

Site Improvement Plan

Breney Common and Goss & Tregoss 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)

UK0030098 Breney Common and Goss & Tregoss Moors SAC

Site description

The two discrete parts of this lowland site are located in mid Cornwall to the north and east of the St Austell china clay district. The site exhibits mosaics of various habitats, including dry and wet heaths, acid grassland, bog, swamp, fen and open water communities.

The soil structure reflects past mining operations, which have caused poor drainage. The site supports a rich assemblage of wetland invertebrates including a meta population of marsh fritillary butterfly as well as an important vascular plant assemblage. The existing SAC boundary is currently in the process of being extended and revised into the new Mid Cornwall Moors SSSI/SAC. This rationalises and clarifies the special interest of the overall area within a single landscape-scale designation, combining and linking six previously notified SSSIs with substantial extensions.

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 Undergrazing	Pressure	H4010 Wet heathland with cross-leaved heath, H4030 European dry heaths, H7140 Very wet mires often identified by an unstable `quaking` surface, S1065 Marsh fritillary butterfly	Reintroduction of grazing with hardy breeds of cattle and ponies	Cornwall Wildlife Trust, Natural England
2 Inappropriate scrub control	Pressure	H4010 Wet heathland with cross-leaved heath, H4030 European dry heaths, H7140 Very wet mires often identified by an unstable `quaking` surface, S1065 Marsh fritillary butterfly	Remove and control excess tree and scrub cover	Cornwall Wildlife Trust, Natural England
3 Hydrological changes	Pressure	H4010 Wet heathland with cross-leaved heath, H4030 European dry heaths, H7140 Very wet mires often identified by an unstable `quaking` surface, S1065 Marsh fritillary butterfly	Restore the hydrology	Natural England, University(ies), Others - not yet determined
4 Drainage	Pressure	H4010 Wet heathland with cross-leaved heath, H4030 European dry heaths, H7140 Very wet mires often identified by an unstable `quaking` surface, S1065 Marsh fritillary butterfly	Reduce the impact of drainage	Cornwall Wildlife Trust, Natural England, Others - not yet determined
5 Wildfire/ arson	Pressure/ Threat	H4010 Wet heathland with cross-leaved heath, H4030 European dry heaths, H7140 Very wet mires often identified by an unstable `quaking` surface, S1065 Marsh fritillary butterfly	Reduce the impact of wildfires and establish burning plans	Cornwall Wildlife Trust, Natural England, Cornwall Fire and Rescue Service

6	Habitat fragmentation	Pressure	S1065 Marsh fritillary butterfly	Investigate and restore marsh fritillary habitat connectivity	Cornwall Wildlife Trust, Natural England, Volunteers, Landowner(s), University(ies), Butterfly Conservation
7	Water Pollution	Threat	H4010 Wet heathland with cross-leaved heath, H4030 European dry heaths, H7140 Very wet mires often identified by an unstable `quaking` surface, S1065 Marsh fritillary butterfly	Reduce the impact of diffuse and point source pollution	Cornwall Wildlife Trust, Natural England
8	Air Pollution: impact of atmospheric nitrogen deposition	Pressure/ Threat	H4010 Wet heathland with cross-leaved heath, H4030 European dry heaths, H7140 Very wet mires often identified by an unstable `quaking` surface, S1065 Marsh fritillary butterfly	Control and reduce the impact of atmospheric nitrogen deposition	Not yet determined

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 Undergrazing

A severe lack of grazing over a prolonged period has resulted in extensive areas being dominated by rank sward types with a poor structure. In addition this is partially responsible for the extensive spread of willow, gorse and birch scrub and bracken.

<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>
1A	Introduce grazing to undergrazed areas.	Not yet determined	2017-20	National Nature Reserve (NNR) management plan	Not yet determined	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>
1B	Fencing of common land boundaries on Goss & Tregoss Moors.	£100,000	2014-17	National Nature Reserve (NNR) management plan	Natural England	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>
1C	Additional fencing at Breney Common and the relocation of fencing at Red Moor along the southern boundary.	£6,000	2015-17	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Natural England	Cornwall Wildlife Trust	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>
1D	Installation of two cattle grids at Helman Tor.	£80,000	2015-17	Mechanism not identified / develop mechanism	Other	Cornwall Wildlife Trust	Natural England

2 Inappropriate scrub control

Over the last 30 years rapid vegetative succession has led to large areas of SAC habitat features becoming dominated by secondary scrub. In addition this has and is continuing to reduce the connectivity of marsh fritillary habitat. This progressive succession is also actively drying parts of the site out. A mixed strategy has been developed of permanent scrub removal and reversion to open habitats in some areas whilst in other parts long-term rotational scrub control is advocated to provide a habitat structure favourable to marsh fritillary. Innovative and sustainable approaches to scrub control need to be explored and where appropriate introduced.

<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>
2A	Enable ongoing long-term rotational management of an estimated 250ha of secondary scrub on Goss Moor.	£585,000	2014-29	National Nature Reserve (NNR) management plan	Natural England	Natural England	Not yet determined

<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	Acquire machinery to enable implementation of scrub control on Goss Moor.	£150,000	2014	National Nature Reserve (NNR) management plan	Defra, Natural England	Natural England	Not yet determined

<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	Acquire machinery to enable implementation of scrub control at Breney Common, Tregonetha and Redmoor.	£150,000	2014-17	Mechanism not identified / develop mechanism	Not yet determined	Cornwall Wildlife Trust	Natural England, Others - not yet determined

<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	Control and remove 65ha of scrub under 20 years old on Goss Moor.	£156,000	2014-15	National Nature Reserve (NNR) management plan	Natural England	Natural England	Not yet determined
2E	Implement scrub control at Breney Common (20ha); Lowertown Moor (20ha) and Red Moor (40ha).	£320,000	2014-17	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Natural England	Cornwall Wildlife Trust	Natural England, Others - not yet determined
2F	Investigate innovative approaches to scrub management	Not yet determined	2015-20	Investigation / Research / Monitoring	Natural England, Grant in aid	Natural England	Not yet determined

3 Hydrological changes

The hydrological regime is not properly understood and requires further modelling. The regime is almost certainly impacted upon by extra evapotranspiration caused by invading scrub.

<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	Investigate the hydrological regime on Goss Moor (including by modelling) to help inform the formulation of a Water Level Management Plan (WLMP) for Goss Moor.	£100,000	2015-20	Investigation / Research / Monitoring	Natural England, External funding, National Environment Research Council (NERC)	Natural England	University(ies), Others - not yet determined
<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	Investigate innovative methods for hydrological restoration including the opportunity for re-naturalising the head waters of the Fal catchment where this would benefit the SAC.	Not yet determined	2015-20	Investigation / Research / Monitoring	Natural England, Grant in aid	Natural England	Not yet determined

4 Drainage

The internal and external network of artificial drains is actively impacting upon the hydrological regime constraining the extent of wetland habitats such as wet heath and transition mire.

<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	Block small drainage channels where appropriate on Goss Moor to instigate rewetting of surrounding vegetation on Goss Moor	£7,500	2014-16	National Nature Reserve (NNR) management plan	Natural England	Natural England	Others - not yet determined

<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	Block small drainage channels where appropriate on Red Moor to instigate rewetting of surrounding vegetation	£7,500	2014-16	Mechanism not identified / develop mechanism	Not yet determined	Cornwall Wildlife Trust	Others - not yet determined
<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>
4C	Prepare and implement a WLMP including the renaturalisation of the main channel network across Goss Moor	£150,000	2015-21	Water Level Management Plan	Natural England	Natural England	Others - not yet determined

5 Wildfire/ arson

Inappropriate past burning in conjunction with wildfire events have degraded the SAC's habitat and species interest features.

<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	Implement an appropriate controlled burning and wildfire prevention regime on Goss & Tregoss Moors.	£100,000	2014-19	National Nature Reserve (NNR) management plan	Defra, Natural England	Natural England	Cornwall Wildlife Trust, Cornwall Fire and Rescue Service

6 Habitat fragmentation

Conserving the area's Marsh fritillary metapopulation requires a landscape-scale partnership approach agreed with land managers to address fragmentation of the species habitat and declining habitat quality.

<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	Improve habitat connectivity between Breney Common and Red Moor by securing the conservation management of important land at Helman Tor.	£150,000	2015-17	Land / Tenancy Acquisition: Land Acquisition	Not yet determined	Cornwall Wildlife Trust	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>
6B	Establish the Marsh fritillary meta-population status through monitoring and investigation of populations outside of the current transect locations.	£10,000	2015-16	Partnership agreement	External funding	Not yet determined	Cornwall Wildlife Trust, Volunteers, Landowner(s), Butterfly Conservation
<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>
6C	Research the health of the Marsh fritillary population and its genetic viability.	£25,000	2015-18	Investigation / Research / Monitoring	External funding	Natural England	Cornwall Wildlife Trust, University(ies), Butterfly Conservation
<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>
6D	Develop a landscape-scale approach to Marsh fritillary conservation through the establishment of a Marsh fritillary management forum and strategy.	£500	2014-19	Partnership agreement	Natural England	Natural England	Cornwall Wildlife Trust

7 Water Pollution

Run-off from surrounding agricultural land, the A30 trunk road and railway are sources of diffuse water pollution.

<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>
7A	Investigation to identify the water pollution pathways affecting the wetland habitats on Goss Moor and the measures/techniques required to improve water quality.	£25,000	2016-19	Investigation / Research / Monitoring	Natural England	Natural England	Cornwall Wildlife Trust, Others - not yet determined

8 Air Pollution: impact of atmospheric nitrogen deposition

Air pollution impacts on vegetation diversity. Aerial deposits of nitrogen potentially exceed the threshold limits above which the quality and character of wetland vegetation begins to be altered and adversely impacted.

<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>
8A	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

Site details

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

Qualifying features

#UK Special responsibility

Breney Common and Goss & Tregoss Moors SAC	H4010 Northern Atlantic wet heaths with <i>Erica tetralix</i>
	H4030 European dry heaths
	H7140 Transition mires and quaking bogs
	S1065 <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i> : Marsh fritillary butterfly

Site location and links

Breney Common and Goss & Tregoss Moors SAC

Area (ha) **816.01** Grid reference **SW951598** [Map link](#)

Local Authorities Cornwall

Site Conservation Objectives [European Site Conservation Objectives for Breney Common and Goss & Tregoss Moors SAC](#)

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.

Breney Common and Goss & Tregoss Moors SAC

River basin

[South West RBMP](#)

WFD Management catchment

North Cornwall, Seaton, Looe and Fowey, West Cornwall and the Fal

WFD Waterbody ID (Cycle 2 draft)

GB108048001390, GB108048002300, GB108049000030

Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)

Breney Common and Goss & Tregoss Moors SAC	Breney Common SSSI Goss & Tregoss Moors SSSI
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National Nature Reserve (NNR)

Breney Common and Goss & Tregoss Moors SAC	Goss Moor NNR
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Ramsar

Breney Common and Goss & Tregoss Moors SAC	n/a
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Special Areas of Conservation (SAC) and Special Protection Areas (SPA)

Breney Common and Goss & Tregoss Moors SAC	n/a
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<i>Version</i>	<i>Date</i>	<i>Comment</i>
1.0	18/11/2014	

www.naturalengland.org.uk/ipens2000

