

Water Environment Improvements Project Evidence Form

Scope & Purpose

This form is to be used by the external Water Environment Governance Group (WEGG), to review, validate and formally approve the length of bluespaces improved for the Water Environment Improvements ODI. The form will be completed by the Water Environment Team with support from project partners and presented to the WEGG. After formal approval, the km of water environment improved will be recorded against the ODI and projects will be marked as completed on the Water Environment Scorecard and illustrated as delivered in the Bluespaces Mapping Portals.

Project Name

Wild About Bowlees

Project Lead

Company/ Organisation	Named Lead	Position
North Pennines AONB Partnership	Simon Wilson	Programme Manager – Business and Engagement

Water Environment Improved (NWG use only)

Year	Claimed	Proposed	Reason For Any Change
Year 3	2.8 km	2.8 km	N.A

Water Environment Assurance

This project has been reviewed internally to ensure it has delivered benefits above and beyond our baseline and regulatory obligations to improve the water environment accessible to customers across at least two out of three aspects. Following our assurance process, the project was approved by both our internal and external groups for review before delivery. This form presents evidence of project completion and the outputs achieved, to request project sign off.

Level	Project Acceptance Date	Project Approval Date	Completed Project Sign Off Date
Project Team	January 2022	N/A	N/A
Water Environment Steering Group (Internal)	March 2022	March 2022	N/A
Water Environment Governance Group (External)	March 2022	March 2022	May 2023

Project Timescales

Candidate Project Approved	Project Initiated	Project Completed
March 2022	March 2022	April 2023



Project Summary and Highlights

Summary

North Pennines AONB has improved 2.8 km of bluespaces around the Bowlees visitor centre in Teesdale.

The site is the focal point for visitors to the North Pennines, with the visitor centre receiving over 37,000 visitors in 2022-23. The facilities (café, car park, information) and the natural environment (encompassing the Bowlee Beck, the River Tees and associated woodland, scrub and calcareous grassland habitats) make it an ideal site for targeting improvements for visitors to the water environment and hosting events and activities focussed on nature and place.

The Wild About Bowlees project has enabled significant investment in resources and staff time to improve the water environment and the visitor experience, and increased opportunities for a diverse audience to appreciate the site and engage with nature.

The results of work enabled by the Wild about Bowlees project will have long lasting effects which will continue to benefit the area for years to come. In addition, the project has highlighted the potential for the enhancement of the nature value and access opportunities elsewhere in the North Pennines AONB.

Highlights

- Regular litter picking, strategic tree planting and work in the purpose-built tree nursery have all contributed to increasing the biodiversity value of the area
- 340 new trees have been planted at locations selected to increase habitat connectivity, reduce erosion and create new food sources and habitats
- The tree nursery was completed in April 2022: more than 3000 plug plants are housed as well as seed collected from juniper, rock whitebeam, hazel, rowan, hawthorn, bird cherry, birch & alder
- Publication of walk leaflets, the development of a tramper trail network, and further access infrastructure improvements have been achieved through the project to benefit visitors
- Volunteer activities, guided walks and educational activities based at Bowlees Visitor Centre with schools and youth groups have enabled a total of 484 people (260 adults and 224 children) to gain a hands-on experience of the water environment, and to understand its management and pressures

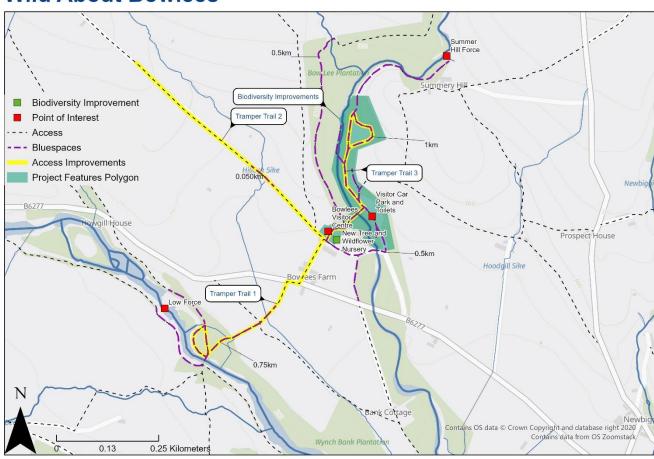


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Maps

Wild About Bowlees



Total Length of Bluespaces: 2.8km

Figure 1: Bluespaces Improved at Bowlees Visitor Centre Tramper trail network



Project Outputs, Benefits & Evidence Against Criteria

Access, Facilities & Recreation				
Expected Project Outcomes	Benefits			
 Three 'Tramper Trails' will be created to allow disabled visitors to access areas close to the Bowlees visitor centre, via a newly purchased off-road mobility scooter. These routes will include Low Force, Bowlee Beck and the track towards Dirt Pit, opening up 1.7 km of access to the mobility impaired 				
2. A series of walks will be developed that will allow people to explore areas of bluespaces around Bowlees, the Bowlee Beck, River Tees and other tributaries. Walk guidance will include waymarking and signage and associated published materials and web pages for the public	A1: Increases access to, engagement with and enjoyment of the water environment			
 A programme of events and guided walks delivered by a project officer (approx. 0.25 FTE across 2022/23 with a focus the peak visitor season: April to October) will allow more people to gain access to the water environments in and around the Bowlees site 	A2: Benefits health and wellbeing through:			
4. Opportunities will be provided for volunteers to be engaged in practical access and biodiversity improvements alongside water; volunteers will benefit physically and mentally from being outdoors and in the natural environments of Bowlees and the surrounding area	 A3: Influences positive environmental behaviors 			
 Educational visits will include activities such as in-river species monitoring which will help engage visitors in discussing water use and environmental behaviours, supported with NWG messaging. 				
Outnuts				

Outputs

- A contract has been secured with Lake District Mobility Ltd to undertake the management and administration of the North Pennines AONB Tramper network. 3 Tramper-friendly routes have been identified from Bowlees, one of which (Tramper Trail 3) is ready to use. Contracts are secured for works on Tramper Trail 1 and Tramper Trail 2, which will make them accessible. The successful bidders, 4 Nature, will carry out works during summer 2023. A contract has been secured for the procurement of a Tramper to be kept at Bowlees visitor centre. Work to establish Tramper trails at Bowlees has led to development of a wider network of Tramper trails across 5 locations around the AONB including one at NWG's Derwent Reservoir site
- Walk leaflets for 8 routes around Bowlees have been produced, physical copies of which will be available from Bowlees Visitor Centre and digital copies will be downloadable from the interactive map on the NPAONB website (pdfs of leaflets attached)
- A wide range of audiences including school groups, families, volunteers and youth groups were engaged in a total of 50 events between 04/21 and 04/22 which included identification workshops, craft sessions, conservation activities, guided walks and more.
- In addition to the monthly tree nursery drop-in sessions which have been held since July 2022, practical works involving volunteers have included tree planting, bird box maintenance and construction, drystone walling and more (see schedule of activities 2022-23). A new natural play area has been created to further enhance the visitor experience, enabling a new way for young people to engage with the site.
- Water has been a key theme throughout engagement sessions. Four activities held over summer 2022 and one in April 2023 included river dipping. Awareness was drawn to factors affecting aquatic invertebrates such as pollution and water use. In other activities where water was not the explicit theme of the session, water was highlighted as an integral component of bluespace ecosystems. For example, during the Creatures of the Night event (Oct 2022) attendees were invited to listen to the sound of the river and imagine themselves as a nocturnal herbivore taking refuge from predators by using the sound of water to mask their footsteps.



Evidence



Some fresh resurfacing on Tramper Trail 3



The play area during construction

What might I see?

In spring, grey wagtail and dipper can be seen along the Bowlee Beck. Woodland plants start to emerge and flower in the woods around Bowlees.



Trees are fully in leaf and the quarry area at Bowlees is awash with flowers. Orchids come into flower and the insectivorous plant, (catches and dissolves insects for food), butterwort can be seen in the quarry. The quarry is a local wildlife site and special invertebrate site. Small birds including spotted flycatcher, chiffchaff and willow warbler will be busy rearing young prior to their migration later in the year.

Autumn & winter

The Bowlee Beck is often in full spate with impressive waterfalls and surging water. Beck is a norse word for a stream and is used throughout Teesdale. Further north, the word burn is used which originates from Anglo Saxon. Though we cannot be completely sure, the names Bowlee and

Bowlees might refer to the curved woodland along the valley following the beck. The beck is shown as Bow Ley on old maps. In autumn, the native broadleaf woodland around Bowlees turns golden brown as leaves start to fall. Towards the end of winter, aconites and snowdrops emerge in the Bowlees Visitor Centre grounds.



The North Pennines Area of Outstanding Natural Beauty (AONB) is one of England's most special places – a stunning, upland landscape of wide open moors, flower-rich hay meadows, intimate woods, dark night skies, charismatic wildlife, industrial heritage, tumbling rivers and dramatic waterfalls. In recognition of its world-class Earth heritage and efforts to make the most of this for tourism and education, it is also designated as a UNESCO Global Geopark

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Bowlees Visitor Centre is run by the North Pennines AONB Partnership. Open daily from: Mid-March to the end of October For winter opening times, visit: www.bowleesvisitorcentre.org.uk





Supported by Northumbrian Water's Blues and the Teesdale Area Action Partnership.

bluespaces





Photography: ©North Pennines AONB Partnership unless otherwise stated. Cover image: Gibson's Cave 03/23/1000

Gibson's Cave and **Summerhill Force**

A walk from Bowlees

DISTANCE & TIME: 0.8 miles (1.3km), 30 minutes

DIFFICULTY: MODERATE - along paths, some steps and uneven ground









Front cover for walk leaflet detailing route to Gibson's Cave

bluespaces





Making Birdboxes with colleagues from Northumbrian Water (© NPAONB)



River Dipping with Darlington Cubs, 24/09/2023 (© NPAONB)

River Dipping Evolution Game

Talk about lifecycle of eg: dragonfly – egg, nymph, emerging, adult

No resources needed

Activity:

Children move around – everyone is an egg to start – move like an egg

Countdown from 3 – everyone must get into pairs

Children do 'rock paper scissors GROW'

– winner gets to grow to next stage of
life (egg > nymph, nymph > emerging,
emerging > adult)

If they don't win they remain at the current stage

Go until a final round – how many became adults?

Talk about factors that can affect lifecycles – pollution, being predated, not enough resources etc

Plan for river dipping lifecycle game- carried out on 24/09 session with Darlington Cubs





Wildlife & Biodiversity

Expected Project Outcomes

Benefits

- Improvements will be delivered to part of a Local Wildlife Site (a wet quarry grassland) at Bowlees including habitat management to the waterside wet woodland, other woodland, and grassland, and additional measures to increase biodiversity including installing bird and bat boxes, and scrub and tree planting to diversify the predominantly Ash woodland structure
- 2. A tree and wildflower nursery is to be established on site in the field adjacent to the visitor center, supporting the conservation of native plants of local provenance (inc. Globeflower, Melancholy Thistle, Wood Cranesbill, and Great Burnet) and the conservation of the Rock Whitebeam (*Sorbus rupicola*), to enhance biodiversity within the area and leave a biodiversity legacy. Collection of native seed for the nursery from surrounding areas and other related conservation activities will be undertaken as part of the project's programme of events and visitor and volunteer engagement.
- B1: Improves the quantity, quality and connectivity of habitats
- B2: Improves the conservation status and or abundance or distribution of species

Outputs

- Tree planting and maintenance has taken place at key locations including 340 new trees planted, and 60 trees maintained. Scrub management was undertaken at the wet grassland site to prevent the encroachment of willow and downy birch into the flower-rich habitat. Through consultation with Teesdale Special Flora's Plants on the Edge project, an organisation devoted to preserving Upper Teesdale's unique flora, it was decided that the condition of the wet grassland quarry site could best be improved by cutting back vegetation in late summer to reduce dominance of meadowsweet and devils-bit scabious. A new bog garden has been created, alongside deadwood features for invertebrates.
 - A Management Plan, drafted in 2019, has been revised and updated to include a calendar of conservation activities to take place over the next year, to be delivered by the Field Officer and Countryside Worker Level 2 apprentice a clear legacy of this project.
- 2. Tree nursery completed April 2022. Monthly volunteer sessions have taken place to maintain and improve the nursery. Typical tasks include weeding and potting on seedlings, organising and logging specimens, and cleaning the site to maintain biosecurity. More than 3000 plug plants are now housed here, key species of which include Globeflower, Melancholy Thistle, Wood Cranesbill, and Great Burnet. Tree species housed here include juniper, rock whitebeam (a particularly rare riparian species), hazel, rowan, hawthorn, bird cherry, birch & alder- the seeds of which are all of local provenance, collected by volunteers in summer 2022. A management proposal for Rock Whitebeam at Low Force has been developed.

Evidence





A group from Stockton Riverside College involved in the Princes Trust programme taking part in tree maintenance; Scrub removal with school placement students in the wet grassland site at Bowlees Quarry

bluespaces | NWG water





The tree nursery and the path which leads up to it



Tree nursery drop-in session for volunteers



Hedge planting above the quarry





Force."

Water Quality			
Expected Project Outcomes	Benefits		
 Volunteers managing the Pennine Way National Trail, and along other promoted routes from the visitor centre will remove litter and prevent it from entering the watercourse, and the project officer and volunteers will also assist in removing litter, particularly through the busy summer months 	 C3: Improves state and function of water, including naturalisation, visual appearance, litter and odour 		
Outputs			

1. NPAONB staff have been supporting a weekly litter pick undertaken between low force and high force by volunteers, preventing litter and debris entering the watercourse

Evidence

"There has clearly been quite a party or parties going on over the weekend. 2 spent BBQs plus assorted cans and bottles were retrieved from amongst the trees on the Raby side, together with more cans and a pair of socks (hanging in a tree) on the rocks.

Over Wynch Bridge I retrieved a carrier bag of full of picnic remains which had been thrown over the fence (onto Hield House land) shortly before the waterfall. Next to it was a soiled nappy which had not even been bagged up.

The rocks by the waterfall had been the scene of another party. Loads of Budweiser bottles, the carton they came in, and a Grey Goose vodka bottle had been left on the rocks and in the river. There were also several soft drinks bottles and an even distribution of Fosters cans along the footpath. Also, another tied up carrier bag of picnic remains on the riverbank. In total I have retrieved two full blue bags of garbage and other unsavoury material from Low

Example of correspondence from a volunteer, after picking litter along the River Tees



	Additional & Secondary Benefits			
	Expected Project Outcomes	Benefits		
1. 2.	-,,	D2: Provides benefits to local communities, the local		
	Connected project and the AONB Management Plan	economy or NWG		
3.	Project walk designs and waymarking outputs will feed into wider AONB application and help produce a process and template for the creation and production of other short walks in the region	D3: Supports strategic project or investment into strategic partnership or landscape/regional activity		

Outputs

- 1. Representatives from Teesdale Special Flora's Plants On the Edge project, who provided input into the updated management plan, is comprised of local residents with an interest in botany. Local interest groups such as Middleton in Bloom and Upper Teesdale Agricultural Support Services were contacted prior to volunteer events so that the message could be spread locally.
- 2. See table below for demonstrated links to management plan elements
- 3. The success of the project has highlighted the potential for similar projects to be initiated elsewhere in the AONB. Two key themes which will continue to be the focus of access works in the AONB are walks by water and short circular routes. The AONB partnership recognises the benefits continued collaboration with Northumbrian Water for future projects will bring.

Evidence

Links between the Wild About Bowlees project, the Tees-Swale management plan and the North Pennines AONB Partnership's management plan

NPAONB Management Plan Mid Term Outcomes	Tees Swale Programme Element	Wild about Bowlees Enabled Activities
There is a more resilient landscape, richer in wildlife	1E Woodland	Enhancement of woodland at Bowlees Visitor centre through planting and maintenance of trees
Natural and cultural heritage assets are maintained in good condition	2E Tees-Swale Volunteers	Volunteer activities in the tree nursery and on site, wildflower identification sessions
Our natural and cultural assets are valued for their own sake and for all that they provide for us 3A Access to the Uplands 3B Uplands for All		Tramper trails and circular walk leaflets Visits for groups from Princes Trust and Cubs have enabled participants to deepen their understanding of the countryside and gain hands on experiences of nature conservation
	3D Community Events	A broad range of public events ranging from volunteering, guided walks and identification workshops
	2Ciii Youth Group leaders and outdoor centres	Activities held with Princes Trust and Cubs groups, which build confidence for youth group leaders to take groups into the area



Hi,

I'm wondering if a tree planting event I'm running at Bowlees as part of the North Pennines AONB partnership would be of interest to anyone at UTASS. If so, I'd be grateful if you were able to circulate the following message:

Would you like to spend a day helping nature at Bowlees Visitor Centre this Half Term? On 24 February (10am-15.30pm) the North Pennines AONB Partnership are planting trees and shrubs to create diverse woodland habitat for birds and insects. All are welcome from ages 11 and up. The work will take place on a steep slope so sure footedness and a reasonable level of fitness are essential. The visitor centre, which has toilet facilities, will be open on the day. Refreshments will be provided inside.

To find out more and sign up, please follow this link: <u>Upcoming Events – North Pennines AONB</u>

Thanks in advance for your help.

Kind regards,

Example of an invitation email sent to Upper Teesdale Agricultural Support Services for a tree planting event



Customer Testimonies & Media

"I'm so glad I came here, this place is amazing there are so many fossils"

Feedback received from participant in river dipping session, 24/09/22

"The young people we have on the programme don't often have the opportunity to go out into local nature and experience what's on their doorstep. The sessions we have with [NPAONB staff]. are an excellent way for our young people to expand their horizons on how they experience what's outside of their normal day-to-day life in a way which is explorative, curious and fulfilling."

Feedback received from participants in tree maintenance and nursery work, 30/11/22

"Just to let you know that I had a meeting with Margaret yesterday and she mentioned how well organised your meeting was at Bowlees last week. She really felt that you were 'on the ball' and that it was a really good meeting, well timed, and delicious scones with jam that you could really taste the raspberries in.

I thought you might appreciate the feedback.

Best wishes

Naomi"

Feedback from Upper Teesdale Botany Group members, who provided input on management objectives for Bowlees Visitor Centre- 02/02/23

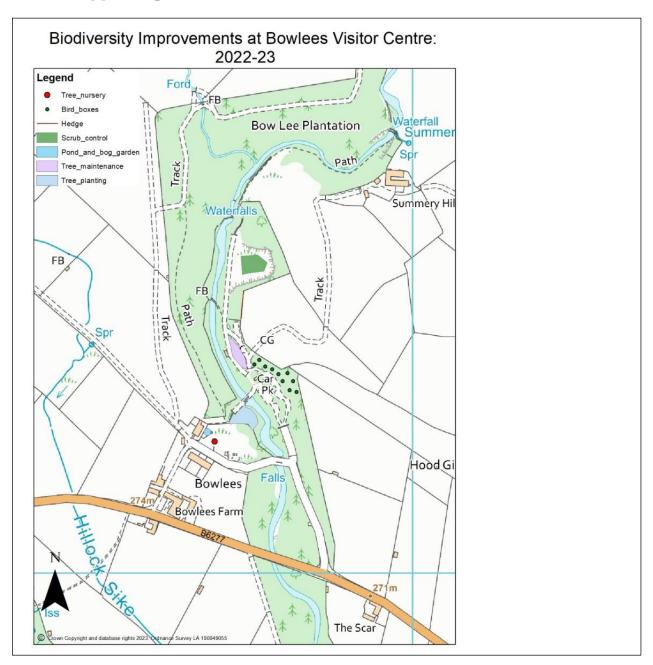
Lead Partner Quotes & Testimonials

"The Wild About Bowlees Project has enabled me to create a meaningful difference to the site- improving both the visitor access and biodiversity. The benefits this has brought are self-evident when walking around the centre and will remain for years to come. The project links with Tees-Swale has fostered a rich spirit of collaboration within the team, working together to achieve common goals. The support from Northumbrian Water has been exemplary, the Just an Hour activity involving bird box cleaning and construction was a highlight of the year."

Jack Ravenscroft, Project Officer, North Pennines AONB Partnership

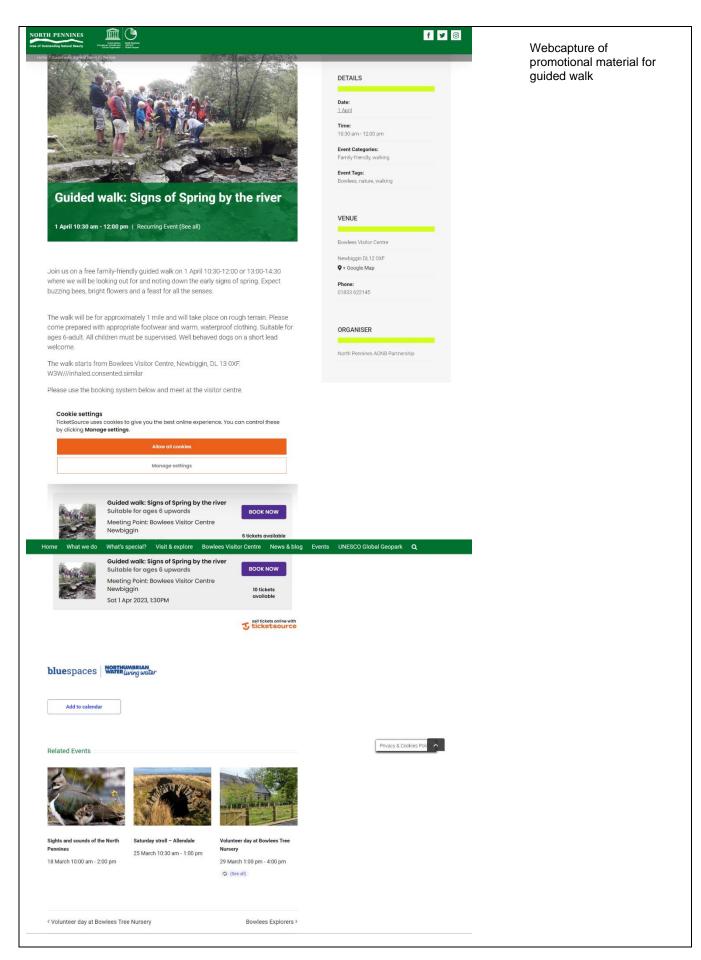


Other Supporting Evidence



bluespaces | NWG







Tree nursery completed April 2022: more than 3000 plug plants are housed here as well as seed collected from juniper, rock whitebeam, hazel, rowan, hawthorn, bird cherry, birch & alder



Trees planted at locations selected to increase habitat connectivity, reduce erosion and create new food sources and habitats

See appendices for additional supporting evidence