

## Site Improvement Plan

# Minsmere to Walberswick Heaths and Marshes

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](mailto: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](mailto:enquiries@naturalengland.org.uk)

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

**UK0012809 Minsmere to Walberswick Heaths & Marshes SAC**

**UK9009101 Minsmere-Walberswick SPA**

## Site description

Minsmere – Walberswick Heaths & Marshes SAC and SPA is located on the Suffolk coast south of Southwold in eastern England. It comprises two large marshes, the tidal Blyth estuary and associated habitats. This composite coastal site contains a complex mosaic of habitats, notably areas of marsh with dykes, extensive reedbeds, mud-flats, lagoons, shingle, woodland and areas of lowland heath.

It supports the largest continuous stand of Common Reed *Phragmites australis* in England and Wales and demonstrates the nationally rare transition in grazing marsh ditch plants from brackish to fresh water. There are nationally important numbers of breeding and wintering birds. In particular, the reedbeds are of major importance for breeding Bittern *Botaurus stellaris* and Marsh Harrier *Circus aeruginosus*. A range of breeding waders (e.g. Avocets *Recurvirostra avosetta*) and heathland birds occur in other areas of the SPA. The shingle beaches support important numbers of breeding Little Tern *Sterna albifrons*, which feed substantially outside the SPA in adjacent marine waters. The site is also important for wintering Bitterns and raptors. The SAC features are heathland, vegetated annual and perennial shingle habitats.

## 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 Coastal squeeze	Pressure	A051(B) Gadwall, A051(NB) Gadwall	Ensure there is scope for natural adaptation or intertidal habitat creation, to offset the impacts of sea level rise	Environment Agency, National Trust, Natural England, RSPB, Suffolk Coastal District Council, Suffolk Wildlife Trust, Waveney District Council, Landowner(s), Blyth Estuary Group, EDF Energy
2 Public Access/Disturbance	Pressure	A021(B) Bittern, A021(NB) Bittern, A051(B) Gadwall, A051(NB) Gadwall, A056(B) Shoveler, A056(NB) Shoveler, A132(B) Avocet, A132(NB) Avocet, A195(B) Little Tern, A224(B) European nightjar, A246(B) Woodlark, A394(NB) Greater white-fronted goose, H1210 Annual vegetation of drift lines, H1220 Coastal shingle vegetation outside the reach of waves, H4030 European dry heaths	Reduce habitat and bird disturbance	Ministry of Defence (MoD), National Trust, Natural England, RSPB, Suffolk Coast & Heaths AONB, Suffolk Coastal District Council, Suffolk Wildlife Trust, Waveney District Council, Local partnership

3 Changes in species distributions	Pressure	A081(B) Marsh Harrier, A195(B) Little Tern, A224(B) European nightjar, A246(B) Woodlark	Investigate population trends, identify threats and remedy accordingly	Forestry Commission, National Trust, Natural England, RSPB, Suffolk Wildlife Trust, British Trust for Ornithology (BTO), Sandlings Bird Group
4 Invasive species	Pressure	A051(NB) Gadwall, A056(NB) Shoveler, A132(B) Avocet, A132(NB) Avocet, A394(NB) Greater white-fronted goose	Monitor <i>Spartina anglica</i> , and manage as appropriate	Natural England
5 Inappropriate pest control	Threat	A224(B) European nightjar, A246(B) Woodlark	Ensure the adequate protection of nesting birds from predators	Natural England, RSPB, Suffolk Wildlife Trust, British Trust for Ornithology (BTO)
6 Air Pollution: impact of atmospheric nitrogen deposition	Pressure/ Threat	A051(B) Gadwall, A051(NB) Gadwall, A056(B) Shoveler, A056(NB) Shoveler, A132(B) Avocet, A132(NB) Avocet, A224(B) European nightjar, A246(B) Woodlark, A394(NB) Greater white-fronted goose, H4030 European dry heaths	Establish a Site Nitrogen Action Plan	Natural England
7 Water Pollution	Threat	A051(B) Gadwall, A051(NB) Gadwall, A056(B) Shoveler, A056(NB) Shoveler, A132(B) Avocet, A132(NB) Avocet, A394(NB) Greater white-fronted goose	Ensure appropriate thresholds are maintained	Environment Agency, Natural England
8 Deer	Threat	A021(B) Bittern, A021(NB) Bittern, A224(B) European nightjar, A246(B) Woodlark, H4030 European dry heaths	Ensure that coordinated deer management maintains sustainable numbers	Forestry Commission, National Trust, Natural England, RSPB, Suffolk Wildlife Trust, The Deer Initiative, Landowner(s)
9 Fisheries: Commercial marine and estuarine	Pressure	A195(B) Little Tern	Revised approach to fisheries management (Article 6 project) and the Little Tern project	Eastern Inshore Fisheries Conservation Authority (IFCA), Natural England, Centre for Environment, Fisheries and Aquaculture Science (Cefas)

## 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 Coastal squeeze

As coastal change takes place there's a loss of SPA wintering and breeding habitat. Coastal Squeeze and greater frequency of coastal flooding is leading to loss of reedbed (at Walberswick and Corporation Marshes) and to loss of freshwater marsh (between Dunwich and Walberswick). There is evidence of erosion and accretion on leading edges at the Blyth (limited in most places) where coastal management is in line with the Shoreline Management Plan and deemed appropriate, but this may change in the future with sea level rise, increased flood risk and increased/reduced tidal prism. There is a risk of saline incursion into Westward Marshes if Waller's Wall is no longer maintained.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Ensure the Shoreline Management Plan considers coastal squeeze and incorporates appropriate mitigation and compensation for any change that affects the integrity of the site.	Not yet determined	2014-50	Shoreline Management Plan and Strategies	Not yet determined	Environment Agency	National Trust, Natural England, RSPB, Suffolk Wildlife Trust, Waveney District Council, Blyth Estuary Group, EDF Energy
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1B	Investigate and monitor coastal squeeze/ coastal change to provide a robust evidence base against which appropriate management requirements can be determined. This should examine the short-, medium-, and long term, including how nature conservation interests are affected by coastal change, (e.g. freshwater to saline). Identify evidence gaps and undertake appropriate investigations.	£20,000	2015-25	Investigation / Research / Monitoring	Not yet determined	Environment Agency	Natural England, Landowner(s)

<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>
<b>1C</b>	Develop a Minsmere to Walberswick Heaths and Marshes adaptation plan that captures all the known issues. Opportunities for habitat creation where known should be included. Once produced the plan should be appropriately assessed to ensure that proposed actions will maintain the integrity of the Minsmere to Walberswick Heaths and Marshes designated site network and the features for which it is designated.	£10,000	2015-20	Mechanism not identified / develop mechanism	Not yet determined	Environment Agency	National Trust, Natural England, RSPB, Suffolk Coastal District Council, Suffolk Wildlife Trust
<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>
<b>1D</b>	Address impacts of coastal squeeze on SPA/SAC features through the Environment Agency Regional Habitat Creation Programme, including enabling adaptation to take place and creation of freshwater marsh elsewhere to mitigate/compensate against loss of future loss of freshwater habitat (Dingle Marshes, and other locations.)	Not yet determined	2018-50	Habitat creation / restoration strategy: Other		Environment Agency	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>
<b>1E</b>	Extend Dunwich River diversion further to the south through Dingle Marshes to allow natural coastal process to take place and prevent river channel blockage through shingle roll back.	Not yet determined	2018-20	Flood Risk Maintenance Programme: Flood Risk Management - Capital/Improvement Schemes	Flood and Coastal Erosion Risk Management (FCERM) 2015-21	Environment Agency	Suffolk Wildlife Trust

<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>
<b>1F</b>	Improve Dingle Marshes sluice function at to allow better evacuation of seawater from Dingle Marshes following over topping events.	Not yet determined	2017	Flood Risk Maintenance Programme: Flood Risk Management - Capital/Improvement Schemes	Flood and Coastal Erosion Risk Management (FCERM) 2015-21	Environment Agency	Suffolk Wildlife Trust

## 2 Public Access/Disturbance

A great number of recreational visitors are attracted by area contributing to bird disturbance (e.g. human and dog disturbance to Little terns, Nightjar and Woodlark). Increased corvid predation is perceived as birds are flushed. The downward trends for these species are a concern. Trampling of heathland habitat and vegetated shingle (and Dune) habitat is an issue. Private aircraft (helicopters and planes, paramotorists) and MOD aircraft (helicopters and planes) regularly fly low over the site leading to disturbance of SPA features. Whilst wildfowling/shooting activities on site are fully assessed the impact of disturbance from unregulated shooting activity adjacent to the SPA/SAC is not fully understood.

<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>
<b>2A</b>	Undertake a comprehensive review of public access to heathland, incorporating existing research.	£20,000	2015	Investigation / Research / Monitoring	Local partnership, Developer Contributions Scheme (DCS)	Not yet determined	National Trust, Natural England, RSPB, Suffolk Coast & Heaths AONB, Suffolk Coastal District Council, Suffolk County Council, Suffolk Wildlife Trust, EDF Energy

<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>
<b>2B</b>	Investigate the impact of levels of public access/disturbance to heathland on SPA/SAC features, evaluate significance of problem in relation to other factors, and establish where resource should be allocated to address factors with greatest effect.	Not yet determined	2018	Investigation / Research / Monitoring	Local partnership	Not yet determined	National Trust, Natural England, RSPB, Suffolk Coast & Heaths AONB, Suffolk County Council, Suffolk Wildlife Trust, EDF Energy

<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>
<b>2C</b>	Informed by investigation into impacts of disturbance, implement NNR management plans to ensure heathland habitat is managed to minimise disturbance to SPA/SAC features through access management/zonation.	Not yet determined	2014-24	National Nature Reserve (NNR) management plan	Natural England (NNR running costs)	Natural England	National Trust, RSPB, Suffolk Wildlife Trust
<b>2D</b>	Implementation of NNR management plans to ensure appropriate level of summer wardening of heathland habitats, resourcing to be informed by investigation into impacts of disturbance.	Not yet determined	2014-24	National Nature Reserve (NNR) management plan	Natural England (NNR running costs)	Natural England	National Trust, RSPB, Suffolk Wildlife Trust
<b>2E</b>	Establish wardening on heathland areas outwith NNR, informed by investigation into impacts of disturbance and patterns of use.	£30,000	2016-20	Advice: Wardening	Local Authority	Not yet determined	National Trust, Natural England, RSPB, Suffolk Coast & Heaths AONB, Suffolk Coastal District Council, Suffolk County Council, Suffolk Wildlife Trust, EDF Energy
<b>2F</b>	Undertake a comprehensive review of public access to beaches, incorporating existing research.	£15,000	2014-15	Investigation / Research / Monitoring	Not yet determined	Not yet determined	Natural England, RSPB, Suffolk Coast & Heaths AONB, Suffolk Coastal District Council, Suffolk Wildlife Trust

<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>
<b>2G</b>	Investigate impact of public access/disturbance on beach SPA/SAC features, evaluate significance of problem in relation to other factors, and establish where resource should be allocated to address factors with greatest effect.	Not yet determined	2014-15	Investigation / Research / Monitoring	Not yet determined	Natural England	RSPB, Suffolk Wildlife Trust
<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>
<b>2H</b>	Establish/Increase beach wardening to minimise impact of disturbance on Little terns (informed by investigation).	£15,000	2015-17	Advice: Wardening	LIFE	Local partnership	National Trust, Natural England, RSPB, Suffolk Coast & Heaths AONB, Suffolk Wildlife Trust, Suffolk Little Tern Group
<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>
<b>2I</b>	Establish beach wardening to minimise impact of disturbance on vegetated shingle.	Not yet determined	2015-20	Advice: Wardening	Not yet determined	Not yet determined	National Trust, Natural England, RSPB, Suffolk Coast & Heaths AONB, Suffolk Coastal District Council, Suffolk County Council, Suffolk Wildlife Trust



<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>
<b>2J</b>	Ensure impacts are assessed and that measures are in place to mitigate against impact from increased disturbance from proposed Sizewell C Development; through displacement of users away from Sizewell area (and possibly onto SPA areas) and increased population during construction in the locality. Mitigation may include provision of recreational green space at robust locations (such as new country parks), etc.	Not yet determined	2015-25	Advice: Access Strategy	Not yet determined	Not yet determined	Natural England, Suffolk Coastal District Council, Suffolk County Council, EDF Energy
<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>
<b>2K</b>	Investigate and monitor levels and impact of military and civilian aircraft on SPA features, evaluate significance of problem in relation to other factors, establish how to remedy impacts and where resource should be allocated to address factors with greatest effect. Incorporate existing research.	Not yet determined	2015-18	Investigation / Research / Monitoring	Not yet determined	Not yet determined	Ministry of Defence (MoD), RSPB, Suffolk Wildlife Trust, Joint Nature Conservation Committee (JNCC), Civil Aviation Authority (CAA)
<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>
<b>2L</b>	Reduce disturbance of SPA bird features from military aircraft through better recognition (and ideally avoidance) of sensitive locations.	Not yet determined	2015	Advice: Education & awareness raising	Ministry of Defence (MoD)	Ministry of Defence (MoD)	Natural England, Joint Nature Conservation Committee (JNCC)

<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>
<b>2M</b>	Reduce disturbance of designated bird features from civilian aircraft through better recognition (and ideally avoidance) of sensitive locations and understanding of third party responsibilities under the Wildlife & Countryside Act (as amended).	Not yet determined	2014	Advice: Education & awareness raising	Not yet determined	Natural England	Civil Aviation Authority (CAA)
<b>2N</b>	Formalise reporting of incidents of all aircraft flying low over designated sites, disturbing wintering and breeding birds to allow Natural England to undertake appropriate enforcement action in relation to any breach of SSSI legislation.	Not yet determined	2014	Partnership agreement: Other	Not yet determined	Natural England	National Trust, RSPB, Suffolk Wildlife Trust, Suffolk Little Tern Group
<b>2O</b>	Establishment of a Paramotor Working Group to improve user awareness/behaviour.	Not yet determined	2015	Advice: Education & awareness raising	Not yet determined	Natural England	RSPB, Suffolk Coast & Heaths AONB, Suffolk Little Tern Group
<b>2P</b>	Produce Aviation Code of conduct for Suffolk (and possibly Norfolk) Coast to improve user awareness/behaviour.	Not yet determined	2015-16	Advice: Education & awareness raising	Not yet determined	Natural England	Natural England, Suffolk Coast & Heaths AONB, Civil Aviation Authority (CAA), Suffolk Little Tern Group

<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>
<b>2Q</b>	Investigate scope for having SPAs marked on Civil Aviation Authority air maps as avoidance areas to reduce disturbance.	Not yet determined	2015	Advice: Negotiation	Not yet determined	Natural England	Joint Nature Conservation Committee (JNCC), Civil Aviation Authority (CAA)
<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>
<b>2R</b>	Investigate disturbance impacts of offsite shooting activities on SPA features, notably adjacent to the Blyth and Minsmere Levels.	Not yet determined	2014-19	Investigation / Research / Monitoring	Not yet determined	Natural England	RSPB, Suffolk Wildlife Trust, British Association for Shooting and Conservation (BASC)

### 3 Changes in species distributions

The downward trend in population numbers of Woodlark, Nightjar, Marsh Harrier and Little Tern presents concerns. Reasons for decline (predation, disturbance, habitat management, food sources, possibly persecution, etc.) need to be better understood and mitigated as appropriate. This issue links to Public Access/Disturbance issues.

<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>
<b>3A</b>	Investigation into the downward trend in population numbers of Nightjar, Woodlark and Marsh Harrier including habitat decline, predation, disturbance, etc.	Not yet determined	2015 onwards	Investigation / Research / Monitoring	Not yet determined	Natural England	Forestry Commission, National Trust, RSPB, Suffolk Wildlife Trust, British Trust for Ornithology (BTO), LIFE+ Little Tern Project, Suffolk Little Tern Group, Sandlings Bird Group

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
<b>3B</b>	Mitigate against Nightjar, Woodlark and Marsh Harrier population declines through active site management (habitat management, wardening, predation control, etc.).	Not yet determined	2015-20	National Nature Reserve (NNR) management plan	Not yet determined	Natural England	Forestry Commission, National Trust, RSPB, Suffolk Wildlife Trust, Sandlings Bird Group

#### 4 Invasive species

*Spartina anglica* is encroaching on estuarine muds. With *Spartina* at the front, and reed encroaching at back, saltmarsh could be squeezed out.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
<b>4A</b>	Investigation and monitoring of <i>Spartina anglica</i> encroachment onto estuarine muds.	Not yet determined	2018	Investigation / Research / Monitoring	Not yet determined	Natural England	n/a

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
<b>4B</b>	Develop <i>Spartina anglica</i> management plan as appropriate following investigation.	Not yet determined	2018-20	Invasive Control Plan: Invasive Species Control Programme	Not yet determined	Natural England	n/a

#### 5 Inappropriate pest control

Corvids and gulls are attracted by feed of nearby outdoor pig farming, predating and disturbing SPA features

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
<b>5A</b>	Investigate the impacts of predation on SPA features (notably crows, gulls and rats attracted to pig feed, plus other mammals (badgers and foxes) at Minsmere & Dingle). More research is needed to understand actual impact of predation on nest survival and fledgling success.	Not yet determined	2014	Investigation / Research / Monitoring	Catchment Sensitive Farming (CSF)	Natural England	RSPB, Suffolk Wildlife Trust, British Trust for Ornithology (BTO)

<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>
<b>5B</b>	Negotiation with local pig farmers regarding feeding practice that reduces crow, gull and rat numbers, if they are found to be a problem.	Not yet determined	2014-19	Advice: Negotiation	Not yet determined	Natural England	n/a

## 6 Air Pollution: impact of atmospheric nitrogen deposition

Air pollution can impact on vegetation diversity. Modelled aerial deposits of nitrogen exceed the threshold limit above which the diversity of heathland vegetation begins to be altered and adversely impacted. Many land use practices contribute to this problem including land spreading, outdoor pigs, high nutrient inputs on fields, etc.

<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>
<b>6A</b>	Control, reduce and ameliorate atmospheric nitrogen deposition.	Not yet determined	2015-20	Site Nitrogen Action Plan	Not yet determined	Natural England	Not yet determined

## 7 Water Pollution

Inappropriate surface and ground water quality may impact on SAC habitats and the supporting habitats of some SPA birds. The estuary water is nutrient rich with high pollutant levels. Eutrophication is having an influence on reed. Increased flood events could lead to habitat change/loss of diversity. nutrient run off from outdoor pig farming could exacerbate the issue locally. Ground water pollution on light lands from land use practices such as treatment plants, land spreading, outdoor pigs, high nutrient inputs on fields, etc, may be an issue locally. There is a lack of groundwater monitoring in place.

<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>
<b>7A</b>	Establish a Ground Water site nutrient management plan including regularly monitor ammonium, nitrogen and phosphorus concentrations in ground water across site, particularly areas adjacent to outdoor pigs and farm land with high nutrient inputs. Investigate sources of high nutrient levels.	Not yet determined	2014-20	Investigation / Research / Monitoring	Not yet determined	Environment Agency	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>
<b>7B</b>	Establish a surface water site nutrient management plan including a robust regular monitoring regime for ammonium, nitrogen and phosphorus concentrations in water courses across site (including Estuary and ditches), particularly areas adjacent to outdoor pigs and farm land with high nutrient inputs. Investigate sources of high nutrient levels.	Not yet determined	2014-20	Diffuse Water Pollution Plan	Not yet determined	Environment Agency	Natural England (CSF)
<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>
<b>7C</b>	Reduce nutrient inputs where monitoring identifies concentrations of nutrients (surface water and ground water) exceeding thresholds for Natura 2000 sites, by working with local landowners/managers, through DSF/DWP .	Not yet determined	2014-19	Advice: Education & awareness raising	Catchment Sensitive Farming (CSF)	Natural England	Environment Agency

## 8 Deer

High numbers of red deer are damaging reedbed (runways and wallows/loss of structure), woodland (reduced structural diversity) and heathland (erosion and reduced structural diversity) habitat. Minsmere RSPB Reserve has started a culling programme. Some areas/habitats benefit from deer browsing whilst others are damaged. There is no coordinated approach to deer control in the wider area. This issue links with Changes in species distribution and should be viewed in parallel with Public Access/Disturbance.

<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>
<b>8A</b>	Investigate the need for a coordinated deer management and monitoring programme for the area.	Not yet determined	2015-16	Investigation / Research / Monitoring	Not yet determined	Natural England	Forestry Commission, National Trust, RSPB, Suffolk Wildlife Trust, The Deer Initiative, Landowner(s)

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
<b>8B</b>	If investigation identifies the need, establish a fully coordinated deer management programme for the area, through production of a Deer Management and Monitoring strategy/plan. Actions to be monitored.	£13,000	2015-25	Non-Natural England funded site management plan	Not yet determined	Natural England	Forestry Commission, National Trust, RSPB, Suffolk Wildlife Trust, The Deer Initiative, Landowner(s)

## 9 Fisheries: Commercial marine and estuarine

Many different fishing pressures close to shore that may include bycatch of juveniles numbers/ disturbance of fish nursery areas that could potentially have an impact on Little tern *Sterna albifrons*. Commercial fishing activities categorised as 'amber or green' under Defra's revised approach to commercial fisheries in EMSs require assessment and (where appropriate) management. This assessment will be undertaken by EIFCA. For activities categorised as 'green', these assessments should take account of any in-combination effects of amber activities, and/or appropriate plans or projects, in the site. Where these assessments indicate management is required, appropriate measures will be introduced by the Regulator by 2016. If management measures are established to protect the feature(s), on-going work will be required by the Regulator to ensure compliance and 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.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
<b>9A</b>	Where the assessments indicate management is required, introduce appropriate measures.	Not yet determined	2016	Enforcement: Byelaws	Not yet determined	Eastern Inshore Fisheries Conservation Authority (IFCA)	Natural England, Centre for Environment, Fisheries and Aquaculture Science (Cefas)

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
<b>9B</b>	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. Ongoing action.	Not yet determined	2014-20	Enforcement: Byelaws	Not yet determined	Eastern Inshore Fisheries Conservation Authority (IFCA)	Centre for Environment, Fisheries and Aquaculture Science (Cefas)

## Site details

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

### Qualifying features

#UK Special responsibility

<b>Minsmere to Walberswick Heaths &amp; Marshes SAC</b>	H4030 European dry heaths
	H1210 Annual vegetation of drift lines
	H1220 Perennial vegetation of stony banks
<b>Minsmere-Walberswick SPA</b>	A052(B) <i>Anas crecca</i> : Eurasian teal
	A021(B) <i>Botaurus stellaris</i> : Great bittern
	A081(B) <i>Circus aeruginosus</i> : Eurasian marsh harrier
	A082(NB) <i>Circus cyaneus</i> : Hen harrier
	A224(B) <i>Caprimulgus europaeus</i> : European nightjar
	A056(B) <i>Anas clypeata</i> : Northern shoveler
	A056(NB) <i>Anas clypeata</i> : Northern shoveler
	A051(B) <i>Anas strepera</i> : Gadwall
	A051(NB) <i>Anas strepera</i> : Gadwall
	A132(B) <i>Recurvirostra avosetta</i> : Pied avocet
	A195(B) <i>Sterna albifrons</i> : Little tern
A394(NB) <i>Anser albifrons albifrons</i> : Greater white-fronted goose	

### Site location and links

#### **Minsmere to Walberswick Heaths & Marshes SAC**

Area (ha) **1265.52**      Grid reference **TM468682**      [Map link](#)

Local Authorities      Suffolk

Site Conservation Objectives      [European Site Conservation Objectives for Minsmere to Walberswick Heaths & Marshes SAC](#)



<i>European Marine Site conservation advice</i>	<a href="#">Minsmere-Walberswick Heaths and Marshes EMS</a>
<i>Regulation 33/35 Package</i>	<a href="#">Regulation 33/35 package link</a>
<i>Marine Management Organisation site plan</i>	<a href="#">n/a</a>
<b>Minsmere-Walberswick SPA</b>	
Area (ha) <b>2018.92</b> Grid reference <b>TM476748</b>	<a href="#">Map link</a>
<i>Local Authorities</i>	Suffolk
<i>Site Conservation Objectives</i>	<a href="#">European Site Conservation Objectives for Minsmere-Walberswick SPA</a>
<i>European Marine Site conservation advice</i>	<a href="#">Minsmere-Walberswick Heaths and Marshes EMS</a>
<i>Regulation 33/35 Package</i>	<a href="#">Regulation 33/35 package link</a>
<i>Marine Management Organisation site plan</i>	<a href="#">n/a</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.

### Minsmere to Walberswick Heaths & Marsh

River basin	Anglian	<a href="#">Anglian RBMP</a>
WFD Management catchment	East Suffolk	
WFD Waterbody ID (Cycle 2 draft)	GB105035046270, GB105035046271	

### Minsmere-Walberswick SPA

River basin	Anglian	<a href="#">Anglian RBMP</a>
WFD Management catchment	East Suffolk	
WFD Waterbody ID (Cycle 2 draft)	GB105035046270, GB105035046271, GB105035046300	

## Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)		
<b>Minsmere to Walberswick Heaths &amp; Marshes SAC</b>	Minsmere-Walberswick Heaths & Marshes SSSI	
<b>Minsmere-Walberswick SPA</b>	Minsmere-Walberswick Heaths & Marshes SSSI	
National Nature Reserve (NNR)		
<b>Minsmere to Walberswick Heaths &amp; Marshes SAC</b>	Suffolk Coast NNR Westleton Heath NNR	
<b>Minsmere-Walberswick SPA</b>	Suffolk Coast NNR Westleton Heath NNR	
Ramsar		
<b>Minsmere to Walberswick Heaths &amp; Marshes SAC</b>	Minsmere/Walberswick	
<b>Minsmere-Walberswick SPA</b>	Minsmere/Walberswick	
Special Areas of Conservation (SAC) and Special Protection Areas (SPA)		
<b>Minsmere to Walberswick Heaths &amp; Marshes SAC</b>	Minsmere-Walberswick SPA	
<b>Minsmere-Walberswick SPA</b>	Minsmere to Walberswick Heaths & Marshes SAC	
Other relevant documents and links		
	<a href="#">Touching the Tide</a>	Web link
	<a href="#">Spartina anglica 2004 review</a>	2004 Anglica spartina Review
	<a href="#">Suffolk Local Biodiversity Action Plan (Little tern)</a>	Biodiversity Action Plan: Little Tern

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

[www.naturalengland.org.uk/ipens2000](http://www.naturalengland.org.uk/ipens2000)

