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

Planning for the Future

Site Improvement Plan

Lake District High Fells

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)

UK0012960 Lake District High Fells SAC

Site description

The Lake District High Fells SAC consists of ten sites in the Lake District mountains that support a diverse mixture of upland vegetation types. These include heaths, mires, oak woodland, juniper scrub, clear water lakes and specialised vegetation of mountain-tops, cliffs and screes.

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 grazing	Pressure	H3130 Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels, H4010 Wet heathland with cross-leaved heath, H4030 European dry heaths, H4060 Alpine and subalpine heaths, H5130 Juniper on heaths or calcareous grasslands, H6150 Montane acid grasslands, H6230 Species-rich grassland with mat-grass in upland areas, H6430 Tall herb communities, H7130 Blanket bogs, H7230 Calcium-rich springwater-fed fens, H8110 Acidic scree, H8220 Plants in crevices on acid rocks, H91A0 Western acidic oak woodland, S1393 Slender green feather-moss	Review grazing regimes and negotiate alterations where necessary for site condition	Lake District National Park Authority, National Trust, Natural England, United Utilities Water Plc
2 Deer	Pressure	H4030 European dry heaths, H5130 Juniper on heaths or calcareous grasslands, H91A0 Western acidic oak woodland	Ensure adequate deer management plans are in place and are implemented	National Trust, Natural England, United Utilities Water Plc, Landowner(s)
3 Air Pollution: impact of atmospheric nitrogen deposition	Pressure/ Threat	H3130 Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels, H4010 Wet heathland with cross-leaved heath, H4030 European dry heaths, H4060 Alpine and subalpine heaths, H5130 Juniper on heaths or calcareous grasslands, H6150 Montane acid grasslands, H6230 Species-rich grassland with mat-grass in upland areas, H6430 Tall herb communities, H7130 Blanket bogs, H7230 Calcium-rich springwater-fed fens, H8110 Acidic scree, H8220 Plants in crevices on acid rocks, H91A0 Western acidic oak woodland, S1393 Slender green feather-moss	Develop and implement a Site Nitrogen Action Plan (if deemed appropriate to the site-specific circumstances)	Natural England

4 Unsustainable on-site population or habitat	Pressure/ Threat	H6430 Tall herb communities, H8210 Plants in crevices in base-rich rocks, H8220 Plants in crevices on acid rocks	Write and deliver an arctic alpine recovery plan	Lake District National Park Authority, Natural England
5 Public Access/Disturbance	Pressure/ Threat	H3130 Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels, H4010 Wet heathland with cross-leaved heath, H4030 European dry heaths, H4060 Alpine and subalpine heaths, H5130 Juniper on heaths or calcareous grasslands, H6150 Montane acid grasslands, H6230 Species-rich grassland with mat-grass in upland areas, H6430 Tall herb communities, H7130 Blanket bogs, H7230 Calcium-rich springwater-fed fens, H8110 Acidic scree, H8220 Plants in crevices on acid rocks, H91A0 Western acidic oak woodland, S1393 Slender green feather-moss	Continue the 'Fix the Fells' Programme to minimise habitat impacts	Lake District National Park Authority, National Trust, Fix the Fells programme
6 Managed rotational burning	Pressure/ Threat	H7130 Blanket bogs	Review burning regimes and negotiate changes where necessary	Natural England, United Utilities Water Plc
7 Hydrological changes	Threat	H4010 Wet heathland with cross-leaved heath, H7130 Blanket bogs, H7230 Calcium-rich springwater-fed fens	Review hydrological problems and implement remedies	Cumbria Wildlife Trust, Lake District National Park Authority, National Trust, Natural England, United Utilities Water Plc
8 Invasive species	Threat	H4030 European dry heaths, H5130 Juniper on heaths or calcareous grasslands, H91A0 Western acidic oak woodland	Control the regeneration of non-native conifers and any Rhododendron	Cumbria Wildlife Trust, Forestry Commission, Lake District National Park Authority, National Trust, Natural England, United Utilities Water Plc
9 Disease	Threat	H4030 European dry heaths, H5130 Juniper on heaths or calcareous grasslands, H91A0 Western acidic oak woodland	Investigate Phytophthora control options, keep impact of ash dieback under review and consider appropriate response	Forestry Commission, 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 grazing

In recent times, sheep grazing has had by far the biggest man-made impact on the condition of almost all of the features in the SAC. Although flock sizes have reduced considerably over the last decade or so, sheep still have impacts in certain localities and on the more sensitive features. Some palatable vegetation receives a high localised pressure with sheep congregating to graze some habitats. Seasonality of grazing is also important because grazing outside of the growing season has greater impacts on habitat condition than grazing when vegetation is actively growing. Some habitats in some locations would benefit from the replacement of some or all sheep by cattle as cattle have different habitat impacts.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1A	Review the condition of SAC interest features and grazing regimes on (and affecting) all management units.	Staff time	2014-19	Habitat creation / restoration strategy: Habitat restoration	Natural England, National Trust, United Utilities, National Park Authority	Natural England	Lake District National Park Authority, National Trust, United Utilities Water Plc

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1B	Prescribe changes to grazing management regimes that will remedy the above.	Staff time	2014-19	Habitat creation / restoration strategy: Improvements to habitat connectivity	Natural England, National Trust, United Utilities, National Park Authority	Natural England	Lake District National Park Authority, National Trust, United Utilities Water Plc

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1C	Amend grazing regimes on all site units where interest features are not in good condition due to grazing management.	£1,000,000	2014-24	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Natural England	Natural England	n/a

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1D	Amend grazing regimes on all areas outside of the SAC where these are impacting on SAC condition through encroachment (areas to be identified in 1A above).	£500,000	2014-24	Rural Development Programme for England (RDPE): Environmental Stewardship Entry Level Scheme (ELS)	Natural England	Natural England	n/a

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1E	Investigate other mechanisms to address this issue, possibly to include amendment to agricultural tenancies where required.	Not yet determined	2015-24	Mechanism not identified / develop mechanism	National Trust	Natural England	National Trust, United Utilities Water Plc

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1F	Negotiation and/or enforcement where grazing is unconsented.	Not yet determined	2014-24	Enforcement: Other	Not yet determined	Natural England	n/a

2 Deer

Deer numbers in general, and red deer in particular, have increased in recent years and they are having grazing/browsing impacts.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
2A	Develop and agree a deer management plan with major landowners.	Staff time	2015	Partnership agreement	Staff time	Natural England	National Trust, United Utilities Water Plc, Landowner(s)

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
2B	Implement the deer management plan.	£192,000	2016-24	Partnership agreement	Not yet determined	Natural England	National Trust, United Utilities Water Plc

3 Air Pollution: impact of atmospheric nitrogen deposition

Nitrogen deposition exceeds site relevant critical loads. The precise impacts are unclear and require further investigation. One specific area of concern is that it may be increasing grass-dominance at the expense of the less competitive plants, especially in the most unproductive habitats such as mountain tops, cliffs and possibly some mires. Impacts on oligotrophic lakes could also be significant.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
3A	Investigate impacts on interest features.	Not yet determined	2015-20	Investigation / Research / Monitoring	Not yet determined	Natural England	Not yet determined

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
3B	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

4 Unsustainable on-site population or habitat

Populations of key species in some habitats (particularly arctic alpine species on cliffs) are low, and action is required to assist them to recover to viable levels.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
4A	Write an arctic alpine recovery plan to identify additional intervention required in order for important species to have self-sustaining populations in future.	Staff time	2015-16	Habitat creation / restoration strategy: Habitat restoration	Staff time	Natural England	n/a

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
4B	Deliver the arctic alpine recovery plan.	£70,000	2017-24	Partnership agreement	SSSI funding	Natural England	Lake District National Park Authority

5 Public Access/Disturbance

Public access results in path erosion. There are also specific impacts due to the popularity of particular activities such as climbing and gill scrambling.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
5A	Catalogue all locations within the SAC with serious footpath erosion, and prioritise by their impact on SAC features.	Staff time	2015-16	Partnership agreement	Staff time	National Trust	Lake District National Park Authority, Fix the Fells programme

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
5B	Implement the required path repairs through the 'Fix the Fells' to reduce erosion around the paths.	£2,500,000	2016-24	Existing Local Project	Fix the Fells Programme	National Trust	Lake District National Park Authority, Fix the Fells programme

6 Managed rotational burning

There is strong evidence that managed rotational burning results in changes to plant species composition, peat properties, Dissolved Organic Carbon, peat chemistry, peat water table and peat flow-paths of blanket bog and upland wet heath habitats. Although managed burning is acceptable on many areas of upland dry heath, sensitive areas need to be avoided and details of management such as burn rotation length need to be appropriate to avoid deterioration. This issue affects only Skiddaw Group SSSI and Shap Fells SSSI.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
6A	Informed by the Uplands Evidence Review, improve blanket bog habitat so that it increasingly contributes to Favourable Conservation Status of this interest feature by reviewing the agreed burning on the SAC.	Staff time	2015	Investigation / Research / Monitoring	Natural England	Natural England	United Utilities Water Plc

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
6B	Informed by the Uplands Evidence Review, improve blanket bog habitat so that it increasingly contributes to Favourable Conservation Status of this interest feature, by amending burning plans on all units where this is considered necessary.	Staff time	2014-24	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Natural England	Natural England	n/a

7 Hydrological changes

Although many of the more extensive moor grips have now been blocked, drainage ditches still exist in many mires. Although there are no very large areas of bare peat in this SAC, there are areas where vegetation cover is fragmented. In particular some edges of peat haggs may need re-profiling.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
7A	Catalogue locations where man-made drainage features, peat haggs and other areas of bare peat exist and assess their impacts on site features.	£20,000	2015-20	Investigation / Research / Monitoring	Cumbria Wildlife Trust peatland project	Natural England	Cumbria Wildlife Trust, Lake District National Park Authority, National Trust, United Utilities Water Plc

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
7B	Implement peat restoration works where necessary.	£500,000 (£100k per site)	2016-24	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Cumbria Wildlife Trust peatland project	Natural England	Cumbria Wildlife Trust, Lake District National Park Authority, National Trust, United Utilities Water Plc

8 Invasive species

There are no particularly extensive areas dominated by invasive species. However, scattered larch and spruce have seeded in from nearby forestry plantations. There are also occasional Rhododendrons.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
8A	Implement clearance and chemical treatment of all Rhododendron, and implement control of spruce and larch regeneration.	£50,000 (£5k per site)	2015-24	Invasive Control Plan: Invasive Species Control Programme	Not yet determined	Natural England	Lake District National Park Authority, National Trust, United Utilities Water Plc

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
8B	Assess whether grazing regimes in place on all juniper stands are appropriate to allow juniper to regenerate.	Included in investigation into grazing regimes (under Issue 1)	2015-20	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Natural England	Natural England	Cumbria Wildlife Trust

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
8C	Amend grazing regimes where necessary to allow juniper regeneration.	included in simliar action (under Issue 1)	2014-24	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Natural England	Natural England	n/a

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
8D	Undertake further research into mechanisms of spread of *Phytophthora austocedrae.*	Not yet determined	2015-24	Investigation / Research / Monitoring	Not yet determined	Natural England	n/a

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
8E	Keep impact of ash dieback under review and consider appropriate response.	Not yet determined	2015-24	Investigation / Research / Monitoring	Not yet determined	Natural England	Forestry Commission

9 Disease

Phytophthora austrocedrae is present on the site and threatens juniper. Ash dieback is also a threat.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
9A	Undertake further research into mechanisms of spread of *Phytophthora austocedrae*.	Not yet determined	2015-24	Investigation / Research / Monitoring	Not yet determined	Natural England	n/a

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
9B	Keep impact of ash dieback under review and consider appropriate response.	Not yet determined	2015-24	Investigation / Research / Monitoring	Not yet determined	Natural England	Forestry Commission

Site details

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

Qualifying features

#UK Special responsibility

Lake District High Fells SAC	S1393 *Drepanocladus (Hamatocaulis) vernicosus*: Slender green feather-moss
	H3130 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the *Isoëto-Nanojuncetea*
	H4010 Northern Atlantic wet heaths with *Erica tetralix*
	H4030 European dry heaths
	H4060 Alpine and Boreal heaths
	H5130 Juniperus communis formations on heaths or calcareous grasslands
	H6150 Siliceous alpine and boreal grasslands
	H6230# Species-rich *Nardus* grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe)
	H6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
	H7130# Blanket bogs
	H7230 Alkaline fens
	H8110 Siliceous scree of the montane to snow levels (*Androsacetalia alpinae and Galeopsietalia ladani*)
	H8210 Calcareous rocky slopes with chasmophytic vegetation
	H8220 Siliceous rocky slopes with chasmophytic vegetation
	H91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles

Site location and links

Lake District High Fells SAC

Area (ha) **26999.36** *Grid reference* **NY303318**	Map link
Local Authorities	Cumbria
Site Conservation Objectives	European Site Conservation Objectives for Lake District High Fells 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 (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.

Additional information is provided on targets for flow and some water quality parameters, in order to meet the conservation objectives for certain Natura 2000 sites. The relevant targets are identified in the revised conservation objectives document (see link to PDF below).

These targets have been revised for a number of Natura 2000 rivers and lakes, following a review by the conservation agencies of Common Standards Monitoring Guidance. For rivers, this is done through local discussions between Natural England and Environment Agency staff. For lake sites, the only parameter where alignment of standards was reviewed was phosphorus and so this work was undertaken jointly at a national level.

The linked PDF documents include the proposed target values, and also set out an 'interim progress goal', that will need to be achieved by 2021. Where sufficient information is available the document also identifies a timescale for achievement of the longer-term target. For any sites where it has not been possible to agree specific targets, usually because further technical work is required, these will be indicated in the documents by an asterisk. For further information please see Part 2 of the River Basin Plan

Lake District High Fells SAC

River basin	North West RBMP Solway Tweed RBMP
WFD Management catchment	Derwent (NW), Eden and Esk, Kent and Leven, Lune, South West Lakes
WFD Waterbody ID (Cycle 2 draft)	GB102076070680, GB102076070690, GB102076070700, GB102076070740, GB102076073710, GB102076073730, GB102076073740, GB112072071810, GB112074069950, GB112074069960, GB112074070100, GB112075070330, GB112075070350, GB112075070410, GB112075070420, GB112075070440, GB112075070470, GB112075070490, GB112075070530, GB112075073630, GB30228955, GB30229083, GB30229129, GB31229062, GB31229097, GB31229183
Locally revised Conservation Objectives	
Additional information on locally revised Conservation Objectives	n/a
EA/ NE agreed RBMP lake SAC targets	Proposed total phosphorus targets for Lake Natura 2000 Protected Area Special Areas of Conservation for the updated river basin management plan consultation

River Restoration Plan

Source of information on river restoration plans for SAC rivers where these are in place or planned, with links to documentation where this is available.

Webpage link: Restoring Designated Rivers	n/a
River Restoration Plan document	n/a

Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
Lake District High Fells SAC	River Eden & Tributaries SSSI (overlaps the SAC)
	River Derwent & Tributaries SSSI (overlaps the SAC)
	Buttermere Fells SSSI
	Armboth Fells SSSI
	Skiddaw Group SSSI
	Helvellyn & Fairfield SSSI
	Wasdale Screes SSSI
	Scafell Pikes SSSI
	Pillar & Ennerdale Fells SSSI
	Honister Crag SSSI
	Birk Fell SSSI
	Shap Fells SSSI

National Nature Reserve (NNR)	
Lake District High Fells SAC	n/a

Ramsar	
Lake District High Fells SAC	n/a

Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Lake District High Fells SAC	n/a

Version	*Date*	*Comment*
1.0	17/12/2014	