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

Planning for the Future

Site Improvement Plan

Pevensey Levels

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)

UK0030367 Pevensey Levels SAC

Site description

Pevensey Levels is a large wet grassland complex criss-crossed with freshwater ditches. The SAC feature is a small freshwater snail, little whirlpool ram's-horn snail (*Anisus vorticulus*). Comparatively little is known about the ecology of this species, however it is likely that its requirements reflect those of the freshwater flora and fauna assemblage which is better understood.

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 water levels	Threat	S4056 Little ramshorn whirlpool snail	Identify and fund long-term sustainable water level management. Undertake monitoring of ram's-horn snail.	Environment Agency, Local Authorities, Natural England
2 Invasive species	Threat	S4056 Little ramshorn whirlpool snail	Long term floating pennywort control programme. Investigation of, and implementation of *Crassula* control	Environment Agency, Internal Drainage Board(s) (IDB), Natural England
3 Water Pollution	Threat	S4056 Little ramshorn whirlpool snail	Reduce nutrient output into site, but maintain water availability	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 water levels

The site is a complex managed hydrological system. Maintaining adequate water levels (0.3cm below ditch neck) is critical to the feature. This is currently being delivered through a Water Level Management Plan to achieve appropriate water levels, which should be adequately monitored and maintained. It is uncertain how water levels will be managed following the dissolution of the Internal Drainage Board (IDB), including who will be responsible and how it will be enforced. This is critical for the maintenance of the ram's-horn snail (*Anisus voticulus*) habitat and control of pennywort.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1A	Identify and fund a sustainable long term mechanism to maintain acceptable water levels on site.	£1500000	2015-20	Water Level Management Plan	Defra, Dept. For Communities & Local Government (DCLG), Flood and Coastal Erosion Risk Management (FCERM) 2015-21	Environment Agency	East Sussex County Council, Eastbourne Borough Council, Hastings Borough Council, Lewes District Council, Mid Sussex District Council, Natural England, Rother District Council, Wealden District Council

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1B	Ecological monitoring of ram's-horn snail *Anisus vorticulus*: Maintain an accurate and up-dated knowledge of the ditch occupation by ram's-horn snail. Repeat surveys of the whole cSAC will be required periodically. Post ditch clearance monitoring of populated ditches is important to assess effectiveness of ditch clearance protocol and other changes that are/may occur in the future such as changes in water levels/water quality/management of ditches.	£20000	2015-19	Investigation / Research / Monitoring	Natural England	Natural England	n/a

2 Invasive species

Floating pennywort *Hydrocotyle ranunculoides* and *Crassula* have a known impact on freshwater invertebrate assemblages partly through intervention in ditch succession. There is over 45 km of floating pennywort on Pevensey and it is likely to spread across the site unless appropriate control is in place. Funding has put in place controls during 2012-15, however, at least 3 - 5 further years of control are required. It has become clear in the last year that *Crassula* is more widespread than previously thought, with an area of over 100 ha affected. There are no known control methods, and trials are underway to identify suitable methods that could be implemented.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
2A	Trial a national control investigation for *Crassula*.	£50000	2015-16	Investigation / Research / Monitoring	Water Framework Directive (WFD)	Natural England	Environment Agency, Internal Drainage Board(s) (IDB)

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
2B	Implement a control programme based on the Crassula investigation	£250000	2015-20	Invasive Control Plan: Invasive Species Control Programme	Water Framework Directive (WFD)	Natural England	Environment Agency, Internal Drainage Board(s) (IDB)

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
2C	Continue to implement the Floating pennywort control programme	£500000	2015-20	Invasive Control Plan: Invasive Species Control Programme	Water Framework Directive (WFD)	Natural England	Environment Agency, Internal Drainage Board(s) (IDB)

3 Water Pollution

Two sewarage treatment plants flow into the top of the catchment. Water quality analysis by the Environment Agency show that phosphorus (P) levels are higher than 0.1m/l downstream of these plants. Maximum levels of 0.1m/l P can be tolerated by freshwater invertebrate and plant assemblages (which includes ram's-horn snail). Discharges from these two sewerage plants are not sufficiently diluted due to low flow. Secondly the storm water tank of one plant sits directly on the site and during peak flows discharges filtered, but untreated, sewerage into the same location.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
3A	Identify and implement a successive mechanism to reduce phosphate output from existing point sources without loss of water flow. Following national pilot study.	Not yet determined	2015-20	Water Industry Asset Management Plan (AMP): Implement Plan Scheme	Water company	Environment Agency	Natural England

Site details

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

Qualifying features

#UK Special responsibility

Pevensey Levels SAC	S4056 *Anisus vorticulus*: Little ramshorn whirlpool snail

Site location and links

Pevensey Levels SAC

Area (ha) **3585.38** *Grid reference* **TQ649074**	Map link
Local Authorities	West Sussex
Site Conservation Objectives	European Site Conservation Objectives for Pevensey Levels SCI
European Marine Site conservation advice	n/a
Regulation 33/35 Package	n/a
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 (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.

Pevensey Levels SAC

River basin	South East RBMP
WFD Management catchment	Cuckmere & Pevensey Levels
WFD Waterbody ID (Cycle 2 draft)	GB107041006650, GB107041006670, GB107041012420, GB107041012430, GB107041012460, GB107041012500

Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
Pevensey Levels SAC	Pevensey Levels SSSI

National Nature Reserve (NNR)	
Pevensey Levels SAC	Pevensey Levels NNR

Ramsar	
Pevensey Levels SAC	Pevensey Levels

Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Pevensey Levels SAC	n/a

Version	*Date*	*Comment*
0.1	29/10/2014	