Improvement Programme for England's Natura 2000 Sites (IPENS) Planning for the Future

Site Improvement Plan Pagham Harbour

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)

UK9012041 Pagham Harbour SPA

Site description

Pagham Harbour SPA is located South East of Chichester between Selsey and Bognor Regis and comprises an extensive central area of saltmarsh and tidal mudflats, with surrounding habitats including lagoons, shingle, open water, reed swamp and wet permanent grassland. All are supporting habitats for the breeding SPA bird species common tern and little tern and over-wintering brent goose and ruff.

Species identified for possible future consideration include and Pintail and Black-tailed godwit. Most of the site is currently managed as RSPB local nature reserve.

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 Physical modification	Pressure/ Threat	A046a(NB) Dark-bellied Brent Goose, A054(NB) Pintail, A151(NB) Ruff, A193(B) Common Tern, A195(B) Little Tern	Continue advice under Habs Regs in association with ongoing monitoring.	Arun District Council, Environment Agency
2 Public Access/Disturbance	Pressure/ Threat	A046a(NB) Dark-bellied Brent Goose, A054(NB) Pintail, A151(NB) Ruff, A193(B) Common Tern, A195(B) Little Tern	The RSPB are to continue to manage the area using Local Nature Reserve (LNR) bylaws	-
3 Water Pollution	Threat	A046a(NB) Dark-bellied Brent Goose, A054(NB) Pintail, A151(NB) Ruff, A193(B) Common Tern, A195(B) Little Tern	The lagoon will undergo detailed surveys and ongoing monitoring.	Environment Agency, RSPB, Southern Water Services Ltd, Landowner(s)
4 Fisheries: Commercial marine and estuarine	Threat	A046a(NB) Dark-bellied Brent Goose, A054(NB) Pintail, A151(NB) Ruff, A193(B) Common Tern, A195(B) Little Tern	Introduce appropriate management measures where required, and ensure compliance	Sussex Inshore Fisheries Conservation Authority (IFCA)
5 Fisheries: Recreational marine and estuarine	Threat	A046a(NB) Dark-bellied Brent Goose, A054(NB) Pintail, A151(NB) Ruff, A193(B) Common Tern, A195(B) Little Tern	Introduce appropriate management measures where required and ensure compliance	Sussex Inshore Fisheries Conservation Authority (IFCA)
6 Change in land management	Threat	A046a(NB) Dark-bellied Brent Goose, A054(NB) Pintail, A151(NB) Ruff, A193(B) Common Tern, A195(B) Little Tern	Get land into appropriate management through ongoing advice or management scheme	Natural England, Landowner(s)

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 Physical modification

Church Norton shingle Spit is accreting from the west, towards Pagham beach. In recent years there has been a pulse of sediment that has led to an extension of the spit which is also causing changes to the location and size of the harbour mouth and has led to risk of coastal erosion. Changes to the shingle spit may also lead to a natural closure of the channel, leading to changes in the wetland areas behind the spits. This could affect the breeding, roosting and feeding habitats of many of the bird species currently using the intertidal areas. It is not clear if, to what extent, or how quickly this would happen. The issue is the subject of ongoing discussion with the EA and others in terms of flood risk and coastal erosion issues.

Actio	n Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Monitor topographical and sedimentary changes to inform shingle management for coastal protection	Not yet determined	2014 onwards	Shoreline Management Plan and Strategies	Private funding, Central government, District council, Parish council	Arun District Council	Environment Agency

2 Public Access/Disturbance

This site has open access over the shingle beach areas, which includes along with other species, Little tern nesting sites and Brent geese feeding and roosting areas. The public footpath and open access areas are regularly used by walkers, bird watchers, dog walkers, anglers and kite surfers. The tern nesting area is fenced off during breeding season but many birds are disturbed by dogs being walked off leads. At Sidlesham Quay people are able to launch into the harbour at high tide from outside the LNR, as well as during low tide from within the LNR, this causes trampling of the saltmarsh and other habitats. The bylaws and best practice protocols are not always adhered to or (in the case of the byelaws) enforced due to its size, use and the available number of LNR staff.

Action Action description	n Cost	estimate Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
habitat. Pagham have an EU Life- 'People Engagen Breeding Seabiro RSPB to post the conduct on the Q not mention that	ance to birds and deter is one of 17 sites to funded seasonal nent Officer – s' post until 2018. boating code of uay, but this does aunching is tide (above mean is of course	et 2014 onward	ds Advice: Education & awareness raising	& RSPB	RSPB	n/a

3 Water Pollution

The Pagham Lagoon and Harbour both receive fresh water from agricultural land drainage through rife systems. Pagham lagoon in particular is vulnerable to freshwater ingress as it has limited saline input and also receives surface water via road drains, and other drains and overflows. The pollutants and nutrients possibly present in the surface runoff could threaten the water quality of the lagoon. It is thought that the surface water drainage system is somehow connected to the sewage system (through piecemeal development in Pagham) causing it to overflow back into the surface water. Any remedy based on the outcomes of an Surface Water Management Plan and infiltration study lead by West Sussex County Council (in partnership) will likely lead to a multi agency aproach with a possible outcome utilising "sustainable urban drainage systems" or similar. Given the potential closure of the harbour by the shingle spit (priority 1), water pollution could become an issue over the long term for the inner harbour.

Action Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
3A Pagham lagoon to undergo ecological surveys and monitoring. An infiltration study has been commissioned to understand the cause of sewer flooding and surface water and sewage system and will focus on how polluted water enters Pagham Lagoon. Should the studies reveal the need for action to reduce sewer flooding and overflow, the likely actions could include multiagency lead infiltration reduction programme (e.g. SuDs etc). The costs quoted are for survey & monitoring only		2014 owards	Investigation / Research / Monitoring	Southern Water Services	West Sussex County Council	Arun District Council, Environment Agency, RSPB, Southern Water Services Ltd, Landowner(s)

4 Fisheries: Commercial marine and estuarine

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 Sussex IFCA. For activities categorised as 'green', these assessments should take account of any incombination effects of amber activities, and/or appropriate plans or projects, in the site. Set netting, hand gathering of shellfish, and bait digging are the main activities occuring in the site.

Actior	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
4A	Where 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), ongoing 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.		2016	Regulation: Creation / amendment of byelaws	Defra, Sussex IFCA	Sussex Inshore Fisheries Conservation Authority (IFCA)	Natural England

5 Fisheries: Recreational marine and estuarine

Bait digging and angling occur within the harbour. They were previously managed through a West Sussex County Council permitting scheme, which limited how much the activity could occur within the site, but this is no longer the case. There is therefore currently no mechanism to restrict this activity in a relatively 'pristine' site.

Action Ac	ction description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
ma me Re the red co of ma En co	Where assessments indicate anagement is required, appropriate reasures will be introduced by the egulator by 2016. If management reasures are established to protect re feature(s), on-going work will be equired by the Regulator to ensure ompliance and an appropriate level reporting to ensure sites are well anaged and to enable Natural ngland to provide advice on the ondition of features and potential ondition threats.	Not yet determined	2016	Regulation: Creation / amendment of byelaws	Defra, Sussex IFCA	Sussex Inshore Fisheries Conservation Authority (IFCA)	Natural England

6 Change in land management

Some areas of land under agricultural use within the wet grassland are currently outside the management control of the RSPB or an environmental scheme(i.e. they are not within Environmental Stewardship or other formal management). NE is looking to target landowners to get the land into appropriate management either through the RSPB scheme or separately.

Action	n Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
6A	Start the process of getting private land into appropriate management through ongoing advice or management scheme.	£4,000	2015-16	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Agri- environment scheme	Natural England	n/a
Actio	n Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
6B	Start the process of getting private land into appropriate management through ongoing advice or management scheme.	Not yet determined	2015-16	Advice	No funding required	Natural England	n/a
Action	n Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
6C	Start the process of getting private land into appropriate management through ongoing advice or management scheme.	£3,000	2015-16	Conservation Enhancement Scheme (CES)	Conservation Enhancement Scheme (CES)	Natural England	Landowner(s)

Site details

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

Qualifying features			
#UK Special responsibility			
Pagham Harbour SPA	A151(NB) Philomachus pugnax: Ruff		
	A046a(NB) Branta bernicla bernicla: Dark-bellied brent goose		
	A195(B) Sterna albifrons: Little tern		
	A193(B) Sterna hirundo: Common tern		
Site location and links			
Pagham Harbour SPA			
Area (ha) 636.68 Grid reference SZ874968	Map link		
Local Authorities	West Sussex		
Site Conservation Objectives	Pagham Harbour SPA		
European Marine Site conservation advice	Pagham Harbour SPA		
Regulation 33/35 Package	Regulation 33/35 package link		
Marine Management Organisation site plan	<u>n/a</u>		

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 (RMBP) 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.

Pagham Harbour SPA	
River basin	South East RBMP
WFD Management catchment	Arun & Western Streams
WFD Waterbody ID (Cycle 2 draft)	GB107041006580, GB107041006610, GB107041012880

Overlapping or adjacent protected sites

Overlapping of aujacent protected sites						
Site(s) of Special Scientific Interest (SS	Site(s) of Special Scientific Interest (SSSI)					
Pagham Harbour SPA	Pagham Harbour SSSI					
National Nature Reserve (NNR)						
Pagham Harbour SPA	n/a					
Ramsar						
Pagham Harbour SPA	Pagham Harbour					
Special Areas of Conservation (SAC) a	and Special Protection Areas (SPA)					
Pagham Harbour SPA	n/a					

Version	Date	Comment
1.0	30/10/14	



www.naturalengland.org.uk/ipens2000