

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

Skerne Bridleway and River Restoration

Project Lead

Company/ Organisation	Named Lead	Position
Durham Wildlife Trust	Mark Dinning	Head of Conservation

Bluespaces Improved

Year	Claimed	Proposed	Reason For Any Change
Year 5	3.6 km	3.6 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	October 2021	N/A	N/A
Water Environment Steering Group (Internal)	November 2021	December 2021	N/A
Water Environment Governance Group (External)	December 2021	December 2021	May 2025

Project Timescales

Candidate Project Approved	Project Initiated	Project Completed
December 2021	April 2022	March 2025*

*The baseline water quality elements of this project were achieved through a phosphorus removal scheme at Fishburn sewage treatment works which was managed by NWG separately to the Bluespaces programme elements, managed by partners, and signed off in December 2024.



Project Summary and Highlights

Summary

The Discover Brightwater Landscape Partnership and NWG have delivered water environment improvements to 3.6 km of publicly accessible water environments in County Durham.

The project built on a NWG water quality improvement baseline, delivered through WINEP investment, to install permanent infrastructure to remove phosphorus from final effluent discharged from Fishburn sewage treatment works (STW) which flows into the Skerne. The water quality improvements, delivered by Dec 2024, have resulted in improvements towards Good status (currently at Poor ecological status).

This project focussed on river restoration, habitat creation and access work across a stretch of the River Skerne between the village of Fishburn and Bishop's Fen nature reserve. The river follows the course of a former railway which is used as access for locals and visitors. Through this project, the access has been improved and dedicated as a Public Bridleway, building on the restoration of the historic Holdforth Railway Bridge in 2020/21 which reconnects access between local communities. One section of the bridleway has been resurfaced, and new gates, drainage and signage have been installed to create a safe and engaging route along the River Skerne corridor, all directly aided by this Bluespaces contribution. Other partner contributions have supported restoration of the river channel, with works including bank protection and in-stream flow deflectors and woody debris to create dynamic habitat for aquatic plants, invertebrates, and other wildlife, through restoring the river's natural flow. This in-stream work complements wetland creation at Bishops Fen occurring in the south west project area.

Highlights

- Significant improvements to the riverside access, including resurfacing, waymarking, drainage, vegetation clearance and new steps and new gates have created a safe route along the river
- Installation of in-stream flow deflectors, woody debris and bank protection have improved the water quality and biodiversity value of the riparian habitat
- Riverside tree thinning and tree-planting elsewhere have created a greater diversity of habitat for wildlife
- Willow clearance from a pond has restored open-water habitat for the benefit of great-crested newts and other aquatic wildlife



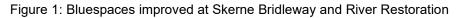


Maps

Skerne Bridleway and River Restoration



Total length of Bluespaces: 3.6 km





Project Outputs, Benefits & Evidence Against Criteria

Access, Facilities & Recreation					
	Expected Project Outcomes	Benefits			
1.	Designation of new bridleway on existing route with associated path improvements; resurfacing, drainage, and vegetation clearance.				
2.	Path improvements provide improved access to water environments, link communities in the area and encourage active travel	 A1: Increases access to, engagement with and enjoyment of the water environment A2: Benefits health and wellbeing through: 			
		A3: Influences positive environmental behaviors			
	Outp	uts			
2.	 (DWT) Brightwater project. Additional path improvements included the installation of new gates, new steps and further vegetation clearance. A stolen car drove through some of path improvements in 2022 and caused significant damage but remedial works by DWT was subsequently undertaken to rectify some of the damage and to deter similar activity in the future by placing large boulders on the path. 				
3.	large boulders on the path.				
	Bishops Fen was identified and new signage and a view				
	improvements, the local community has benefitted from opportunities have been provided locally to work on acce Holdforth Bridge in March 2022 and NWG Just an Hour improvements and a litter pick in June 2024. There were project, monitoring mink populations along the Skerne. E funding has enhanced connectivity between local village 'Bishop Middleham & The Skerne' walking route (Bishop)	ess improvements with 9 volunteers constructing new steps at			

Evidence





Before and after path resurfacing (top left & right), vegetation clearance and creation of dead hedging, and new waymarker sign



New gate, and new steps from Holdforth Bridge

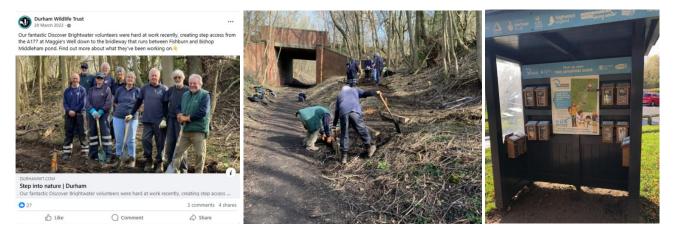




Vehicle damage, and boulders on path to prevent future vehicle access



Interpretation board and viewing screens at Bishops Fen



Volunteers constructing steps at Holdforth Bridge (left and centre) and public information hub at Hardwick Country Park, promoting access routes



Members of NW's Graduate scheme attending a guided walk, and leaflet promoting route

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Wildlife	& Biodi	versity
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	Expected Project Outcomes	Benefits	
1.	In channel restoration work on the River Skerne delivered by Tees Rivers Trust, including narrowing re-meandering and overall improvements to the river structure and habitats	 B1: Improves the quantity, 	
2.	Improved riparian habitat for fish, invertebrates, water vole and otter	quality and connectivity of habitats	
3.	Clearing out existing pond near Fishburn to restore former Great Crested Newt habitat	B2: Improves the conservation status and or abundance or distribution of	
4.	Woodland planting along the river restoration corridor and at Fishburn village, including the planting of Alder Buckthorn (Frangula alnus) for Brimstone (Gonepteryx rhamni) butterflies	speciesB3: Reduces risk or impact	
5.	Surveys to identify signs of invasive Mink (Neovison vision) followed by appropriate trapping and control. Mink poses a significant threat to wader birds using the project area and the surrounding wetland landscape	of invasive non-native species (INNS)	
	Outputs		

1. Flow deflectors and woody debris have been installed along the River Skerne to improve areas where there is little flow and very little in terms of in-river features. The deflectors help with scouring out the river bed and trap sediment behind them, encouraging plants to grow and providing shelter for fish fry. The in-river features also provide habitat for other wildlife such as riverflies and kingfishers. Willow spiling provided a natural engineering solution to bank erosion and tree thinning afforded further habitat improvements.

- 2. See section1 above
- 3. Willow and scrub clearance has been completed with volunteers and contractors. This has allowed in more light and prevented drying out through water uptake by vegetation. After two weeks of the initial clearance, standing water was present where it wasn't before. The work will be ongoing for the next few years.
- 4. Fishburn Parish Council and Durham County Council planted 3500 trees, comprising a mix of 11 native species, within 1.4 ha of riverside green area, increasing the habitat diversity and wildlife value of the area
- 5. A mink trap was deployed on 2nd Jan 2023 until present. The trap has so far led to the humane control of 18 mink along the River Skerne. This is an important trap as it is the only accessible place to deploy a trap along the Skerne, and has caught more mink than the average trap across the DWT catchment area. The trap will continue to be monitored and checked by volunteers. It is hoped the control being carried out will have a significant impact on wetland birds and water voles.

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Evidence

Plan of river improvements between Fishburn and Holdforth Bridge



In-stream deflectors



Willow spiling bank protection

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Woody debris and creation of back-water pool area



During and after willow clearance from pond



Fishburn tree planting area, before (top) and after (bottom, left and right)

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	Water Qua	ality
	Expected Project Outcomes	Benefits
1. 2.	Fishburn and Trimdon STW WINEP investment to remove phosphorus from final discharged effluent In channel river work and bank restoration to improve vegetation cover and reduce erosion and diffuse pollution and restore natural flows	 C1: Reduces pollutants entering waters from point or diffuse sources C2: Contributes towards improved status or no deterioration of rivers or bathing waters or protecting drinking water C3: Improves state and function of water, including naturalisation, visual appearance, litter and odour
	Outputs	
 Improvements to Fishburn STW to achieve reductions of phosphorus in final effluent were approved in December 2024 Completed works included permanent installation of chemical dosing equipment and media filters for tertiary solids removal. Water quality testing of final effluent between 10 and 23 October 2024 confirmed a mean daily phosphorous concentration of 0.089 mg/l, within the consented annual average limit of 0.3 mg/l. These improvements were funded separately through WINEP investment, and going forward, final effluent quality will be maintained as part of NWG's baseline operations. Bluespaces funding has delivered additional improvements over and above this baseline investment 		
2. The installation of flow deflectors has created more riparian habitats and allowed more opportunities for vegetation to take hold, as well as restoring more natural flows in the river. Bankside erosion control measures have reduced excess sediment entering the watercourse. NWG Just an Hour volunteers helped with litter clearance in June 2024, removing material that was polluting the water course.		
	Evidenc	e
<image/>		
		r tertiary solids removal (bottom) at Fishburn STW





Installation of in-stream deflectors and bankside protection



Removing litter from in and around the watercourse

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Additional & Secondary Benefits			
	Expected Project Outcomes	Benefits	
1. 2. 3. 4.	Improved river channel structure and flow reduces the flood risk downstream Increased use of businesses in local villages through the promotion of walks and visitors to the area Improved access links between Hardwick Park, Bishop Middleham, Fishburn, and other villages Key project in the Discover Brightwater Landscape Partnership Conservation Action Plan	 D1: Provides resilience and adaptation to climate change and/or reduces the risk of flooding D2: Provides benefits to local communities, the local economy or NWG D3: Supports strategic project or investment into strategic partnership or landscape/regional activity 	
	Outpu	uts	
1. Multiple in-stream improvements, including flow deflectors, woody debris and creation of back-flow pools have improved river channel structure and provided flood risk mitigation.			
2. Three routes that make use of the improved access between Bishop's Fen and Fishburn have been promoted, raising the profile of the area for visitors.			
3.	3. See section 3 above		
4.	4. Delivery of this work has made a valuable contribution to the work of the Discover Brightwater Landscape Partnership.		
Evidence			
See evidence presented above for main outputs.			



Customer Testimonies & Media

'The work Brightwater has done across our Parish has been of real value. It has helped our community to better appreciate and enjoy the history, environment and wildlife around them. A great example of this is the restoration of the bridleway to Fishburn, which had become almost impassible at times and was at best difficult to access. Restoring this pathway is enabling lots more people to gain all the benefits of exercise and also the well being gained from just being out in nature. Thank you.'

Harvey Neve, Chair, Bishop Middleham Parish Council

'As a local resident, I regularly run, walk and cycle on the bridleway between Fishburn and Bishop Middleham. It provides a beautiful and peaceful location to do all three, with the Skerne alongside and the abundance of wildlife that the various habitats attract. Prior to the pathway improvements, there were times of the year when the ground became either too overgrown or muddy to enjoy using. The new, wider track and the improved steps down from Maggie's Well have made access and use of the bridleway much-improved. Thank you to all involved.'

Kate English, local resident



Cllr Chris Lines, Sedgefield Division - Follow 11 October 2024 - @

It was great to join Discover Brightwater, Durham Wildlife Trust and partners for the official dedication of Bishop's Fen this week. It's part of the bigger Great North Fen project, which is bringing nature and biodiversity back to 850 hectares of land alongside River Skerne, as it weaves its way through this part of County Durham.

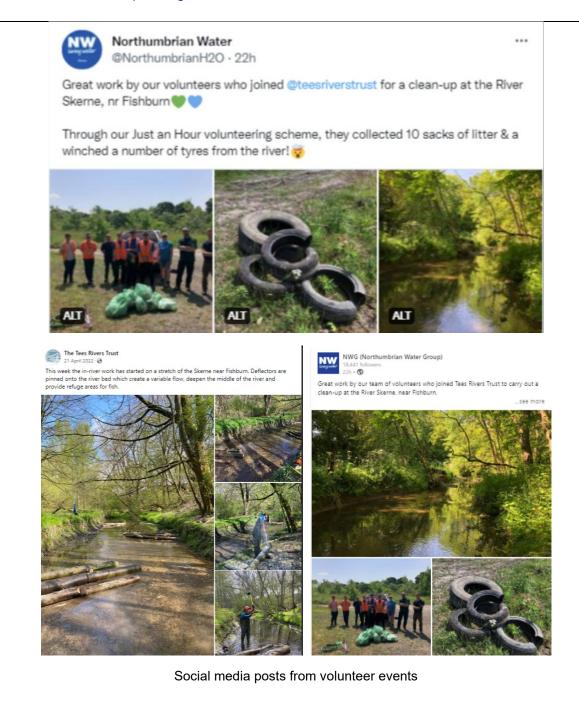
Vesterday's event included some really interesting presentations at Hardwick Hall Hotel, but the best part was a lovely (if damp!) walk to the site of Bishop's Fen. Once there, Reverend Rick Simpson, the Archdeacon of Auckland, led the dedication, and cut a willow branch to officially 'open' the fen.

Courtesy of The Northern Echo, you can read more about the project and this week's event at https://www.thenorthernecho.co.uk/.../24642030.great....



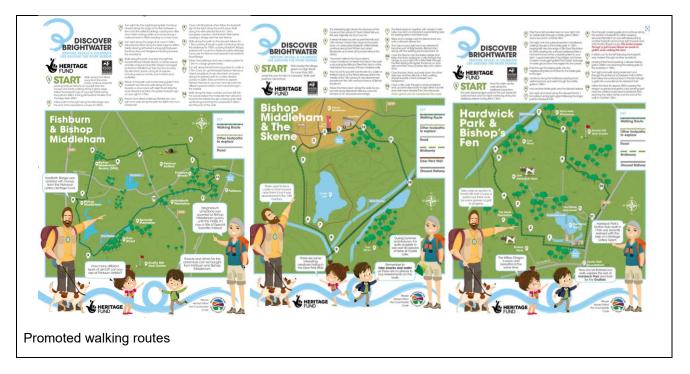
Post reporting opening of Bishop's Fen

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Link to Discover Brightwater Eco-Museum website: Discover Brightwater Eco-Museum

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Lead Partner Quotes & Testimonials

'Funding from Bluespaces has made an important contribution to the work of the Discover Brightwater Landscape Partnership. This support has enabled significant access improvements along the Skerne between Fishburn and Bishop's Fen, with funding also facilitating a number of in-stream improvements to enhance the ecological and hydrological quality of the catchment. The project has provided increased opportunities for visitors to connect with nature and to learn more about the water environment, and has made a valuable contribution towards achieving our ambition for the Great North Fen'

Mark Dinning, Head of Conservation, Durham Wildlife Trust

'Funding via the Brightwater project has helped the former railway line from Fishburn to Bishop Middleham, owned by the County Council, to be opened up as a public bridleway, giving access for walkers, horse-riders and cyclists between Fishburn and Bishop Middleham or Hardwick Park, avoiding any road use. A new bridge over the River Skerne and major surfacing works give visitors the chance to explore the countryside and connect with nature.'

Mike Ogden, Access and Rights of Way Team Leader, Durham County Council