

Appendix A SEA / HRA- Likely Impact and Mitigation - Forest of Bowland AONB Management Plan - Measures

This table identifies the draft Outcomes and Measures in the Draft AONB Management Plan. Columns C-f consider the likely potential general impact on priority habitats and species of delivering the measures identified in the draft management plan. Mitigation is considered where the impacts may be other than positive or neutral. Column F identifies the likely effects in the context of an HRA, after mitigation, the application of Core Principles in the plan and allowing for some measures to require individual project-by-project assessments. The impact of the Outcomes alone is addressed more specifically in the HRA Screening document, to which this spreadsheet forms an appendix. This spreadsheet should also be read in conjunction with SEA Screening Report

Potential Impacts Key				
1 Wholly positive				
2 Somewhat positive				
3 Neutral				
4 Somewhat negative				
5 Wholly negative				

HRA effect definitions

No negative effect: these are elements of the plan that would have no negative effect on any European site

No significant negative effect: these are elements of the plan that could have an effect, but the likelihood is there would be no significant negative effect on a European Site either alone or in combination with other plans or projects. This category of effects includes trivial and de minimis impacts

Likely significant effect alone: these elements of the plan will require full appropriate assessment unless the plan can be modified in a way that reduces the effect to no significant negative effect or no effect

Likely to have a significant effect in combination: as with the above category, elements of the strategy categorised in this way will be subject to appropriate assessment unless the effect made by the strategy alone can be reduced to no significant negative effect or no negative effect.

Uncertain: this is where it is not possible to make a judgement on the likelihood of significant effects occurring. These impacts will require further investigation via an appropriate assessment.

In-combination effects:

The plans considered for in-combination effects are the Local Plans identified in the main document; and local conservation management plans, and the North Yorks & York and Lancashire LNRs. Also considered are plans such as RoWPs and certain forestry plans. The assessment of effect is made on the basis of either a) the activity requiring its own HRA in any event or b) the activity being considered to have no possible negative effect in combination because of its pro-conservation nature, even when considered in combination with other plans, of which it would in effect support the delivery. c) the plan acting to counter the potentially negative impacts of some other plans, e.g. the Local Plan

Section	Measure	Potential Impact 1-5 (see key)	Nature of mitigation	Impact after mitigation	HRA Likely Significant Effects	Activity potentially requiring its own HRA on a European site	In combination effect? And reason (a,b, c above)
Outcome 1 Landscape The distinctive landscape character of the Forest of Bowland is conserved and enhanced	1A Restore dry stone walls, hedgerows and white railings to maintain the network visible in the landscape. This may also include historic or distinctive features such as gateposts, signposts, sheepfolds and footpath furniture	1	None	1	No negative effect	No	No negative effect - b, c
	1B Ensure the long-term viability of parkland through appropriate management	1	None	1	No negative effect	No	No negative effect - b, c
	1C Protect skylines from development, in particular support the continuation of the OFCOM funded undergrounding programme	3	None	3	No negative effect	No	No negative effect - b, c
	1D Use local building materials, methods and styles for any new build or renovation works	3	None (assuming carefully chosen location of materials)	3	No negative effect	No	No negative effect - b, c
	1E Avoid large scale tree planting and, where possible, fencing, in wide open moorland landscape areas, and preserve long, open views of the valley floodplains through the careful selection of sites and species for any areas of new planting	1	None	1	No negative effect	No	No negative effect - b, c
	1F Manage the spread of invasive species	1	None	1	No negative effect	No	No negative effect - b, c
	1G Manage grazing to facilitate a diverse mix of moorland vegetation and the natural regeneration of woodland and scrub	1 to 4	The management plan Core Principle of 'not delivering one environmental benefit at the expense of another' applies here. There is an assumption that this measure does not support woodland and scrub expansion into other valuable habitats	1	No negative effect	No	No negative effect - b, c
	1H Conserve the strong sense of tranquillity across the landscape and protect dark skies by preventing and reducing artificial light pollution	3	None	3	No negative effect	No	No negative effect - b, c
	1I Avoid loss or damage to mature field trees through intensification of agricultural practices, and conserve and maintain distinctive clumps of trees	1	None	1	No negative effect	No	No negative effect - b, c
	1J Ensure that highway improvement schemes respect and reflect local character	3	None	3	No negative effect	No	No negative effect - b, c
Iteration	2A Improve the hydrological function and condition of peatland through re-wetting and re-vegetating	1	None	1	No negative effect	Yes	No negative effect - a, b, c
	2B Restore peatlands to support a diverse mosaic of vegetation; manage this with appropriate grazing regimes and stock management	1	None	1	No negative effect	Yes	No negative effect - a, b, c
	2C Ensure that opportunities for green finance are developed and be ready to respond to opportunities where green finance can aid with increasing the scale and rate of delivery	1-3	None	1-3	No negative effect	No	No negative effect - b, c

Outcome 2 Peatland and All Bowland's remaining unrestored peatlands are brought under res	2D Support a more targeted and practical fire severity index, and maintain up to date fire plans for moorland areas	1	None	1	No negative effect	No	No negative effect - b, c
	2F Support specialist restoration contractors to 'scale up' operations	1-3	None	1-3	No negative effect	No	No negative effect - b, c
	2G Avoid new track construction, infrastructure or any development on deep peat which requires planning permission	1-3	None	1-3	No negative effect	No	No negative effect - b, c
	2H Undertake legal, proportionate and responsible predator control at levels which benefit species such as curlew, golden plover, hen harrier and merlin	1	None	1	No negative effect	No	No negative effect - b, c
	2I Remove inappropriate tree planting, and do not replant conifer plantations after they are harvested in areas where trees negatively affect the hydrology of peatland.	1	None	1	No negative effect	No	No negative effect - b, c
	2J Restore heathland on areas of plantation woodland which previously supported heathland vegetation, through a mixture of felling, restructuring and grazing management.	1	None	1	No negative effect	Yes	No negative effect - a, b, c
	2K Restore heathland vegetation on areas of grass moorland on shallow peat soils	1	None	1	No negative effect	Yes	No negative effect - a, b, c
	2L Work across the Great North Bog coalition to identify and trial innovative restoration techniques and materials	1 to 4	Care must be taken to ensure that any new approach is monitored and any necessary remedial action taken promptly	1	No significant negative effect	No	No negative effect - b, c
3 Woodlands are in good ecological condition, supporting a diversity and abundance of key species. Tree and scrub cover is to support nature and enhance the landscape	3A Manage woodlands in line with UK Forestry Standard and bring existing woodlands and hedgerows into good condition	1	None	1	No negative effect	Yes	No negative effect - a, b, c
	3B Identify, survey, and deliver management plans for all remnant Atlantic or temperate rainforests, and ancient woodland	1	None	1	No negative effect	No	No negative effect - b, c
	3C Plant trees, woodlands (including riparian woodlands) and hedgerows to act as wildlife networks and natural solutions to climate change. Plant species that may be more resilient to climatic change, pests and diseases	1 to 5	The management plan Core Principle of 'not delivering one environmental benefit at the expense of another' applies here. Schemes would be designed to maximise benefit for biodiversity, including their location, extent and timing. Major schemes would require their own HRA. Other measures address where 'not' to plant trees (e.g. open moorland)	1	No negative effect	Yes	No negative effect - a, b, c
	3D Survey and retain existing significant / veteran trees in the landscape and plant new ones to act as habitat, stepping stones and future landscape features, in line with UKFS	1	None	1	No negative effect	No	No negative effect - b, c
	3E Facilitate the natural growth and expansion of woodland and scrub habitat, especially to promote habitat connectivity	1 to 5	The management plan Core Principle of 'not delivering one environmental benefit at the expense of another' applies here. Schemes would be designed to maximise benefit for biodiversity, including their location, extent and timing. Major schemes would require their own HRA. Other measures address where 'not' to plant trees (e.g. open moorland)	1	No negative effect	Yes	No negative effect - a, b, c
	3F Create areas of new parkland, wood pasture and agro-forestry	1 to 5	The management plan Core Principle of 'not delivering one environmental benefit at the expense of another' applies here. Schemes would be designed to maximise benefit for biodiversity, including their location, extent and timing. Major schemes would require their own HRA. Other measures address where 'not' to plant trees (e.g. open moorland)	1	No negative effect	Yes	No negative effect - a, b, c
	3G Improve the aftercare of planted trees and woodlands, including the removal of plastic guards where these have been necessary	1	None	1	No negative effect	No	No negative effect - b, c

Outcome expanding	3H Employ measures to minimise grazing, trampling or browsing animals on woodland ground flora, natural regeneration, colonisation and the development of scrub, including fencing where appropriate	1	None	1	No negative effect	Yes	No negative effect - a, b, c
	3I Support research into future woodland resilience to climate change, pests and diseases	1	None	1	No negative effect	No	No negative effect - b, c
Outcome 4 Grasslands Grasslands are species-rich, safeguarded, extended, and support wider biodiversity	4A Ensure existing and potential species-rich meadows, pastures and scarce grasslands are in good condition and well connected	1	None	1	No negative effect	Yes	No negative effect - a, b, c
	4B Expand and connect areas of priority grassland through bespoke restoration and enhancement, using locally sourced seed and plant material, and appropriate management practices	1	None	1	No negative effect	Yes	No negative effect - a, b, c
	4C Deliver a campaign to highlight the important value of grasslands including their biodiversity, soil protection, flood management and climate resilience benefits.	1	None	1	No negative effect	No	No negative effect - b, c
	4D Manage roadside verges in a way that increases biodiversity	1	None	1	No negative effect	No	No negative effect - b, c
	4E Promote the uptake of regenerative farming principles and/or a maximum sustainable outputs (MSO) approach	1	None	1	No negative effect	No	No negative effect - b, c
	4F Be ambitious in creating and maintaining space for nature in grasslands and the wider farmed landscape by promoting and enabling Nature Friendly Farming practices	1	None	1	No negative effect	No	No negative effect - b, c
	4G Encourage appropriate management of purple moor grass and rush pasture	1	None	1	No negative effect	No	No negative effect - b, c
	4H Identify, map and record flood plain meadows and CHEGD Priority Habitat grasslands	1	None	1	No negative effect	No	No negative effect - b, c
	4I Survey and monitor SAC and SSSI upland meadows and ensure their favourable condition is a priority in management agreements	1	None	1	No negative effect	No	No negative effect - b, c
	4J Assess farm and estate greenhouse gas emissions and act to reduce these and to increase sequestration, in line with ambitions for a pathway to Net Zero for the National Landscape	1	None	1	No negative effect	No	No negative effect - b, c
	4K Encourage landowners to take up the National Estate for Nature role by delivering estate-wide management plans to deliver 30 by 30 and to contribute to PLTOF targets.	1	None	1	No negative effect	No	No negative effect - b, c
Watercourses Rivers and watercourses are healthy and functioning naturally. New wetland these and existing wetlands are well-managed all supporting a greater abundance and	5A Maintain, create and expand wetland habitats, promoting good hydrological function and diverse and abundant key species	1 to 4	The management plan Core Principle of 'not delivering one environmental benefit at the expense of another' applies here. Schemes would be designed to maximise benefit for biodiversity, including their location, extent and timing. Major schemes would require their own HRA	1	No negative effect	Yes	No negative effect - a, b, c
	5B Use regulatory powers, advice and enforcement to ensure watercourses and wetlands are in good ecological condition and free from pollution, barriers and artificial modification	1		1	No negative effect	No	No negative effect - b, c
	5C Strengthen the resilience of river systems to climate change and extreme weather events, encouraging the development of nature-based solutions (eg natural flood management) in rivers and wetlands as climate adaptation methods	1		1	No negative effect	Yes	No negative effect - a, b, c
	5D Tackle invasive and non-native species affecting in-stream and riparian habitats	1		1	No negative effect	Yes	No negative effect - a, b, c
	5E Restore natural processes to watercourses to improve in-channel habitats, reconnect rivers to their floodplains, increase biodiversity and enhance the landscape	1 to 4	The management plan Core Principle of 'not delivering one environmental benefit at the expense of another' applies here. Schemes would be designed to maximise benefit for biodiversity, including their location, extent and timing. Major schemes would require their own HRA	1	No negative effect	Yes	No negative effect - a, b, c

Outcome 5 Rivers and wading birds are created, and habitats of key species	5F Restore and create ponds, scrapes and dams on farmland, moorland and in woodland	1 to 4	The management plan Core Principle of 'not delivering one environmental benefit at the expense of another' applies here. Schemes would be designed to maximise benefit for biodiversity, including their location, extent and timing. Major schemes would require their own HRA	1	No negative effect	Yes	No negative effect - a, b, c
Outcome 6 Champion Species Species are increasing in range and abundance	6A Carry out more research and practical action to ensure that wading birds thrive in Bowland	1	None	1	No negative effect	No	No negative effect - b, c
	6B Enable seed collecting, propagating and planting of globeflower and other local native species in meadows.	1	None	1	No negative effect	Yes	No negative effect - a, b, c
	6C Install more 'homes for nature' including boxes for swift, pied flycatcher, brown long-eared bat	1	None	1	No negative effect	No	No negative effect - b, c
	6D Identify a northern seed source for juniper; propagate and plant saplings in upland cloughs	1	None	1	No negative effect	Yes	No negative effect - a, b, c
	6E Survey the black grouse population near to Bowland, and establish relocations where habitats support the potential for new leks and a resident population	1	None	1	No negative effect	Yes	No negative effect - a, b, c
	6F Establish a local management approach to combat and eradicate illegal persecution of hen harriers (and other raptors)	1	None	1	No negative effect	No	No negative effect - b, c
	6G Carry out research to identify key sites for wax caps and hard fern, and deliver actions that help to understand and safeguard these habitats	1	None	1	No negative effect	Yes	No negative effect - a, b, c
	6H Deliver habitat and species conservation measures at a landscape scale, increase habitat connectivity and undertake adaptive management to increase species diversity and abundance	1 to 4	The management plan Core Principle of 'not delivering one environmental benefit at the expense of another' applies here. Schemes would be designed to maximise benefit for biodiversity, including their location, extent and timing. Major schemes would require their own HRA	1	No negative effect	Yes	No negative effect - a, b, c
Outcome 7 Quality access infrastructure facilities and information, means escape is a welcoming place for everyone	7A Maintain and enhance the Public Rights of Way network and provide resources to improve provision, recognising the importance of the network to the rural economy and people's well-being	3	None	3	No negative effect	No	No negative effect - b, c
	7B Develop and enhance Access for All routes and facilities to meet the needs of a wide range of users following the established practice of least restrictive means, and where possible include the provision of all-terrain wheelchairs	3 to 4	Route selection and materials would be critical. Any impacts would likely fall under the de minimis category, but activities affecting an N2K site may require their own HRA	3	No negative effect	Yes	o significant negative effect - a, b, c
	7C Use bespoke projects (e.g. through NLHF, FiPL, Countryside Stewardship) to enhance the network beyond the minimum standard on key promoted and strategic routes, and provide additional access	3 to 4	Care should be taken on siting / nature of additional access to ensure no harm to protected sites	3	No negative effect	Yes	No negative effect - a, b, c
	7D Seek to ensure that any existing permissive access routes continue, especially where they provide important links to wider access within Bowland.	3 to 4	Impacts of permissive should be regularly monitored and steps taken to address issues that arise	3	No negative effect	Yes	o significant negative effect - a, b, c
	7E Manage public countryside sites to provide more opportunities for a wider range of people to explore, enjoy and understand the landscape.	3	None	3	No negative effect	No	No negative effect - b, c

Outcome 7 Access The provision of high-quality access to the Forest of Bowland National Land	7F Promote responsible and safe access for visitors to the countryside (e.g. Countryside Code, dogs and livestock, respect for fragile habitats, advice on water safety, fire-risk)	3	None	3	No negative effect	No	No negative effect - b, c
	7G Improve the promotion of countryside access opportunities, including interpreted routes and easy access routes, including increased use of digital mapping and digital information	3	None	3	No negative effect	No	No negative effect - b, c
	7H Through the Fire Operations Group (FOG) and partners, help to maintain up-to-date fire plans for moorland areas and raise awareness of the risk and impacts of wildfire in the National Landscape.	1	None	1	No negative effect	No	No negative effect - b, c
	7I Utilise adaptive management techniques and practice that create and restore rights of way which are more resilient to climate change	3 to 5	Care should be taken on siting / nature of additional access to ensure no harm to protected sites	3	No negative effect	Yes	No negative effect - a, b, c
Outcome 8 Enjoying, Understanding and Celebrating 8. More people can enjoy, understand and celebrate the National Landscape's natural beauty and special qualities through the provision of high-quality information, events and activities which inspire them to engage with the area	8A Create inviting communications and interpretation that highlight the year-round opportunities of the area for both communities and visitors.	3	None	3	No negative effect	No	No negative effect - b, c
	8B Deliver, support and promote events which celebrate the nature, landscape, culture and heritage of the Forest of Bowland National Landscape.	3 to 5	The nature and scale of events must be carefully managed to ensure no negative impact on protected sites and species. A bespoke assessment of potential impacts may be likely in some circumstances	3	No negative effect	Yes	No negative effect - a, b, c
	8C Manage, improve and create new interpretation and information, to raise awareness of the special qualities of the Forest of Bowland landscape.	3	None	3	No negative effect	No	No negative effect - b, c
	8D Organise and promote inclusive events for people facing barriers to accessing the countryside, especially those related to physical disability, mental health and neurological conditions like dementia.	3	The likely scale of such events is unlikely to generate negative impacts	3	No negative effect	No	No negative effect - b, c
Outcome 9 Learning and Skills More people are learning about Bowland and its natural beauty, and practising the skills that help to conserve and enhance its characteristic features	9A Provide and support educational visits to Bowland, including engaging schools and colleges from nearby towns	3	None providing visits are carefully managed	3	No negative effect	No	No negative effect - b, c
	9B Provide support to teachers to help them develop and deliver Bowland-related programmes in the classroom and in the field	3	None	3	No negative effect	No	No negative effect - b, c
	9C Support school travel costs and work to remove barriers to participation in educational activity.	3	None	3	No negative effect	No	No negative effect - b, c
	9D Provide support for, and input to, lifelong-learning programmes linked to the area's nature, culture and heritage	3	None	3	No negative effect	No	No negative effect - b, c
	9E Develop and resource opportunities for citizen science with a strong element of training and learning that support increases in the quantity and quality of data on species and habitats	3	None	3	No negative effect	No	No negative effect - b, c
Outcome 10 Health and Well-Being More people are enjoying the health and well-being benefits that come from a greater connection with Bowland's nature, culture and landscape	9F Provide training opportunities in skills which are key to conserving and enhancing Bowland's components of natural beauty, including developing more opportunities for peer-to-peer learning	3	None	3	No negative effect	No	No negative effect - b, c
	9G Create apprenticeships, traineeships and placements in rural skills, and professional roles in local organisations, to establish career pathways into the farming, nature and heritage sectors	3	None	3	No negative effect	No	No negative effect - b, c
	10A Develop targeted support programmes which overcome specific barriers to people enjoying the National Landscape.	3	None	3	No negative effect	No	No negative effect - b, c
	10B Collaborate across sectors to make best use of available resources to deliver wellbeing programmes.	3	None	3	No negative effect	No	No negative effect - b, c
	10C Provide opportunities to encourage communities to improve their health and wellbeing through access to nature, close to home and in the National Landscape.	3	None	3	No negative effect	No	No negative effect - b, c
Heritage The Forest of Bowland is better understood, appreciated and valued	11A Use the planning system to resist the piecemeal erosion of aspects of Bowland's historic landscape character (settlement patterns, field boundaries, woodland and wood pasture, parklands, etc)	1	None	1	No negative effect	No	No negative effect - b, c
	11B Ensure that tangible cultural heritage is not adversely impacted by projects and land management activity beyond the planning system	1	None	1	No negative effect	No	No negative effect - b, c
	11C Utilise agri-environment schemes and other incentives to conserve historic features and reinforce the character of historic landscapes	1	None	1	No negative effect	No	No negative effect - b, c
	11D Improve the condition of assets which appear on Historic England's Heritage at Risk Register, and act to remove them from the Register through conservation and restoration measures	3	None	3	No negative effect	No	No negative effect - b, c
	11E Develop uses for redundant historic structures which respect their character	3 to 4	Care would need to be taken over the nature and scale of the uses of any structures on protected sites	3	No negative effect	Yes	No negative effect - a, b, c

Outcome 11 Historic environment and cultural heritage The historic environment and cultural heritage of Bowland is conserved, enhanced and celebrated	11F Establish and support community-led archaeological projects	3 to 4	Care would need to be taken in the planning of any works, which may need their own HRA screening	3	No negative effect	Yes	No negative effect a, b, c
	11G Ensure the Heritage at Risk register is resourced to stay up to date with good quality and accessible information	3	None	3	No negative effect	No	No negative effect - b, c
	11H Ensure the supply of local building materials is adequate for ongoing building repairs & maintenance	3 to 5	The sources of local building stone must be carefully considered in the context of protected sites	3	No negative effect	Yes	No negative effect - a, b, c
	11I Research and document local life and traditions, supporting efforts to keep alive local stories, crafts and skills	3	None	3	No negative effect	No	No negative effect - b, c
	11J Develop collaborative projects to research, conserve and interpret the built heritage of the Forest of Bowland.	3	None	3	No negative effect	No	No negative effect - b, c
	11K Increase awareness around Listed Building status, the need for consent and the use of appropriate materials/technologies in relation to climate change resilience	3	None	3	No negative effect	No	No negative effect - b, c
Outcome 12 Regenerative tourism Bowland is a destination for regenerative tourism, emphasising the connection between nature, society and culture, while ensuring financial benefits stay within the local community	12A Support initiatives that promote the use of public transport and active travel.	3	None	3	No negative effect	No	No negative effect - b, c
	12B Support collaborative tourism-related projects to drive economic growth.	3	None	3	No negative effect	No	No negative effect - b, c
	12C Establish and engage with networking and training opportunities for tourism-related businesses to support regenerative tourism development, via networks such as the Forest of Bowland Sustainable Tourism Network.	3	None	3	No negative effect	No	No negative effect - b, c
	12D Develop tourism initiatives that are community-led and provide benefit to local people.	3 to 4	Care would need to be taken in the precise nature and scale of activity in relation to protected sites	3	No negative effect	No	No negative effect b, c
	12E Develop the research & statistical data for the Forest of Bowland to enable better understanding of its visitor and economic profile, to inform future developments and funding.	3	None	3	No negative effect	No	No negative effect - b, c
	13A Retain access to services within local communities and resist developments which would result in their loss.	3	None	3	No negative effect	No	No negative effect - b, c
Outcome 13 Community Thriving local communities have access to key services and are actively engaged in activities and projects that conserve, enhance and celebrate the natural and cultural heritage of the National Landscape.	13B Provide funding, support and advice for community-based projects and activities which enhance the National Landscape.	1 to 4	Care must be taken to ensure that whilst such programmes may enhance the landscape, they would not have detrimental impacts on other aspects of natural beauty and the conservation objectives of protected sites. Larger schemes may require their own HRA screening.	1	No negative effect	Yes	No negative effect - a, b, c
	13C Support community activity to reduce greenhouse gas emissions in the National Landscape	1 to 5	Care must be taken to ensure that measures would not have damaging impacts on aspects of natural beauty and the conservation objectives of protected sites. Larger schemes may require their own HRA screening	1	No negative effect	Yes	No negative effect - a, b, c
	13D Strengthen access to, and movement within, the Forest of Bowland through enhanced public transport options, whilst also actively promoting walking, cycling and other forms of active travel	3	None	3	No negative effect	No	No negative effect - b, c
	13E Provide a wide range of rewarding opportunities for volunteering that bring benefits both to participants, and to the Forest of Bowland.	1	None	1	No negative effect	No	No negative effect - b, c