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

Site Improvement Plan Morecambe Bay Pavements

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)

UK0014777 Morecambe Bay Pavements SAC

Site description

Morecambe Bay Pavements SAC is located in south Cumbria and Lancashire. It comprises extensive areas of upland calcareous grassland, limestone pavement and broadleaved woodlands (both ash and yew).

In addition to this it holds an exemplar calcareous lowland lake, extensive Juniper and notably has a population of narrow-mouthed whorl snail.

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	H6210 Dry grasslands and scrublands on chalk or limestone (important orchid sites)	Arrange cattle grazing through RDPE schemes	Natural England
2 Commons management	Pressure/ Threat	H6210 Dry grasslands and scrublands on chalk or limestone (important orchid sites), H8240 Limestone pavements	Negotiate Commons agreements	Natural England, Hutton Roof Parish Council, Commoners
3 Inappropriate scrub control	Threat	H6210 Dry grasslands and scrublands on chalk or limestone (important orchid sites), H8240 Limestone pavements	Remove and control excess tree and scrub cover	Forestry Commission, Natural England
4 Forestry and woodland management	Pressure	H5130 Juniper on heaths or calcareous grasslands, H6210 Dry grasslands and scrublands on chalk or limestone (important orchid sites), H8240 Limestone pavements, H9180 Mixed woodland on base-rich soils associated with rocky slopes, H91J0 Yew-dominated woodland	Continue restoration of woodlands back to broadleaves	Environment Agency, Forestry Commission, Natural England
5 Deer	Pressure	H5130 Juniper on heaths or calcareous grasslands, H8240 Limestone pavements, H9180 Mixed woodland on base-rich soils associated with rocky slopes, H91J0 Yew-dominated woodland	Control deer, and take measures to prevent browsing	Forest Enterprise, Forestry Commission, Lake District National Park Authority, Natural England, The Deer Initiative, Arnside and Burton Deer Management Group

6 Public Access/Disturbance	Pressure	H6210 Dry grasslands and scrublands on chalk or limestone (important orchid sites), H8240 Limestone pavements	Manage both legal, and illegal access	Arnside & Silverdale AONB, Cumbria Constabulary, Lake District National Park Authority, Natural England, South Lakeland District Council, Landowner(s), Highways authority
7 Disease	Pressure	H5130 Juniper on heaths or calcareous grasslands	Retain Juniper throughout the SAC	Arnside & Silverdale AONB, Forestry Commission, Lake District National Park Authority, Natural England
8 Game management: pheasant rearing	Pressure	H3140 Calcium-rich nutrient-poor lakes, lochs and pools	Assess impacts on water quality and amend consents if required.	Natural England
9 Water Pollution	Pressure/ Threat	H3140 Calcium-rich nutrient-poor lakes, lochs and pools	Limit negative inputs from point and diffuse sources into water bodies	Arnside & Silverdale AONB, Environment Agency, Natural England, Gamekeepers/ managers
10 Air Pollution: impact of atmospheric nitrogen deposition	Pressure/ Threat	H5130 Juniper on heaths or calcareous grasslands, H6210 Dry grasslands and scrublands on chalk or limestone (important orchid sites), H8240 Limestone pavements, H9180 Mixed woodland on base-rich soils associated with rocky slopes, H91A0 Western acidic oak woodland, H91J0 Yew- dominated woodland	Control and reduce impacts of atmospheric nitrogen deposition	Not yet determined
11 Invasive species	Pressure/ Threat	H6210 Dry grasslands and scrublands on chalk or limestone (important orchid sites), H8240 Limestone pavements	Monitor and control Cotoneaster	Arnside & Silverdale AONB, Cumbria Wildlife Trust, Lake District National Park Authority, Natural England, Butterfly Conservation
12 Fertiliser use	Pressure	H6210 Dry grasslands and scrublands on chalk or limestone (important orchid sites)	Awareness raising of SSSI protection legislation and enforcement measures	Natural England
13 Change in land management	Threat	H6210 Dry grasslands and scrublands on chalk or limestone (important orchid sites), H8240 Limestone pavements	Promote and support local woodland initiatives	Forestry Commission, Lake District National Park Authority, Cumbria Woodlands

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

The main grazeable habitat - calcareous grassland - requires appropriate grazing. On sites with dense swards (that build up after no grazing periods), cattle grazing (rather than sheep, or no grazing at all) is required

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Introduction of cattle grazing onto grasslands that either had no grazing, or are sheep grazed.	£60,000	2014-16	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Rural Development Programme (RDPE)	Natural England	n/a
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1B	Introduction of cattle grazing onto grasslands that had sheep grazing only.	£60,000	2016-20	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	Natural England	n/a

2 Co	mmons management						
	al areas are Commons, and this create	es organisational	difficulties as th	ey require the setting up	o of Commons Par	tnerships and getting com	munity agreement.
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
2A	Resolve Commons issues and disputes in the absence of an owner	£500	2014	Mechanism not identified / develop mechanism	Rural Development Programme (RDPE)	Natural England	Hutton Roof Parish Council, Commoners
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
2B	Take forward a Commons Partnership where interest in uptake of stewardship is limited	£40,000	2014	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Rural Development Programme (RDPE)	Natural England	n/a
3 Ina	ppropriate scrub control						
	of grazing, but also the difficulty and expone pavements), and thereby shading		nanagement ha	s led to scrub spreading	g over the designa	ted features (such as spec	cies -rich grassland and
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
3A	Phased management, sometimes involving large-scale removal of scrub where it is very dense (mature gorse beds), and follow-up management to maintain cleared areas in an open state.	£20,000	2014-16	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Rural Development Programme (RDPE)	Natural England	n/a

Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
Ongoing scrub control with expiry of existing capital items grants under HLS, on all pavements and some calcareous grasslands.	£80,000	2014-30	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	Natural England	Forestry Commission
Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
earance of old conifer plantations is on	going. The recov			Not yet determined	Natural England s requires ongoing manag	n/a ement and monitoring. In
· · ·	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
Remove beech plantation to extend the area of base-rich fen adjacent to Hawes Water.	£50,000	2015-20	Habitat creation / restoration strategy: Habitat restoration	Not yet determined	Natural England	n/a
Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
Develop a woodland management plan and implement the works required.	£5,000	2015	Rural Development Programme for England (RDPE): England Woodland	Rural Development Programme (RDPE)	Forestry Commission	n/a
	existing capital items grants under HLS, on all pavements and some calcareous grasslands.	Ongoing scrub control with expiry of existing capital items grants under HLS, on all pavements and some calcareous grasslands.£80,000Action descriptionCost estimateOngoing scrub control with expiry of existing capital items grants under HLS on all pavements and some calcareous grasslands. This also affects units and SSSIs not currently in unfavourable condition.Cost estimate £60,000estry and woodland management earance of old conifer plantations is onjoing. The recov illar the mosaic of woodland with open priority features r Action descriptionCost estimate £50,000Action descriptionCost estimate £50,000Action descriptionCost estimate £50,000Action descriptionCost estimate £50,000Action descriptionCost estimate £50,000Action descriptionCost estimate £50,000Develop a woodland management plan and implement the works£5,000	Ongoing scrub control with expiry of existing capital items grants under HLS, on all pavements and some calcareous grasslands.£80,0002014-30Action descriptionCost estimateTimescaleOngoing scrub control with expiry of existing capital items grants under HLS on all pavements and some calcareous grasslands. This also affects units and SSSIs not currently in unfavourable condition.Cost estimateTimescaleestry and woodland management lar the mosaic of woodland with open priority features requires careful I Action descriptionCost estimateTimescaleAction descriptionCost estimateTimescaleAction descriptionCost estimateTimescaleAction descriptionCost estimateTimescaleAction descriptionCost estimateTimescaleRemove beech plantation to extend the area of base-rich fen adjacent to Hawes Water.£50,0002015-20Action descriptionCost estimateTimescaleDevelop a woodland management plan and implement the works£5,0002015	Ongoing scrub control with expiry of existing capital items grants under HLS, on all pavements and some calcareous grasslands.£80,0002014-30Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)Action descriptionCost estimate £60,000TimescaleMechanismOngoing scrub control with expiry of existing capital items grants under HLS on all pavements and some calcareous grasslands. This also affects units and SSSIs not currently in unfavourable condition.Cost estimate £60,000TimescaleMechanism dentified / develop mechanismestry and woodland management the area of base-rich fen adjacent to Hawes Water.Cost estimate £50,000TimescaleMechanismAction descriptionCost estimate the area of base-rich fen adjacent to Hawes Water.Cost estimate £50,000TimescaleMechanismAction descriptionCost estimate £50,0002015-20Habitat creation / restoration strategy: Habitat restorationAction descriptionCost estimate £50,000TimescaleMechanismAction descriptionCost estimate £50,000Z015-20Habitat creation / restoration strategy: Habitat restorationAction descriptionCost estimate £50,000Z015MechanismPevelop a woodland management plan and implement the works required.E5,0002015Rural Development Programme for England (RDPE):	Ongoing scrub control with expiry of existing capital items grants under HLS, on all pavements and some calcareous grasslands.£80,0002014-30Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)Rural Development Programme (RDPE)Rural Development Programme (RDPE)Action descriptionCost estimate £60,000Timescale 2014-30Mechanism Mechanism not identified / develop mechanismFunding option Not yet determinedOngoing scrub control with expiry of existing capital items grants under HLS on all pavements and some calcareous grasslands. This also affects units and SSSIs not currently in unfavourable condition.Cost estimate £60,000Z014-30Mechanism Mechanism not identified / develop mechanismFunding option Not yet determinedestry and woodland management lar the mosaic of woodland with open priority features requires careful balancing.Cost estimate TimescaleMechanism MechanismFunding option Not yet determinedAction description Hawes Water.Cost estimate £50,000Z015-20Habitat creation / restoration strategy: Habitat restorationFunding option Not yet determinedAction description Develop a woodland management plan and implement the works required.Cost estimate £5,000Z015Rural Development Programme Programme for Programme Programme Programme Programme Programme ProgrammeFunding option Not yet determined	Ongoing scrub control with expiry of existing capital items grants under HLS, on all pavements and some calcareous grasslands.£80,0002014-30Rural Development Programme for Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)Rural Development Programme for RDPE):Natural EnglandAction descriptionCost estimateTimescaleMechanism MechanismFunding option determinedDelivery lead bodyOngoing scrub control with expiry of existing capital items grants under HLS on all pavements and some calcareous grasslands. This also atfects units and SSDs not currentlyCost estimateTimescaleMechanism not identified / develop mechanismFunding option Not yet determinedDelivery lead bodyNatural Englandesting capital items grants under HLS on all pavements and some calcareous grasslands. This also atfects units and SSDs not currentlyThe recovery of these areas to broadleaf woodland or other habitats requires ongoing manage lar the mosaic of woodland with open printly features requires careful balancing.Funding optionDelivery lead bodyAction descriptionCost estimateTimescaleMechanismFunding optionDelivery lead bodyAction description<

6/17

Carry out felling and fencing to tackle sycamore and conifers and the lack of regeneration.	£20,000	2016	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land	Rural Development Programme (RDPE)	Forestry Commission	Natural England
ər			Management Scheme)			
			eventing regeneration.	Long term this will	lead to woodland loss. De	er can also affect the
Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
Strategic control of deer to limit overall numbers to a sustainable level.	£99,000	2014-25	Mechanism not identified / develop mechanism	Not yet determined	Forest Enterprise	Natural England, The Deer Initiative
Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
Install deer fencing and carry out planting of local provenance trees to allow for regeneration if natural regeneration is thought to be unlikely	£50,000	2016-25	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	Natural England	Forestry Commission
	er are browsing saplings and seedlings of d flora and emergent vegetation with lim <i>Action description</i> Strategic control of deer to limit overall numbers to a sustainable level. <i>Action description</i> Install deer fencing and carry out planting of local provenance trees to allow for regeneration if natural	of regeneration.erare browsing saplings and seedlings of both scrub and the d flora and emergent vegetation with limestone pavementAction descriptionCost estimateAction descriptionCost estimateStrategic control of deer to limit overall numbers to a sustainable level.£99,000Action descriptionCost estimateAction descriptionCost estimateInstall deer fencing and carry out planting of local provenance trees to allow for regeneration if natural£50,000	sycamore and conifers and the lack of regeneration. er are browsing saplings and seedlings of both scrub and trees, which is pred flora and emergent vegetation with limestone pavement grikes. Action description Cost estimate Strategic control of deer to limit overall numbers to a sustainable level. £99,000 2014-25 Action description Cost estimate Timescale Strategic control of deer to limit overall numbers to a sustainable level. £99,000 2014-25 Action description Cost estimate Timescale Install deer fencing and carry out planting of local provenance trees to allow for regeneration if natural £50,000 2016-25	sycamore and conifers and the lack of regeneration.Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)ererereraction descriptionCost estimate £99,000Timescale 2014-25Mechanism MechanismStrategic control of deer to limit overall numbers to a sustainable level.Cost estimate £99,000Timescale 2014-25Mechanism MechanismAction descriptionCost estimate £99,000Timescale 2014-25Mechanism MechanismAction descriptionCost estimate £99,000Timescale 2014-25Mechanism RechanismAction descriptionCost estimate £99,000Timescale 2014-25Mechanism RechanismAction descriptionCost estimate £90,000Timescale 2014-25Mechanism RechanismAction descriptionCost estimate £0,000Timescale 2016-25Mechanism Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management	sycamore and conifers and the lack of regeneration.Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)Development Programme (RDPE) (RDPE)ererertree browsing saplings and seedlings of both scrub and trees, which is preventing regeneration. Long term this will d flora and emergent vegetation with limestone pavement grikes.MechanismFunding optionAction descriptionCost estimate £99,0002014-25Mechanism not identified / develop mechanismNot yet determinedAction descriptionCost estimate £99,0002014-25Mechanism Runding optionNot yet determinedAction descriptionCost estimate £99,0002016-25Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land ManagementFunding option	sycaimore and conifers and the lack of regeneration. Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPE) Programme (RDPC) Programme (

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
5C	Implement strategic control of deer numbers and commission a feasibility study looking at all methods of population control.	£50,000	2020-30	Species introduction/reintrod uction for conservation management: Investigation	Not yet determined	Lake District National Park Authority	Natural England, Arnside and Burton Deer Management Group
6 Pu	blic Access/Disturbance						
	bike and off-road bikes are illegally acc lines and dogs worrying sheep.	essing land and o	damaging small	areas. This is an increa	asing issue. There	are also problems with pe	destrian trampling along
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
6A	Adopt positive visitor management to limit access and disturbance to sensitive areas, and limit dog fouling	£5,000	2016-25	Advice: Access Strategy	Not yet determined	Natural England	Arnside & Silverdale AONB, Lake District National Park Authority, South Lakeland District Council
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
6B	Limit ease of access by motorbikes onto sites.	£10,000	2014-20	Mechanism not identified / develop mechanism	Not yet determined	Natural England	Landowner(s), Highways authority
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
6C	Inform public about interest features and how to protect them.	£1,000	2014-20	Advice: Education & awareness raising	Not yet determined	Natural England	n/a

Action 6D	Action description Enforce third party damage from motorbikes	<i>Cost estimate</i> Not yet determined	<i>Timescale</i> 2016-25	<i>Mechanism</i> Enforcement: S34 Road Traffic Act/ S28p(6) Liaison With Natural England	<i>Funding option</i> Not yet determined	<i>Delivery lead body</i> Highways Agency	<i>Delivery partner(s)</i> Cumbria Constabulary, Landowner(s), Highways authority
7 Dis	sease						
Phyto	phthora austrocedrae is a disease that	is present and ha	as been killing ju	uniper for at least 5 year	rs.		
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
7A	Monitor <i>Phytophthora austrocedrae</i> on Juniper, assess the scale of the issue and draw up a conservation plan.	£3,000	2015-20	Investigation / Research / Monitoring	Not yet determined	Forestry Commission	Natural England
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
7B	Monitor <i>Phytophthora austrocedrae</i> on Juniper, assess the scale of the issue and draw up a conservation plan.	£5,000	2016-20	Bio-security plan	Not yet determined	Forestry Commission	Natural England
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
7C	Plant out non-contaminated Juniper stock and/or prepare ground so that regeneration can occur.	£20,000	2016-25	Habitat creation / restoration strategy: Other	Not yet determined	Natural England	n/a

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
7D	<i>Chalara</i> -Ash Dieback disease will reach the area, and as ash is a major component of the SAC it will have a profound effect. A resilience plan will need to be drawn up beforehand and implemented.	£10,000	2016-25	Bio-security plan	Not yet determined	Forestry Commission	Arnside & Silverdale AONB, Lake District National Park Authority, Natural England
8 Ga	me management: pheasant reari	ng					
	resence of game infrastructure (feeders nts into small water bodies within the si		etrimental due to	o nutrient inputs and sci	atting of soils. Imp	ortantly game manageme	nt practices are inputting
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
8A	Monitor the impacts of game infrastructure. Assess existing consents and alter if issues are found.	Not yet determined	2016-25	Investigation / Research / Monitoring	Not yet determined	Natural England	n/a
	t er Pollution Iture diffuse pollution, and also point so		tic tanks) are co	patributing to raised pho	enhata lavale with	in the torne	
-			•		•		
	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
9A	Alteration in game management: stop grain from feeding game birds entering the tarn.	£10,000	2015	Advice: Negotiation	Not yet determined	Natural England	Environment Agency, Gamekeepers/ managers
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
9B	Stop pollution from septic tanks entering water bodies.	£50,000	2016-18	Diffuse Water Pollution Plan	Not yet determined	Natural England	Arnside & Silverdale AONB, Environment Agency

	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
9C	Investigate pollution sources around water bodies.	Not yet determined	2016-18	Investigation / Research / Monitoring	Not yet determined	Natural England	n/a
Nitroge which a	r Pollution: impact of atmospher en deposition exceeds site-relevant crit could be due to this factor. Action description		-	t fen, lake (n/a) and the Mechanism	Vertigo snail (unkr <i>Funding option</i>	nown). Lichens in woodla Delivery lead body	and are poorly represente Delivery partner(s)

grassland on part of the site.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
11A	Control <i>Cotoneaster</i> (and other non- natives) spread by cutting and herbicide treating.	£10,000	2014-25	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	Natural England	n/a

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
11B	Control <i>Cotoneaster</i> (and other non- natives) spread by cutting and herbicide treating, on sites not in stewardship schemes and where no funding is available.	£10,000	2014-25	Advice: Negotiation	Headlands to Headspace programme, Nature Improvement Area (NIA)	Natural England	Arnside & Silverdale AONB, Cumbria Wildlife Trust, Lake District National Park Authority, Butterfly Conservation
12 Fe	ertiliser use						
	ding of fertiliser over grassland has red mall areas at the site margins especial				irs competitive spe	ecies. This has occurred be	oth historically and recent
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
12A	Awareness raising of SSSI protection legislation and application of enforcement measures relating to fertiliser application.	Not yet determined	2014-25	Enforcement	Not yet determined	Natural England	n/a
13 C	hange in land management						
Econo	mic incentives for traditional woodland	management are	e weak, and so d	coppicing might not be o	carried out in the lo	ong term.	
Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
13A	Promote local woodland enterprises to retain knowledge and experience and allow for coppicing. Facilitate bringing woodland back into active management, especially for key species (butterflies and birds).	£5,000	2014-25	Advice: Education & awareness raising	Not yet determined	Forestry Commission	Lake District National Park Authority, Cumbria Woodlands

Site details

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

Qualifying features #UK Special responsibility	
Morecambe Bay Pavements SAC	H7210# Calcareous fens with Cladium mariscus and species of the Caricion davallianae
	H8240# Limestone pavements
	H5130 Juniperus communis formations on heaths or calcareous grasslands
	S1014 Vertigo angustior: Narrow-mouthed whorl snail
	H6210# Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia)
	H91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles
	H4030 European dry heaths
	H9180# Tilio-Acerion forests of slopes, screes and ravines
	H91J0# Taxus baccata woods of the British Isles
	H3140 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp

Site location and links

Morecambe Bay Pavements SAC				
Map link				
Cumbria; Lancashire				
European Site Conservation Objectives for Morecambe Bay Pavements SAC				
n/a				
n/a				
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

Morecambe Bay Pavements SAC

River Restoration Plan document

River basin	North West	North West RBMP
WFD Management catchment	Kent/Leven	
WFD Waterbody ID (Cycle 2 draft)	GB112073071032, GB31229647	
Locally revised Conservation Objectives		
Additional information on locally revised Conservation Objectives	<u>n/a</u>	
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	<u>n/a</u>	

n/a

Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SS	SI)
Morecambe Bay Pavements SAC	Thrang Wood SSSI
	Middlebarrow SSSI
	Marble Quarry & Hale Fell SSSI
	Underlaid Wood SSSI
	Gait Barrows SSSI
	Hutton Roof Crags SSSI
	Farleton Knott SSSI
	Thrang End & Yealand Hall Allotment SSSI
	Whitbarrow SSSI
	Scout & Cunswick Scars SSSI
	Hawes Water SSSI
	Eaves Wood SSSI
	Cringlebarrow & Deepdale SSSI
National Nature Reserve (NNR)	
Morecambe Bay Pavements SAC	Clawthorpe Fell NNR
	Gait Barrows NNR
	Hutton Roof NNR
	Whitbarrow NNR
Ramsar	
Morecambe Bay Pavements SAC	n/a

Special Areas of Conservation (SAC) and Special Protection Areas (SPA)

Morecambe Bay Pavements SAC

n/a



Version	Date	Comment
1.0	08/10/2014	



www.naturalengland.org.uk/ipens2000