

Site Improvement Plan

Wast Water

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)

UK0030063 Wast Water SAC

Site description

Wast Water is a relatively large and deep example of an oligotrophic (nutrient poor) waterbody in the Lake District. The shoreline is predominantly rocky and steep. Lying within a catchment with little cultivated land and comprising largely upland grassland and acid rock, the lake water is extremely low in dissolved minerals and is very clear.

The lake has a flora and fauna which is naturally not very diverse, and is restricted to a few groups characteristic of low-nutrient waters. The submerged macrophyte communities of Wast Water are typical of oligotrophic lakes. Species such as bulbous rush *Juncus bulbosus*, quillwort *Isoetes lacustris*, shoreweed *Littorella uniflora*, awlwort *Subularia aquatica* and stoneworts *Nitella spp.* are known to occur.

Least bur-reed *Sparganium natans* and floating bur-reed *Sparganium angustifolium* occur in more sheltered bays and are more typical of mesotrophic situations. Blunt-leaved pondweed *Potamogeton obtusifolius* has been recorded and bog pondweed *P. polygonifolius* occurs in the stream outlets. The macro-invertebrates of Wast Water are typical, including gastropod species (wandering snail *Lymnaea peregra* and river limpet *Ancylus fluviatilis*), the leech *Erpobdella octoculata* and the triclad *Polycelis nigra*. A population of the fish species Arctic charr *Salvelinus alpinus* occurs in the lake.

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 Water Pollution	Threat	H3130 Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Reduce diffuse and point source pollution	Environment Agency, National Trust, Natural England
2 Change in land management	Pressure	H3130 Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Manage the impacts of agriculture, particularly diffuse pollution	Environment Agency, National Trust, Natural England
3 Invasive species	Threat	H3130 Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Biosecurity, control and removal of invasive species	Environment Agency, National Trust, Natural England
4 Air Pollution: impact of atmospheric nitrogen deposition	Pressure	H3130 Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Development and implementation of a Site Nitrogen Action Plan	Not yet determined
5 Changes in species distributions	Pressure	H3130 Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Protect and increase the distribution of SAC species	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 Water Pollution

Wast Water is passing water quality targets, but there are known issues at the head of the lake. This is due to eutrophication, linked to diffuse pollution from agriculture (DWPA) and discharge from septic tanks/ campsite which are adversely affecting the SAC interest features. Nutrient enrichment can accelerate plant growth and alter the flora communities associated with this oligotrophic lake and smother fish spawning gravels.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Local authorities to address known pollution inputs.	£4,000,000	2015-21	Enforcement	Not yet determined	Natural England	Environment Agency, National Trust
1B	Review of agricultural land management in catchment.	Costs in staff time only	2014-15	Investigation / Research / Monitoring	Natural England, National Trust	Natural England	National Trust
1C	Amend land management practices through upgrade of HLS or NELMS.	£300,000	2015-16	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	Natural England	Environment Agency, National Trust

<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	Review of non-agricultural inputs to lake (Septic Tanks etc).	£100,000	2014-15	Investigation / Research / Monitoring	Not yet determined	Environment Agency	National Trust
1E	Upgrade of waste-water treatment facilities (septic tanks, package works etc).	£1,000,000	2015-20	Mechanism not identified / develop mechanism	Not yet determined	Not yet determined	National Trust

2 Change in land management

Land use within the catchment is incompatible with the maintenance of this nutrient poor lake. Intensive grazing, slurry-based cattle rearing and silage production are all examples of agricultural practices which are causing nutrient enrichment of the lake and impacting SAC 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>
2A	Review of agricultural land management in the catchment.	Costs in staff time only	2014-15	Investigation / Research / Monitoring	Natural England, National Trust	Natural England	National Trust
2B	Local authorities to address known pollution inputs.	£4,000,000	2015-21	Enforcement: Other	Not yet determined	Natural England	Environment Agency, National Trust

<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	Amend land management practices through upgrade of HLS or NELMS.	£300,000	2015-2016	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	Natural England	Environment Agency, National Trust

3 Invasive species

Invasive non-natives, often transported to the site by recreational activities, could threaten the natural flora and fauna. In particular the naturally impoverished fauna which is restricted to a few highly characteristic groups in Wast Water.

<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	Implement Cumbria Freshwater Biosecurity Plan to control and eradicate invasive non-native species (INNS), through a national co-ordinated approach.	Not yet determined	2015-21	Bio-security plan	Not yet determined	Natural England	Environment Agency, National Trust

4 Air Pollution: impact of atmospheric nitrogen deposition

Nitrogen deposition exceeds site relevant critical loads, there are no known manifestations of impacts on the 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>
4A	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

5 Changes in species distributions

Increasing temperature fluctuations in the lake due to climate change, may be leading to alterations in species composition and/or distribution of the feature. Declines in the population of the nationally rare Arctic Char *Salvelinus alpinus*, have been observed; this is not a specific SAC feature, but is part of the biota of the notified lake community.

<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	Continued monitoring to ascertain any further reduction in population of charr.	Not yet determined	2017-20	Investigation / Research / Monitoring	Not yet determined	Natural England	n/a

Site details

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

Qualifying features

#UK Special responsibility

Wast Water SAC

H3130 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea

Site location and links

Wast Water SAC

Area (ha) **286.21** Grid reference **NY164062** [Map link](#)

Local Authorities Cumbria

Site Conservation Objectives [European Site Conservation Objectives for Wast Water 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.

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

Wast Water SAC

River basin	North West RBMP
WFD Management catchment	South West Lakes
WFD Waterbody ID (Cycle 2 draft)	GB112074070100, 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)	
Wast Water SAC	Wast Water SSSI

National Nature Reserve (NNR)	
Wast Water SAC	n/a

Ramsar	
Wast Water SAC	n/a

Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Wast Water SAC	n/a

<i>Version</i>	<i>Date</i>	<i>Comment</i>
1.0	31/10/14	

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