Access and Disturbance Theme Plan: A Strategic Approach to Identifying and Addressing Significant Effects on the Features of Natura 2000 Sites.* Natural England.

Natural England. (2016). *Natural England Technical Information Note TIN167, Proposals for a Marine Extension to the Dungeness, Romney Marsh and Rye Bay SPA.* Natural England.

Natural England. (2016b). *Register entry UK9012091 under Regulation 13 of the Conservation of Habitats and Species Regulations 2010.* Defra.

Natural England. (2017). *Dungeness National Nature Reserve Management Plan (Pre-publication Draft).*

Natural England and JNCC. (2016). *Departmental Brief: Dungeness, Romney Marsh and Rye Bay potential Special Protection Area.* Natural England and JNCC.

Owen, M. (1973). The management of grassland areas for wintering geese. *Wildfowl*, pp 123-130.

Pease, M. L., Rose, R. K., & Butler, M. J. (2005). Effects of human disturbances on the behaviour of wintering ducks. *Wildlife Society Bulletin*, 33(1) pp 103-112.

Roberts, G., & Evans, P. R. (1993). Responses of foraging sanderlings to human approaches. *Behaviour*, (126) 1/2 pp 29-43.

Rother District Council. (2013). *Habitats Regulations Assessment for Rother District Council, Camber Supplementary Planning Document.* The Landscape Partnership for Rother Rother District Council.

Rother District Council. (2014). *Camber Supplementary Planning Document (SPD), Statement of Consultation, Appendix A.* Rother District Council.

Rother District Council. (2014). *Camber Village Supplementary Planning Document.* Allies and Morrison Urban Practioners (Authors) for Rother District Council.

Royal Haskoning for Natural England. (2010). *Camber Sands Dunes Management.* Natural England.

Ruddock, M., & Whitfield, D. P. (2007). *A review of disturbance distances in selected bird species.* A report from Natural Research (Projects) Ltd to Scottish Natural Heritage.

Smith, R. (2004). *The effect of kite surfing on water roosts at West Kirby, Dee Estuary.* http://www.deeestuary.co.uk/decgks.htm.

Steiner, W., & Parz-Gollner, R. (2002). Actual number and effects of recreational disturbance on the distribution and behaviour of greylag geese (Anser anser) in the Nesiedler See - Seewinkel Nationalpark Area. *Monitoring and Management of Visitors Flows in Recreational and Protected Areas, Conference Proceedings* , pp 89-94.

Stillman, R. A., Cox, J., Liley, D., Ravenscroft, N., Sharp, J., & Wells, M. (2009). *Solent disturbance and mitigation project: Phase I report. Report to the Solent Forum.*

Suffolk Coast and Heaths AONB, Natural England and Wildside Ecology. (2012). *A Simple Method for Assessing the risk of Disturbance to Birds at Coastal Sites.*

Tarr, N. M., Simons, T. R., & Pollock, K. H. (2010). An experimental assessment of vehicle disturbance effects on migratory shorebirds. *Journal of Wildlife Management*, (74) 8 pp 1776-1783.

Thomas, K. (2000). *The effects of human activity on the foraging behaviour of sanderling (Calidris alba) (BSc dissertation).* Californian State University.

Underhill-Day, J. C. (1984). Population and breeding biology of Marsh harriers in Britain since 1900. *Journal of Applied Ecology*, 21 pp 773-787.

# Appendix

## WeBS Five Year Means

*Table 11: WeBS Sectors 5 Year Means (unless otherwise indicated) 2012-2016[58] (species for which rounded mean >1)*

| WeBS Sector | Bretts (4 year mean) | Camber | Dungeness RSPB | Fairfield (2 year mean) | Lade Pit | Lade Sands (3 year mean) | Long Pits | Pett Level | Rye Harbour | Scotney and Lydd West | Midrips (3 year mean) | Dungeness Beach |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Webs code | 22794 | 21365 | 22791 | 22396 | 22793 | 22403 | 22795 | 21366 | 21364 | 22792 | 21401 | 22405 |
| Arctic Tern | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Avocet[SPA] | 0 | 8 | 1 | 0 | 0 | 0 | 0 | 47 | 164 | 6 | 5 | 0 |
| Bar-headed Goose | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 24 | 0 | 0 | 0 |
| Barnacle Goose | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 317 | 0 | 0 |
| Bar-tailed Godwit | 0 | 0 | 0 | 0 | 0 | 141 | 0 | 0 | 0 | 2 | 0 | 0 |
| Bewick's Swan[SPA] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bittern[SPA] | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 |
| Black Tern | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Black-headed Gull | 0 | 0 | 0 | 168 | 0 | 0 | 0 | 0 | 0 | 24 | 58 | 2952 |
| Black-necked Grebe | 0 | 0 | 5 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Black-tailed Godwit | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 7 | 8 | 1 | 0 | 0 |
| Black-throated Diver | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Brent Goose | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 27 | 0 |
| Brent Goose (Dark-bellied) | 0 | 1 | 0 | 0 | 0 | 5 | 0 | 115 | 44 | 2 | 0 | 0 |
| Canada Goose | 15 | 227 | 110 | 0 | 148 | 0 | 0 | 302 | 370 | 256 | 0 | 0 |

[58] Superscript adjacent to the species name indicates the designation for which this is a qualifying species in its own right. **NB,** species indicated as SSSI (along with other species without annotation) will also form part of the SPA/Ramsar winter assemblage qualifying feature and are therefore also Natura qualifying features in this regard.

| WeBS Sector | Bretts (4 year mean) | Camber | Dungeness RSPB | Fairfield (2 year mean) | Lade Pit | Lade Sands (3 year mean) | Long Pits | Pett Level | Rye Harbour | Scotney and Lydd West | Midrips (3 year mean) | Dungeness Beach |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Caspian Gull | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Common Gull | 10 | 0 | 0 | 313 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 353 |
| Common Sandpiper[SSSI] | 0 | 19 | 2 | 0 | 2 | 0 | 0 | 1 | 10 | 2 | 0 | 0 |
| Common Scoter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 6 | 0 | 0 | 7 |
| Common Tern | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 230 |
| Coot[SSSI] | 42 | 390 | 3287 | 10 | 3425 | 0 | 60 | 1039 | 2648 | 944 | 4 | 0 |
| Cormorant[SSSI] | 9 | 63 | 661 | 2 | 61 | 0 | 0 | 354 | 1684 | 70 | 2 | 677 |
| Curlew | 0 | 474 | 57 | 0 | 0 | 460 | 0 | 727 | 397 | 24 | 16 | 0 |
| Curlew Sandpiper | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Dotterel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dunlin | 0 | 26 | 12 | 0 | 0 | 439 | 0 | 107 | 787 | 45 | 14 | 0 |
| Egyptian Goose | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 7 | 0 | 0 |
| Eider | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gadwall[SSSI] | 0 | 8 | 1063 | 3 | 1155 | 0 | 0 | 281 | 929 | 26 | 1 | 0 |
| Garganey[SSSI] | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 |
| Glaucous Gull | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Golden Plover[SPA] | 0 | 83 | 502 | 55 | 0 | 0 | 0 | 38 | 2458 | 799 | 91 | 0 |
| Goldeneye | 0 | 0 | 37 | 0 | 15 | 0 | 0 | 0 | 18 | 2 | 0 | 0 |
| Goosander | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Great Black-backed Gull | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 20 | 452 |
| Great Crested Grebe[SSSI] | 25 | 7 | 155 | 0 | 142 | 267 | 0 | 135 | 155 | 16 | 6 | 2346 |
| Great White Egret | 1 | 0 | 21 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Green Sandpiper | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 6 | 0 | 0 | 0 |
| Greenshank | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 2 | 4 | 1 | 0 | 0 |

| WeBS Sector | Bretts (4 year mean) | Camber | Dungeness RSPB | Fairfield (2 year mean) | Lade Pit | Lade Sands (3 year mean) | Long Pits | Pett Level | Rye Harbour | Scotney and Lydd West | Midrips (3 year mean) | Dungeness Beach |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Grey Heron | 5 | 28 | 40 | 4 | 20 | 0 | 1 | 10 | 31 | 6 | 0 | 0 |
| Grey Plover | 0 | 0 | 1 | 0 | 0 | 30 | 0 | 8 | 79 | 0 | 1 | 0 |
| Greylag Goose | 107 | 94 | 499 | 0 | 298 | 0 | 2 | 365 | 919 | 1417 | 122 | 0 |
| Herring Gull | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 884 | 70 | 2853 |
| Kingfisher | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| Kittiwake | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 79 |
| Knot | 0 | 0 | 0 | 0 | 0 | 110 | 0 | 1 | 111 | 0 | 0 | 0 |
| Lapwing | 78 | 1741 | 2504 | 225 | 0 | 0 | 0 | 3009 | 4685 | 2750 | 5 | 0 |
| Lesser Black-backed Gull | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 2 | 34 |
| Little Egret | 3 | 19 | 30 | 1 | 5 | 0 | 0 | 20 | 85 | 15 | 1 | 0 |
| Little Grebe[SSSI] | 4 | 13 | 30 | 0 | 101 | 0 | 0 | 62 | 148 | 17 | 0 | 0 |
| Little Gull | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 |
| Little Ringed Plover | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 8 | 1 | 0 | 0 |
| Little Stint | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Little Tern | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Long-tailed Duck | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Mallard | 42 | 258 | 614 | 69 | 601 | 0 | 7 | 563 | 1743 | 977 | 36 | 0 |
| Mediterranean Gull | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 2 | 0 | 7 |
| Moorhen | 11 | 24 | 14 | 5 | 93 | 0 | 13 | 54 | 151 | 0 | 0 | 0 |
| Mute Swan[RAMSAR] | 20 | 41 | 182 | 8 | 153 | 0 | 5 | 69 | 282 | 168 | 28 | 0 |
| Oystercatcher | 3 | 75 | 16 | 0 | 0 | 1329 | 0 | 161 | 2228 | 10 | 110 | 2 |
| Pintail | 0 | 0 | 52 | 0 | 0 | 0 | 0 | 6 | 14 | 9 | 10 | 0 |
| Pochard[SSSI] | 51 | 2 | 795 | 0 | 684 | 0 | 1 | 84 | 323 | 469 | 0 | 0 |
| Red-crested Pochard | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| WeBS Sector | Bretts (4 year mean) | Camber | Dungeness RSPB | Fairfield (2 year mean) | Lade Pit | Lade Sands (3 year mean) | Long Pits | Pett Level | Rye Harbour | Scotney and Lydd West | Midrips (3 year mean) | Dungeness Beach |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Redshank | 0 | 645 | 3 | 0 | 0 | 17 | 0 | 40 | 218 | 7 | 7 | 0 |
| Red-throated Diver | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 15 | 1 | 0 | 0 | 42 |
| Ringed Plover | 0 | 1 | 2 | 0 | 0 | 45 | 0 | 0 | 184 | 10 | 5 | 1 |
| Ruff[SPA] | 0 | 10 | 5 | 0 | 0 | 0 | 0 | 12 | 27 | 1 | 0 | 0 |
| Sanderling[SSSI] | 0 | 0 | 0 | 0 | 0 | 554 | 0 | 0 | 88 | 0 | 0 | 0 |
| Sandwich Tern | 0 | 0 | 0 | 0 | 0 | 52 | 0 | 0 | 0 | 0 | 0 | 135 |
| Scaup | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Shelduck | 0 | 94 | 18 | 0 | 12 | 3 | 1 | 45 | 164 | 34 | 41 | 0 |
| Shoveler[SPA] | 1 | 1 | 1530 | 5 | 257 | 0 | 0 | 347 | 650 | 67 | 16 | 0 |
| Slavonian Grebe | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Smew | 0 | 0 | 19 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Snipe | 0 | 1 | 35 | 3 | 0 | 0 | 0 | 22 | 82 | 0 | 1 | 0 |
| Teal[SSSI] | 0 | 158 | 1440 | 75 | 765 | 0 | 1 | 933 | 1452 | 337 | 46 | 0 |
| Tufted Duck[SSSI] | 30 | 28 | 1613 | 0 | 863 | 0 | 10 | 308 | 917 | 481 | 0 | 0 |
| Turnstone | 0 | 0 | 0 | 0 | 0 | 52 | 0 | 110 | 50 | 0 | 2 | 11 |
| Velvet Scoter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Water Rail[SSSI] | 0 | 0 | 8 | 3 | 9 | 0 | 1 | 8 | 11 | 0 | 0 | 0 |
| Whimbrel[SSSI] | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 10 | 1 | 0 | 0 |
| White-fronted Goose (European) [SSSI] | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 13 | 0 | 13 | 0 | 0 |
| Wigeon[SSSI] | 0 | 42 | 2276 | 98 | 313 | 0 | 0 | 1880 | 1816 | 3024 | 41 | 0 |
| Yellow-legged Gull | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 6 |
| Total mean (rounded) | 458 | 4595 | 17667 | 1050 | 9125 | 3520 | 102 | 11438 | 26239 | 13287 | 788 | 10200 |