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

# Site Improvement Plan Waveney and Little Ouse Valley Fens

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)

UK0012882 Waveney & Little Ouse Valley Fens SAC

# **Site description**

The Waveney and Little Ouse Valley Fens SAC consists of extensive areas of valley fens in the headwaters of both rivers on the Norfolk-Suffolk county boundary.

It includes the Redgrave and South Lopham Fens Ramsar site. The SAC is composed of three component SSSIs and supports two Annex I habitats: purple moor-grass meadows, and calcium-rich fen dominated by great fen sedge (saw sedge). Weston Fen SSSI also supports the Annex II species Desmoulin's whorl snail *Vertigo moulinsiana*. The diverse geology and hydrology of the sites contributes to the diverse nature of the 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 Inappropriate scrub control	Pressure	H6410 Purple moor-grass meadows, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge)	Study and removal of areas of wet scrub and woodland	Natural England
2 Inappropriate water levels	Pressure	H6410 Purple moor-grass meadows, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge)	Investigation of the impacts of water level changes	Environment Agency, Natural England, Landowner/occupier
3 Air Pollution: impact of atmospheric nitrogen deposition	Pressure	H6410 Purple moor-grass meadows, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge)	Control, reduce and ameliorate atmospheric nitrogen impacts	Not yet determined
4 Water Pollution	Pressure	H6410 Purple moor-grass meadows, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge)	Establish a Diffuse Water Pollution Plan	Environment Agency, 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 Inappropriate scrub control

Historically sections of the fen have been allowed to scrub over. These now form wet woodland and scrub with glades containing the remnants of the qualifying features. The aim is to ensure the site includes the same area of *Cladium* fen (H7210 Calcium-rich fen dominated by great fen sedge (saw sedge)) present at the time of designation.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Investigation of both historical and existing levels of scrub on the site.	Not yet determined	2014	Investigation / Research / Monitoring	Natural England	Natural England	n/a
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1B	Production of a management plan to identify areas of scrub and trees for removal, and produce a work programme to reinstate <i>Cladium</i> fen.	Not yet determined	2014-15	Habitat creation / restoration strategy: Habitat restoration	Natural England	Natural England	Not yet determined
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1C	Implementation of a scrub/tree removal programme following completion of a management plan.	Not yet determined	2015-20	Habitat creation / restoration strategy: Habitat restoration	Natural England	Natural England	Not yet determined

2	Inap	prop	riate	wate	er le	vels
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Concerns have been expressed about water levels in the SAC. Some areas such as Redgrave and Lopham Fens have already been worked on. Others (Blo' Norton and Thelnetham Fens) are currently being investigated through the Water Level Management Plan process. Historical evidence suggests that water levels have significantly dropped over time and as a result habitats and features have been damaged. Parts of the fen supported swingmoor habitats and these are a poor representation of their former selves.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
2A	Investigation and review of issues affected by possible changes in water levels.	£8,000	2014	Investigation / Research / Monitoring	Environment Agency	Not yet determined	Environment Agency, Natural England, Landowner/occupier
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
2B	Investigation of the most suitable mechanism(s) to address the issues coming from the Water Level Management Plan (WLMP).	£100,000	2020	Investigation / Research / Monitoring	Environment Agency	Not yet determined	Environment Agency, Natural England, Landowner/occupier
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
2C	Implement suitable mechanism(s) identified in the WLMP.	£100,000	2020	Water Level Management Plan	Environment Agency	Not yet determined	Environment Agency, Natural England, Landowner/occupier

3 Air	<sup>r</sup> Pollution: impact of atmospher	ic nitrogen dep	osition				
Nitrog	en deposition exceeds site relevant cr	ritical loads.					
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
3A	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

ater Pollution						
	n-off particularly	from nearby ou	tdoor poultry and pig u	nits causes nutrient	enrichment and can lead	I to a reduction in
Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
		2014-20	Investigation / Research / Monitoring	Environment Agency, Natural England, Catchment Sensitive Farming (CSF)	Natural England	Environment Agency
Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
Implement actions in the Diffuse Water Pollution Plan. Investigate sources and pathways of diffuse pollution in the catchment from agriculture and roads in areas outside of DWP plans.	Not yet determined	2014-20	Diffuse Water Pollution Plan	Environment Agency, Natural England, Catchment Sensitive Farming (CSF)	Natural England	Environment Agency
	Investigate the impact, pathways and sources of water pollution. Draw up a Diffuse Water Pollution Plan. Include advice to farmers, agri-environment, partnerships with industry.  Action description Implement actions in the Diffuse Water Pollution Plan. Investigate sources and pathways of diffuse pollution in the catchment from agriculture and roads in areas	water quality arising from agricultural run-off particularly ersity.  **Action description**  Investigate the impact, pathways and sources of water pollution. Draw up a Diffuse Water Pollution Plan. Include advice to farmers, agri-environment, partnerships with industry.  **Action description**  **Cost estimate**  **Investigate Not yet determined sources and pathways of diffuse pollution in the catchment from agriculture and roads in areas**	water quality arising from agricultural run-off particularly from nearby outersity.  **Action description**  Investigate the impact, pathways and sources of water pollution. Draw up a Diffuse Water Pollution Plan. Include advice to farmers, agri-environment, partnerships with industry.  **Action description**  **Cost estimate**  **Timescale**  **Diffuse Water Pollution Plan. Include advice to farmers, agri-environment, partnerships with industry.  **Action description**  **Cost estimate**  **Timescale**  **Implement actions in the Diffuse**  **Water Pollution Plan. Investigate sources and pathways of diffuse pollution in the catchment from agriculture and roads in areas**	water quality arising from agricultural run-off particularly from nearby outdoor poultry and pig usersity.  **Action description**  Investigate the impact, pathways and sources of water pollution. Draw up a Diffuse Water Pollution Plan. Include advice to farmers, agri-environment, partnerships with industry.  **Action description**  **Cost estimate**  **Timescale**  **Mechanism**  Monitoring**  **Action description**  **Cost estimate**  **Timescale**  **Mechanism**  Monitoring**  **Action description**  Implement actions in the Diffuse Water Pollution Plan. Investigate sources and pathways of diffuse pollution in the catchment from agriculture and roads in areas**	water quality arising from agricultural run-off particularly from nearby outdoor poultry and pig units causes nutrient ersity.  **Action description**  Investigate the impact, pathways and £2,000-£5,000 2014-20 Investigation / Research / Agency, Diffuse Water Pollution Plan. Include advice to farmers, agri-environment, partnerships with industry.  **Action description**  **Action description**  **Cost estimate**  **Timescale**  **Monitoring**  **Monitoring**  **Monitoring**  **Natural England, Catchment Sensitive Farming (CSF)*  **Action description**  **Implement actions in the Diffuse**  **Water Pollution Plan. Investigate Sources and pathways of diffuse pollution in the catchment from agriculture and roads in areas outside of DWP plans.**  **Punding option**  **Punding opt	water quality arising from agricultural run-off particularly from nearby outdoor poultry and pig units causes nutrient enrichment and can lead erisity.  **Action description**  Cost estimate Timescale Mechanism Funding option Delivery lead body  Investigate the impact, pathways and sources of water pollution. Draw up a Diffuse Water Pollution Plan. Include advice to farmers, agri-environment, partnerships with industry.  **Action description**  Cost estimate Timescale Mechanism Funding option Agency, Monitoring Natural England, Catchment Sensitive Farming (CSF)  **Action description**  Cost estimate Timescale Mechanism Funding option Delivery lead body  Implement actions in the Diffuse Water Pollution Plan. Investigate sources and pathways of diffuse pollution in the catchment from agriculture and roads in areas outside of DWP plans.

# Site details

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

## **Qualifying features**

**#UK Special responsibility** 

Waveney & Little Ouse Valley Fens SAC S1016 Vertigo moulinsiana: Desmoulin's whorl snail

H6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)

H7210# Calcareous fens with Cladium mariscus and species of the Caricion davallianae

## Site location and links

Waveney & Little Ouse Valley Fens SAC

Area (ha) 193.18 Grid reference TM054799 Map link

Local Authorities Norfolk; Suffolk

Site Conservation Objectives <u>European Site Conservation Objectives for Waveney & Little Ouse Valley Fens SAC</u>

European Marine Site conservation advice <u>n/a</u>

Regulation 33/35 Package <u>n/a</u>

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.

#### **Waveney & Little Ouse Valley Fens SAC**

River basin Anglian RBMP

WFD Management catchment Broadland Rivers, Cam and Ely Ouse (including South Level)
WFD Waterbody ID (Cycle 2 draft) GB105033043080, GB105033043110, GB105034045820

#### Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)

Waveney & Little Ouse Valley Fens SAC Redgrave & Lopham Fens SSSI

Weston Fen SSSI

Blo' Norton & Thelnetham Fens SSSI

**National Nature Reserve (NNR)** 

Waveney & Little Ouse Valley Fens SAC Redgrave & Lopham Fen NNR

Ramsar

Waveney & Little Ouse Valley Fens SAC Redgrave & South Lopham Fens

Special Areas of Conservation (SAC) and Special Protection Areas (SPA)

Waveney & Little Ouse Valley Fens SAC n/a

1.0 26/01/2015







