

Site Improvement Plan

North East Kent (Thanet)

Site Improvement Plans (SIPs) have been developed for each Natura 2000 site in England as part of the Improvement Programme for England's Natura 2000 sites (IPENS). Natura 2000 sites is the combined term for sites designated as Special Areas of Conservation (SAC) and Special Protected Areas (SPA). This work has been financially supported by LIFE, a financial instrument of the European Community.

The plan provides a high level overview of the issues (both current and predicted) affecting the condition of the Natura 2000 features on the site(s) and outlines the priority measures required to improve the condition of the features. It does not cover issues where remedial actions are already in place or ongoing management activities which are required for maintenance.

The SIP consists of three parts: a Summary table, which sets out the priority Issues and Measures; a detailed Actions table, which sets out who needs to do what, when and how much it is estimated to cost; and a set of tables containing contextual information and links.

Once this current programme ends, it is anticipated that Natural England and others, working with landowners and managers, will all play a role in delivering the priority measures to improve the condition of the features on these sites.

The SIPs are based on Natural England's current evidence and knowledge. The SIPs are not legal documents, they are live documents that will be updated to reflect changes in our evidence/knowledge and as actions get underway. The information in the SIPs will be used to update England's contribution to the UK's Prioritised Action Framework (PAF).

The SIPs are not formal consultation documents, but if you have any comments about the SIP or would like more information please email us at IPENSLIFEProject@naturalengland.org.uk, or contact Natural England's Responsible Officer for the site via our enquiry service 0300 060 3900, or enquiries@naturalengland.org.uk

This Site Improvement Plan covers the following Natura 2000 site(s)

UK0013077 Sandwich Bay SAC

UK9012071 Thanet Coast & Sandwich Bay SPA

UK0013107 Thanet Coast SAC

Site description

The Thanet Coast has the longest continuous stretch of coastal chalk in Britain (23 km), representing about 20% of UK coastal chalk and 12% of the coastal exposure in Europe. The chalk cliff face, cave and tunnel habitats and communities here are very uncommon in Europe and therefore important internationally.

The intertidal reef, together with the mudflats and sandflats which characterise the remainder of the coastline in North East Kent, provide valuable feeding grounds and roosting areas at low water for wintering waders, Golden Plover *Pluvialis arpicaria* and Turnstone *Arenaria interpres* and a breeding population of Little Tern *Sterna albifrons*.

Sandwich Bay qualifies as a SAC for its fixed dunes with herbaceous vegetation (grey dunes), embryonic shifting dunes, shifting dunes with *Ammophila arenaria* marram grass (white dunes) and dunes with creeping willow *Salix arenaria* as listed under Annex I of the EU Habitats Directive.

Plan Summary

This table shows the prioritised issues for the site(s), the features they affect, the proposed measures to address the issues and the delivery bodies whose involvement is required to deliver the measures. The list of delivery bodies will include those who have agreed to the actions as well as those where discussions over their role in delivering the actions is on-going.

Priority & Issue	Pressure or Threat	Feature(s) affected	Measure	Delivery Bodies
1 Changes in species distributions	Pressure	A169(NB) Turnstone, A195(B) Little Tern	Investigate cause of SPA species decline.	Natural England, Thanet District Council, Sandwich Bay Bird Observatory
2 Invasive species	Pressure	A169(NB) Turnstone, H1170 Reefs	Continued Invasive non native species control and monitoring.	Kent Wildlife Trust, Natural England, Thanet District Council
3 Public Access/Disturbance	Pressure	A140(NB) Golden Plover, A169(NB) Turnstone, A195(B) Little Tern, H1170 Reefs, H2110 Shifting dunes, H2120 Shifting dunes with marram, H2130 Dune grassland	Investigation of disturbance to sand dunes, and wider education and awareness raising.	Natural England, Thanet District Council, Landowner(s)
4 Hydrological changes	Pressure	H2130 Dune grassland	Implement identified management actions to address and adapt to changes in water levels affecting sand dune vegetation	Natural England

5	Air Pollution: impact of atmospheric nitrogen deposition	Pressure	H2110 Shifting dunes, H2120 Shifting dunes with marram, H2130 Dune grassland, H2170 Dunes with creeping willow, H2190 Humid dune slacks	Control, reduce and ameliorate atmospheric nitrogen impacts	Not yet determined
6	Water Pollution	Threat	A169(NB) Turnstone	Collate and review existing water quality information	Environment Agency, Natural England
7	Fisheries: Commercial marine and estuarine	Pressure	A140(NB) Golden Plover, A169(NB) Turnstone, A195(B) Little Tern, H1170 Reefs, H2110 Shifting dunes, H2120 Shifting dunes with marram, H2130 Dune grassland, H2170 Dunes with creeping willow, H2190 Humid dune slacks, H8330 Sea caves	Kent and Essex IFCA byelaw implementation	Kent and Essex Inshore Fisheries Conservation Authority (IFCA), Natural England
8	Fisheries: Commercial marine and estuarine	Pressure	H1170 Reefs	Ensure compliance with byelaw	Kent and Essex Inshore Fisheries Conservation Authority (IFCA), Natural England

Issues and Actions

This table outlines the prioritised issues that are currently impacting or threatening the condition of the features, and the outstanding actions required to address them. It also shows, where possible, the estimated cost of the action and the delivery bodies whose involvement will be required to implement the action. Lead delivery bodies will be responsible for coordinating the implementation of the action, but not necessarily funding it. Delivery partners will need to support the lead delivery body in implementing the action. In the process of developing the SIPs Natural England has approached the delivery bodies to seek agreement on the actions and their roles in delivering them, although in some cases these discussions have not yet been concluded. Other interested parties, including landowners and managers, will be involved as the detailed actions are agreed and delivered. Funding options are indicated as potential (but not necessarily agreed or secured) sources to fund the actions.

1 Changes in species distributions

A decline in the overwintering turnstone (SPA bird feature) population has been recorded over two consecutive year counts, with the cause and effect not specifically identified, although anthropogenic disturbance is a likely cause for some decline in numbers.

Breeding Little tern are a species listed under the SPA designation, however, the species has not bred within the site for over ten years. This is thought to be due to a number of reasons including; human disturbance, predation, nest inundation. Management has been attempted previously, in the form of fencing of nest site areas, signage and managing access to these areas, to encourage breeding Little terns back to the site however, to date, this has not been successful.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Further study is required to identify the cause of decline in the overwintering Turnstone population. The study should include an assessment of how birds use foraging and roosting areas alongside human disturbance, which could be compared to historical use by birds and changes in visitor numbers, and location if available. Information on changes to prey biomass would be useful where available. This study should also include an assessment of regional and national trends in this species, in comparison with international trends and potential factors including recreational disturbance and impacts affecting their migration. Recommendations from this report should identify further actions.	£50,000	2015-20	Investigation / Research / Monitoring	Natural England	Natural England	Thanet District Council, Sandwich Bay Bird Observatory

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
1B	<p>Previous attempts at habitat conservation and management to encourage this species to breed within the site again have been unsuccessful; a study should aim to determine whether the decline within the site is due to natural or anthropogenic pressures and/ or a natural national decline in the species, and if any more can be done at a site level to manage this habitat better to support breeding Little terns. This site should link, where possible, to the Little Tern Recovery Project (EU life project), better managing the network of sites for this species across the country.</p>	£15,000	2015-20	Investigation / Research / Monitoring	Natural England	Natural England	Kent Wildlife Trust

2 Invasive species

Invasive species pose a threat to the condition of Thanet Coast SAC and Thanet Coast and Sandwich Bay SPA. The main threat is from Pacific Oysters (*Crassostrea gigas*), however a number of other invasive species have been recorded within the SAC/SPA.

INNS 1: Pacific Oysters (*Crassostrea gigas*) have been identified as the main threat to the condition of the Thanet Coast SAC. There is an additional threat of shellfish harvesting with the possible damage to chalk reef through removal of Pacific Oysters. Pacific Oysters also pose a threat to the SPA, through the interaction with mussel beds, an SPA supporting habitat.

INNS 2: There is a threat from a number of invasive species (Wireweed *Sargassum muticum*; Chinese mitten crab *Eriocheir sinensis*; Carpet Sea Squirt *Didemnum vexillum*; Wakame *Undaria pinnatifida*; *Caulacanthus ustulatus* (a red algae)) within the SAC/ SPA. This is through competition with blue mussel beds (supporting feature of SPA) and affecting intertidal chalk reef biotopes (SAC subfeature).

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
2A	A mechanism of management has been identified and is currently in place for Pacific oyster (<i>Crassostrea gigas</i>) management, undertaken by a Natural England contractor and coastal volunteers. Further funding is required to continue the long term management required for this project to be a success. This Action links to evidence project IPENS 035 'Distribution of selected non-native species within the inter-tidal zone of the North East Kent Marine Protected Areas'	£30,000	2015-20	Invasive Control Plan: Invasive Species Control Programme	Natural England	Natural England	Kent Wildlife Trust, Thanet District Council

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
2B	A proven, efficient monitoring method has been identified and is currently being undertaken within the site. Further funding is required to continue the long term management required for this project to be a success. Monitoring will help to determine the impact of the invasive non native species on native species or habitat, and the feasibility/necessity of expanding the control project to cover other species. This Action links to evidence project IPENS 035 'Distribution of selected non-native species within the inter-tidal zone of the North East Kent Marine Protected Areas'	£20,000	2015-20	Investigation / Research / Monitoring	Natural England	Natural England	Kent Wildlife Trust, Thanet District Council

3 Public Access/Disturbance

There is an existing concern regarding recreational pressures (for example dog walkers) on the designated features of the site. With regards to disturbance of SPA features this links to the changes in species distribution issue (priority 1). Another specific concern is around compaction, trampling, erosion, and enrichment of sand dunes, particularly where vehicles have access to the sea front.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
3A	The Thanet Coast Project has been working with the local coastal community, schools and visitors on the importance of the designated site to help reduce human impacts. This work could be extended to cover the full length of the designated coastline. There is a need to fund additional events and activities which could be delivered through the existing Thanet Coast Project. There is a need to secure long-term funding for this project.	£90,000	2015-20	Advice: Education & awareness raising	Natural England	Thanet District Council	Natural England

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
3B	A detailed study is required to assess the impact of vehicle access to the sea front on the Sandwich dunes and recommend management measures, such as zoning, to reduce impact on the sand dune communities.	£10,000	2015-18	Investigation / Research / Monitoring	Natural England	Natural England	Landowner(s)

4 Hydrological changes

There is evidence of changes in NVC SD8 sand dune community thought to be due to rising water table. A research project is currently underway to investigate this issue, including gathering dipwell data and water chemistry analysis, and will identify appropriate management measures required.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
4A	A research project is currently underway to investigate hydrological changes (including ground water level and chemistry) and will identify appropriate management measures required to enhance sand dune habitats, including, for example, targeted turf stripping to increase the extent of bare sand and early succession habitats.	Not yet determined	2015-20	Mechanism not identified / develop mechanism	Not yet determined	Natural England	Landowner(s)

5 Air Pollution: impact of atmospheric nitrogen deposition

Nitrogen deposition exceeds site relevant critical loads. Some evidence from sand dune surveys suggesting nitrogen deposition could be contributing to an increase in MG grassland at the expense of SD vegetation, although this is also likely to be the result of over-stabilisation of the dune system.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
5A	Control, reduce and ameliorate atmospheric nitrogen impacts	Not yet determined	2014-20	Site Nitrogen Action Plan	Not yet determined	Not yet determined	Not yet determined

6 Water Pollution

Water quality in water courses has suffered from insufficiently treated Sewage Treatment Works discharges. This potentially reduces food availability for SPA birds. Work to improve quality of water (phosphate stripping) was carried out in 2006 but we are unclear what further monitoring has been carried out.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
6A	The Environment Agency will collate water quality information in consultation with Natural England to help improve the understanding of water chemistry and biology for the Thanet Coast & Sandwich Bay SPA/SACs. This will aim to improve our knowledge of the sites and establish whether further investigation is desirable.	Not yet determined	2015	Investigation / Research / Monitoring	Environment Agency, Natural England, Water Framework Directive (WFD)	Environment Agency	Natural England

7 Fisheries: Commercial marine and estuarine

Commercial fishing activities categorised as 'amber or green' under Defra's revised approach to commercial fisheries in EMSs are being assessed by Kent & Essex IFCA to determine whether management is required. For activities categorised as 'green', these assessments should take into account any relevant in-combination effects with other fishing activities.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
7A	Where the assessments indicate management is required, introduce appropriate measures.	Not yet determined	2016	Regulation: Creation / amendment of byelaws	n/a	Kent and Essex Inshore Fisheries Conservation Authority (IFCA)	Natural England
7B	If management measures are established, ensure compliance with bye-law and provide an appropriate level of reporting to ensure sites are well managed and to enable Natural England to provide advice on the condition of features and potential condition threats.	Not yet determined	2015-20	Regulation: Creation / amendment of byelaws	n/a	Kent and Essex Inshore Fisheries Conservation Authority (IFCA)	Natural England

8 Fisheries: Commercial marine and estuarine

Dredges (inc. hydraulic), benthic trawls and seines are categorised as 'Red' for this interest feature (and specifically the sub-features: Intertidal chalk cliff algal and lichen communities; Intertidal red algal turf communities; Subtidal animal-bored chalk communities) as part of Defra's revised approach to commercial fisheries management in EMSs, and appropriate management measures are being or will be implemented by Kent & Essex IFCA. A Byelaw has been put in place within Thanet Coast SAC to prohibit the above fishing gear from being used over the majority, and within a defined buffer zone, of the chalk reef feature of the SAC.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
8A	Introduce a byelaw	Not yet determined	2014	Regulation: Creation / amendment of byelaws	n/a	Kent and Essex Inshore Fisheries Conservation Authority (IFCA)	Natural England
<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
8B	Ensure compliance with bye-law, and provide an appropriate level of reporting to ensure sites are well managed and to enable Natural England to provide advice on the condition of features and potential condition threats.	Not yet determined	2015-20	Regulation: Creation / amendment of byelaws	n/a	Kent and Essex Inshore Fisheries Conservation Authority (IFCA)	Natural England

Site details

The tables in this section contain site-relevant contextual information and links

Qualifying features

#UK Special responsibility

Sandwich Bay SAC	H2110 Embryonic shifting dunes
	H2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes")
	H2190 Humid dune slacks
	H2170 Dunes with <i>Salix repens ssp argentea</i> (<i>Salicion arenariae</i>)
	H2130# Fixed dunes with herbaceous vegetation ("grey dunes")
Thanet Coast & Sandwich Bay SPA	A140(NB) <i>Pluvialis apricaria</i> : European golden plover
	A169(NB) <i>Arenaria interpres</i> : Ruddy turnstone
	A195(B) <i>Sterna albifrons</i> : Little tern
Thanet Coast SAC	H8330 Submerged or partially submerged sea caves
	H1170 Reefs

Site location and links

Sandwich Bay SAC

Area (ha)	1137.87	Grid reference	TR354617	Map link
Local Authorities				Kent
Site Conservation Objectives				European Site Conservation Objectives for Sandwich Bay SAC
European Marine Site conservation advice				North East Kent (Thanet) EMS
Regulation 33/35 Package				Regulation 33/35 package link
Marine Management Organisation site plan				n/a

Thanet Coast & Sandwich Bay SPA

Area (ha) **1870.16** Grid reference **TR355617**

[Map link](#)

Local Authorities

Kent

Site Conservation Objectives

[European Site Conservation Objectives for Thanet Coast & Sandwich Bay SPA](#)

European Marine Site conservation advice

[North East Kent \(Thanet\) EMS](#)

Regulation 33/35 Package

[Regulation 33/35 package link](#)

Marine Management Organisation site plan

[n/a](#)

Thanet Coast SAC

Area (ha) **2803.84** Grid reference **TR348711**

[Map link](#)

Local Authorities

Kent

Site Conservation Objectives

[European Site Conservation Objectives for Thanet Coast SAC](#)

European Marine Site conservation advice

[North East Kent \(Thanet\) EMS](#)

Regulation 33/35 Package

[Regulation 33/35 package link](#)

Marine Management Organisation site plan

[n/a](#)

Water Framework Directive (WFD)

The Water Framework Directive (WFD) provides the main framework for managing the water environment throughout Europe. Under the WFD a management plan must be developed for each river basin district. The River Basin Management Plans (RBMP) include a summary of the measures needed for water dependent Natura 2000 sites to meet their conservation objectives. For the second round of RBMPs, SIPs are being used to capture the priorities and new measures required for water dependent habitats on Natura 2000 sites. SIP actions for non-water dependent sites/habitats do not form part of the RBMPs and associated consultation.

Sandwich Bay SAC

River basin	South East	South East RBMP
WFD Management catchment	Stour	
WFD Waterbody ID (Cycle 2 draft)	GB107040019550, GB107040019621	

Thanet Coast & Sandwich Bay SPA

River basin	South East	South East RBMP
WFD Management catchment	Stour	
WFD Waterbody ID (Cycle 2 draft)	GB107040019550, GB107040019620, GB107040019621, GB107040019630, GB107040019770	

Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
Sandwich Bay SAC	Sandwich Bay to Hacklinge Marshes SSSI
Thanet Coast & Sandwich Bay SPA	Thanet Coast SSSI Sandwich Bay to Hacklinge Marshes SSSI
Thanet Coast SAC	Thanet Coast SSSI Sandwich Bay to Hacklinge Marshes SSSI
National Nature Reserve (NNR)	
Sandwich Bay SAC	Sandwich & Pegwell Bay NNR
Thanet Coast & Sandwich Bay SPA	Sandwich & Pegwell Bay NNR
Thanet Coast SAC	Sandwich & Pegwell Bay NNR
Ramsar	
Sandwich Bay SAC	Thanet Coast & Sandwich Bay
Thanet Coast & Sandwich Bay SPA	Thanet Coast & Sandwich Bay
Thanet Coast SAC	Thanet Coast & Sandwich Bay
Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Sandwich Bay SAC	Thanet Coast & Sandwich Bay SPA
Thanet Coast & Sandwich Bay SPA	Thanet Coast SAC Sandwich Bay SAC
Thanet Coast SAC	Thanet Coast & Sandwich Bay SPA

<i>Version</i>	<i>Date</i>	<i>Comment</i>
1.0	08/10/2014	

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