

# Site Improvement Plan

## Asby Complex

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](mailto: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](mailto:enquiries@naturalengland.org.uk)

**This Site Improvement Plan covers the following Natura 2000 site(s)**

**UK0014778 Asby Complex SAC**

## Site description

The Asby Complex is a suite of upland sites supporting a rich mosaic of heathland with calcareous grassland, alkaline flushes and limestone pavement. The site is important for a rare assemblage of vascular plants associated with the grassland, flushes and pavement and is also important for upland breeding birds.

Much of the land within the Asby Complex comprises common land or large upland allotments where the main land management is sheep grazing and some sporting management.

## 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 Change in land management	Threat	H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H4030 European dry heaths, H6410 Purple moor-grass meadows, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H7220 Hard-water springs depositing lime, H7230 Calcium-rich springwater-fed fens, H8240 Limestone pavements, S1013 Geyer`s whorl snail, S1393 Slender green feather-moss	Implement appropriate grazing across the site	Natural England, Commons group(s)
2 Hydrological changes	Pressure	H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H6410 Purple moor-grass meadows, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H7220 Hard-water springs depositing lime, H7230 Calcium-rich springwater-fed fens, S1013 Geyer`s whorl snail, S1393 Slender green feather-moss	Identify abstraction sources and impacts on the hydrology	Environment Agency, Natural England, University(ies)
3 Inappropriate stock feeding	Threat	H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H4030 European dry heaths, H6410 Purple moor-grass meadows, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H7220 Hard-water springs depositing lime, H7230 Calcium-rich springwater-fed fens, H8240 Limestone pavements, S1013 Geyer`s whorl snail, S1393 Slender green feather-moss	Enforce illegal stock feeding	Natural England, Landowner(s)
4 Water Pollution	Pressure	H3140 Calcium-rich nutrient-poor lakes, lochs and pools	Further investigation of sources of diffuse inputs	Natural England

5	Invasive species	Threat	H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H7230 Calcium-rich springwater-fed fens	Adopt best practice management solutions	Environment Agency, Natural England, South Cumbria Rivers Trust
6	Fish stocking	Threat	H3140 Calcium-rich nutrient-poor lakes, lochs and pools	Monitor fish stocking and work with leaseholder to reduce impacts	Environment Agency, Natural England
7	Air Pollution: impact of atmospheric nitrogen deposition	Pressure	H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H4030 European dry heaths, H6410 Purple moor-grass meadows, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H7220 Hard-water springs depositing lime, H7230 Calcium-rich springwater-fed fens, H8240 Limestone pavements, S1013 Geyer's whorl snail, S1393 Slender green feather-moss	Reduce the extent of atmospheric air pollution	Not yet determined
8	Public Access/Disturbance	Threat	H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H4030 European dry heaths, H6410 Purple moor-grass meadows, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H7220 Hard-water springs depositing lime, H7230 Calcium-rich springwater-fed fens, H8240 Limestone pavements, S1013 Geyer's whorl snail, S1393 Slender green feather-moss	Produce an access strategy	Cumbria County Council, Natural England, Yorkshire Dales National Park Authority

## 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 Change in land management

The Asby Complex is a series of upland habitats, most of which are common land where the primary management is sheep grazing. Recent levels of sheep grazing are not conducive to achieving favourable condition on the mosaic of heathland and limestone grassland and much of the land is now managed under HLS to introduce cattle grazing. However, there are areas where this beneficial management has not been secured and, whilst they may be managed sensitively at present, any change in land management may have a detrimental effect on the SAC features. The beneficial changes in management achieved through HLS has often had a reliance on fencing, which if removed, would lead to a decline in SAC features. As much of the land is common land, secretary of state approval is required for most fencing proposals.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Introduce cattle grazing in areas where it is not currently present, to disperse sheep grazing evenly across the fell and prevent localised overgrazing. Cattle will also graze non-selectively across the vegetation and therefore result in a more diverse sward.	£100,000	2015-20	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Not yet determined	Natural England	n/a
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1B	Apply for fencing as required to ensure that the appropriate grazing is achieved.	£10,000	2015-20	Mechanism not identified / develop mechanism	Not yet determined	Consultant	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>
<b>1C</b>	Work with the Commons Groups and the major landowners to achieve a sustainable level of grazing that will allow the interest features to be maintained in favourable condition. This may require some alteration in current grazing rights.	Not yet determined	2015-20	Regulation: Compulsory Withdraw/Modify Notice/Consent	Not yet determined	Natural England	Commons group(s)

## 2 Hydrological changes

There are numerous abstractions from both domestic and commercial sources including a large quarry within the Asby Complex. The effect of all these individual changes to the local water table is poorly understood and the in combination effects, less so. Changes in hydrology can have a direct impact on the interest features for which the SAC is notified, specifically the alkaline flushes.

<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>
<b>2A</b>	Work with researchers, Environment Agency and possibly employ external consultants to understand the complex hydrology of the underlying karstic system, and how the current and future abstractions impact upon it.	£500,000	2015-20	Investigation / Research / Monitoring	Natural England, Research project	Natural England	University(ies)

## 3 Inappropriate stock feeding

Foddering of sheep on the fell in winter is regularly carried out where land is not under agreement. This leads to localised suppression of heathland vegetation.

<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>
<b>3A</b>	Natural England and relevant major landowners need to take a stronger line on this issue to tackle the unconsented and illegal stock feeding that is occurring on Common Land. This could be achieved through the appointment of a consultant to work with key land owners and Commons Associations to agree good practice, or it could be achieved through enforcement.	£5,000	2015-20	Major Landowner Group land ownership activities : Other	Not yet determined	Natural England	Landowner(s)

#### 4 Water Pollution

A large gull colony, no longer present on site have left a historic legacy of enrichment in the Tarn. There are likely to be additional inputs from diffuse sources but complex hydrology make it difficult to pinpoint the source.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
4A	Investigation into the sources of diffuse pollution.	£25,000	2015-17	Investigation / Research / Monitoring	Natural England	Natural England	Catchment Sensitive Farming (CSF)

#### 5 Invasive species

Introduction or spreading of non native species such as *Crassula helmsii* would significantly impact the integrity of the Tarn.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
5A	Implement the Cumbria Freshwater Biosecurity Plan, to control and eradicate invasive non-native species through a national co-ordinated approach.	Not yet determined	2015-20	Invasive Control Plan: Invasive Species Control Programme	Not yet determined	Natural England	Environment Agency, South Cumbria Rivers Trust

#### 6 Fish stocking

Inappropriate fish stocking would be detrimental to the the interest features of the tarn if it takes place.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
6A	Continue to monitor existing fish stocking activity via the consenting process and work with the fisheries lease holder to further reduce the impact of fisheries activities.	Not yet determined	2015-20	Regulation: Environmental Permits	Not yet determined	Natural England	Environment Agency

#### 7 Air Pollution: impact of atmospheric nitrogen deposition

Nitrogen deposition exceeds site relevant critical loads.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
7A	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

## 8 Public Access/Disturbance

The area is within the proposed extension area of the Yorkshire Dales National Park. The raising of the profile of this area could lead to increased disturbance and damage to sensitive 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>
<b>8A</b>	Work closely with Yorkshire Dales National Park and Access specialists in Natural England, to ensure that the promotion of recreation is focused away from sensitive areas.	Not yet determined	2015-20	Advice: Access Strategy	Not yet determined	Yorkshire Dales National Park Authority	Cumbria County Council, Natural England

## Site details

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

### Qualifying features

#UK Special responsibility

#### Asby Complex SAC

S1393 *Drepanocladus (Hamatocaulis) vernicosus*: Slender green feather-moss

H3140 Hard oligo-mesotrophic waters with benthic vegetation of *Chara spp*

H4030 European dry heaths

H6210# Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*)

H6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)

H7210# Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*

H7220# Petrifying springs with tufa formation (*Cratoneurion*)

H7230 Alkaline fens

H8240# Limestone pavements

S1013 *Vertigo geyeri*: Geyer`s whorl snail

### Site location and links

#### Asby Complex SAC

Area (ha) **3122.23**      Grid reference **NY598112**      [Map link](#)

Local Authorities      Cumbria

Site Conservation Objectives      [European Site Conservation Objectives for Asby Complex 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

### Asby Complex SAC

River basin	<a href="#">North West RBMP</a>
WFD Management catchment	Eden and Esk, Lune
WFD Waterbody ID (Cycle 2 draft)	GB102076070710, GB102076070840, GB112072071830
Locally revised Conservation Objectives	
Additional information on locally revised Conservation Objectives	<a href="#">n/a</a>
EA/ NE agreed RBMP lake SAC targets	<a href="#">Proposed total phosphorus targets for Lake Natura 2000 Protected Area Special Areas of Conservation for the updated river basin management plan consultation</a>

### 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	<a href="#">n/a</a>
River Restoration Plan document	<a href="#">n/a</a>

## Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
Asby Complex SAC	Ewefell Mire SSSI
	Sunbiggin Tarn & Moors & Little Asby Scar SSSI
	Crosby Ravensworth Fell SSSI
	Great Asby Scar SSSI
	Crosby Gill SSSI
	The Clouds SSSI
National Nature Reserve (NNR)	
Asby Complex SAC	Great Asby Scar NNR
Ramsar	
Asby Complex SAC	n/a
Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Asby Complex SAC	n/a

<i>Version</i>	<i>Date</i>	<i>Comment</i>
1.0	17/12/2014	

[www.naturalengland.org.uk/ipens2000](http://www.naturalengland.org.uk/ipens2000)

