

Site Improvement Plan

Somerset Levels & Moors

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)

UK9010031 Somerset Levels & Moors SPA

Site description

The Somerset Levels and Moors are located in south-west England and are one of the largest and richest areas of traditionally managed wet grassland and fen habitats in lowland UK.

The SPA is within this area, and covers about 35,000 ha in the floodplains of the Rivers Brue, Parrett, Tone and their tributaries. The majority of the site is only a few metres above mean sea level and drains through a large network of ditches, rhynes, drains and rivers. Flooding may affect large areas in winter depending on rainfall and tidal conditions. Parts of the site in the Brue Valley include areas of former raised peatbog that have now been substantially modified by agricultural intensification and peat extraction. This has created areas of open water, fen and reedbed. The site attracts important numbers of waterbirds (swans, ducks and waders) in winter.

A further detailed description of the area can be found in National Character Area profile 142: Somerset Levels and Moors.

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 Drainage	Pressure	A037(NB) Bewick's Swan, A050(NB) Wigeon, A052(B) Eurasian teal, A056(NB) Shoveler, A140(NB) Golden Plover, A142(NB) Northern lapwing, Waterbird assemblage	Water levels managed for SPA birds	Environment Agency, Natural England, Parrett IDB, Axe Brue IDB
2 Inappropriate water levels	Pressure	A037(NB) Bewick's Swan, A050(NB) Wigeon, A052(B) Eurasian teal, A056(NB) Shoveler, A140(NB) Golden Plover, A142(NB) Northern lapwing, Waterbird assemblage	Reduce impacts of deep and prolonged flooding	Environment Agency, Internal Drainage Board(s) (IDB), Natural England, Parrett IDB, RSPB, Somerset Wildlife Trust, Landowner(s), National Farmers' Union (NFU), Country Land and Business Association (CLA), Farming & Wildlife Advisory Group (FWAG), The Royal Bath & West of England Society
3 Maintain and upgrade water management structures	Pressure	A037(NB) Bewick's Swan, A050(NB) Wigeon, A052(B) Eurasian teal, A056(NB) Shoveler, A140(NB) Golden Plover, A142(NB) Northern lapwing, Waterbird assemblage	Restore hydrology by upgrading and maintaining water management infrastructure	Environment Agency, Natural England, Parrett IDB

4 Change in land management	Threat	A037(NB) Bewick's Swan, A050(NB) Wigeon, A052(B) Eurasian teal, A056(NB) Shoveler, A140(NB) Golden Plover, A142(NB) Northern lapwing, Waterbird assemblage	Secure appropriate land management for conservation, by maintaining good working relationships with land owners	Defra, Environment Agency, Internal Drainage Board(s) (IDB), Natural England, RSPB, Somerset Wildlife Trust, Wildfowl and Wetlands Trust, Farming & Wildlife Advisory Group (FWAG)
5 Agricultural management practices	Threat	A037(NB) Bewick's Swan, A050(NB) Wigeon, A052(B) Eurasian teal, A056(NB) Shoveler, A140(NB) Golden Plover, A142(NB) Northern lapwing, Waterbird assemblage	Maintain and improve the 'drove' network, to provide the necessary access for farming activities	Environment Agency, Internal Drainage Board(s) (IDB), Natural England
6 Peat extraction	Pressure	A037(NB) Bewick's Swan, A050(NB) Wigeon, A052(B) Eurasian teal, A056(NB) Shoveler, A140(NB) Golden Plover, A142(NB) Northern lapwing, Waterbird assemblage	Cessation of peat extraction, to curtail adverse impacts	Defra, Developer, Natural England, Somerset County Council, Somerset Wildlife Trust, Upper Brue IDB
7 Public Access/Disturbance	Pressure	A037(NB) Bewick's Swan, A050(NB) Wigeon, A052(B) Eurasian teal, A056(NB) Shoveler, A140(NB) Golden Plover, A142(NB) Northern lapwing, Waterbird assemblage	Minimise disturbance to wintering birds	Environment Agency, Natural England, RSPB, Somerset Wildlife Trust
8 Offsite habitat availability/ management	Threat	A037(NB) Bewick's Swan, A050(NB) Wigeon, A052(B) Eurasian teal, A056(NB) Shoveler, A140(NB) Golden Plover, A142(NB) Northern lapwing, Waterbird assemblage	Improve the knowledge of off-site habitat function and use by the SPA bird assemblage	Natural England, RSPB, Wildlife Trust, British Trust for Ornithology (BTO)

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 Drainage

Excess drainage can result in the problem of low water levels in winter time. This reduces the extent of feeding and roosting sites for SPA birds. Drier soils are detrimental to wetland birds as they rely on the invertebrate assemblages of wet soils for their food. As the soils dry, the invertebrates move deeper into the soil and the soils become too hard for them to probe.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Review of existing Water Level Management Plans as stated in the Somerset Levels 20 year plan. Ensure any changes are compatible with the SPA.	Not yet determined	2014-16	Water Level Management Plan	Defra	Parrett IDB	Environment Agency, Natural England, Axe Brue IDB

2 Inappropriate water levels

Summer flooding and prolonged and deep winter flooding has been a major problem on the Somerset Levels . These events can reduce the extent of feeding and roosting sites for SPA birds. Over areas where the water is too deep, probing birds are unable to reach food sources.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
2A	Seek to incorporate flood risk management into the integrated advice and support provided to assist land managers. Include flood risk management alongside water quality as part of the aims for the local Catchment Sensitive Farming Initiative or its equivalent under NELMS.	£3,000,000	2015-20	England Catchment Sensitive Farming (CSF)	Rural Development Programme (RDPE)	Natural England	Environment Agency, RSPB, Somerset Wildlife Trust, National Farmers' Union (NFU), Country Land and Business Association (CLA), Farming & Wildlife Advisory Group (FWAG), The Royal Bath & West of England Society

<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	Maintain rivers, small watercourses and infrastructure in condition in order to achieve desired water levels on for SPA birds (this action and cost encompasses the whole catchment area as featured in the Somerset Levels Flood Action Plan)	£6,000,000	2015-20	Flood Risk Maintenance Programme: Management Of Vegetation	Environment Agency, Internal Drainage Board (IDB)	Parrett IDB	Environment Agency, Natural England, Parrett IDB, Landowner(s), Axe Brue IDB
<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>
2C	Restore flood resilient grassland, especially on Curry & Hay Moors via the Farm Recovery Fund and agri-environment schemes.	£50,000	2014-17	Habitat creation / restoration strategy: Other	Defra, Rural Development Programme (RDPE)	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>
2D	Improve telemetry to monitor water levels across the Somerset Levels and Moors SPA. IDBs have installed a number of new monitoring sites in recent years. EA has identified a number of new locations where useful information could be gathered following the winter flooding in 2012/13 and 2013/14.	Not yet determined	2015-20	Water Level Management Plan	Environment Agency, Internal Drainage Board (IDB)	Parrett IDB	Environment Agency, Internal Drainage Board(s) (IDB)

3 Maintain and upgrade water management structures

Old Raised Water Level Area (RWLA) management structures do not hold water, or they are designed to drain the sites. Raised water level areas are key habitats managed specifically for wintering birds.

<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	Maintenance of Raised Water Level Area (RWLA) structures.	£300,000	2015-20	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	Natural England	n/a
<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	Replace water control structures on priority sites including West Moor, North Moor, Shapwick Heath, Catcott and Burtle.	£300,000	2015-20	Water Level Management Plan	Environment Agency, Internal Drainage Board (IDB)	Parrett IDB	Environment Agency, Natural England

4 Change in land management

Most of the SPA is covered by Higher Level Stewardship agreements and this is important in supporting appropriate habitat management including appropriate livestock levels. Landowners may decide to come out of agreements at the 5 year break point, especially for land that is within the Raised Water Level Area (RWLA) and this is a risk. This could reduce the extent of appropriately managed wet areas important for SPA birds.

<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	Provision of advice by Natural England to improve farming management for SPA birds.	Not yet determined	2015-20	Advice: Education & awareness raising	Natural England	Natural England	RSPB

<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>
4B	Where appropriate, secure long term conservation management of land necessary to sustain SPA features (includes land purchase schemes).	£1,400,000	2016-25	Mechanism not identified / develop mechanism	EU Life, Natural England, Heritage Lottery Fund (HLF), Voluntary conservation organisation	Local partnership	Natural England, RSPB, Somerset Wildlife Trust, Wildfowl and Wetlands Trust, Farming & Wildlife Advisory Group (FWAG)
4C	Identify solutions to the possible loss of funding from HLS on National Nature Reserve land.	Not yet determined	2015-18	National Nature Reserve (NNR) management plan	Rural Development Programme (RDPE)	Natural England	Defra, Environment Agency
4D	Provision of land management advice to landowners by conservation organisations.	£100,000	2015-20	Partnership agreement	Working Wetlands (WOW) project	Local partnership	Internal Drainage Board(s) (IDB), Natural England, RSPB, Somerset Wildlife Trust, Farming & Wildlife Advisory Group (FWAG)

<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>
4E	Monitor and investigate trends in SPA bird numbers.	£5,000	2016	Investigation / Research / Monitoring	Natural England	Natural England	RSPB, British Trust for Ornithology (BTO)

5 Agricultural management practices

The ability of the land manager to access the site due to loss of, or poor condition of the 'drove' network is a concern.

<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	Improve and maintain farmers' access to fields, for the management of wet grasslands.	£100,000	2016-20	Partnership agreement	Not yet determined	Natural England	Environment Agency, Internal Drainage Board(s) (IDB)

6 Peat extraction

Ongoing extraction of peat occurs in two areas within the site. Extraction damages the site by direct removal of peat and drainage of surrounding land.

<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	Affirm, revoke or modify ongoing peat extraction planning permissions.	£2,000,000	2014-20	Regulation: Other - obtain appropriate permissions	Defra	Somerset County Council	Defra, Natural England
6B	Habitat creation on peat extraction area (e.g. creation of fen), and restoration of habitat on land affected by peat extraction.	Not yet determined	2015-20	Non-Natural England funded site management plan	Peat producer(s)	Developer	Natural England, Somerset Wildlife Trust, Upper Brue IDB

7 Public Access/Disturbance

Dog walking and other activities can cause appreciable disturbance to SPA birds. Priority sites include Raised Water level Areas, droves not designated as access routes, and specific NNRs.

<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>
7 C	Manage public access to reduce disturbance to SPA bird populations.	£10,000	2016-20	Advice: Access Strategy	Natural England	Natural England	Environment Agency, RSPB, Somerset Wildlife Trust
7 A	Commission a study on the sources, risks and impact of disturbance on the Levels SPA and produce a visitor management plan	£7,000	2015	Investigation / Research / Monitoring	Not yet determined	Natural England	RSPB, Somerset Wildlife Trust
7 B	Raise awareness of disturbance to SPA bird populations.	£10,000	2016-20	Advice: Education & awareness raising	Environment Agency, Natural England, Voluntary conservation organisation	Natural England	Environment Agency, RSPB, Somerset Wildlife Trust

8 Offsite habitat availability/ management

There is a limited understanding of how the SPA bird assemblage functionally uses the wider ecological network regionally such as Bridgewater Bay and other parts of the Severn Estuary. There is for example limited knowledge regarding the feeding areas of Golden plover which mainly use the SPA as a roost.

<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>
8 A	Identify off-site habitats and map the wider ecological network that supports the integrity of the SPA including the flyway between the site and the Severn Estuary.	£5,000	2016-19	Investigation / Research / Monitoring	Natural England	Natural England	RSPB, Wildlife Trust, British Trust for Ornithology (BTO)

Site details

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

Qualifying features

#UK Special responsibility

Somerset Levels & Moors SPA

A142(NB) *Vanellus vanellus*: Northern lapwing

A037(NB) *Cygnus columbianus bewickii*: Bewick swan

A140(NB) *Pluvialis apricaria* : European golden plover

A052(NB) *Anas crecca*: Eurasian teal

Waterbird assemblage

Site location and links

Somerset Levels & Moors SPA

Area (ha) **6388.49** Grid reference **ST394417** [Map link](#)

Local Authorities Somerset

Site Conservation Objectives [European Site Conservation Objectives for Somerset Levels & Moors SPA](#)

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 (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.

Somerset Levels & Moors SPA

River basin

[South West RBMP](#)

WFD Management catchment

South & West Somerset

WFD Waterbody ID (Cycle 2 draft)

GB108052015230, GB108052015450, GB108052015482, GB108052015682, GB108052021150, GB108052021181, GB108052021190, GB108052021200

Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
Somerset Levels & Moors SPA	West Sedgemoor SSSI
	Wet Moor SSSI
	Catcott Edington & Chilton Moors SSSI
	Curry & Hay Moors SSSI
	West Moor SSSI
	Southlake Moor SSSI
	Moorlinch SSSI
	Kings Sedgemoor SSSI
	Westhay Moor SSSI
	Tealham & Tadham Moors SSSI
	Shapwick Heath SSSI
	Westhay Heath SSSI
National Nature Reserve (NNR)	
Somerset Levels & Moors SPA	Shapwick Heath NNR
	Somerset Levels NNR
	Westhay Moor NNR
Ramsar	
Somerset Levels & Moors SPA	Somerset Levels & Moors
Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Somerset Levels & Moors SPA	n/a

<i>Version</i>	<i>Date</i>	<i>Comment</i>
1.0	04/11/2014	

www.naturalengland.org.uk/ipens2000

