

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

Angles Way

Project Lead

Company/ Organisation	Named Lead	Position
The River Waveney Trust	Martha Meek	Director

Bluespaces Improved

Year	Claimed	Proposed	Reason For Any Change
Year 4	2.2 km	2.2 km	NA

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	March 2023	NA	N/A
Water Environment Steering Group (Internal)	March 2023	March 2023	N/A
Water Environment Governance Group (External)	March 2023	March 2023	May 2024

Project Timescales

Candidate Project Approved	Project Initiated	Project Completed
March 2023	April 2023	March 2024



Project Summary and Highlights

Summary

Bluespaces funding has supported delivery of a multi-partner project to improve 2.2 km of water environment along the Angles Way, impacting a stretch of the River Waveney from Brockdish to Needham.

This project is part of the larger 'River Access for All' scheme and is a follow-on from the Year 2 Bluespaces project River Waveney Access and Biodiversity Project which improved 6.8 km of other water environment, and identified several specific improvements to be delivered in this area (the 2.2 km improved in this project were not claimed in the previous project). Project partners include the River Waveney Trust, Anglian Water, Norfolk County Council, Canoe Foundation, Paul Bassam Trust, Geoffrey Burton Trust, Needham Parish Council, and Pathmakers.

The Angles Way project has enhanced access along and next to the river (including providing an additional 0.8 km of temporary access), and improved habitats through strong working relationships driving activity across project partners, landowners, the Environment Agency and volunteers from the local community. As part of this project a number of key water environment improvements along this stretch have been delivered, and further actions have also been identified for 2024.

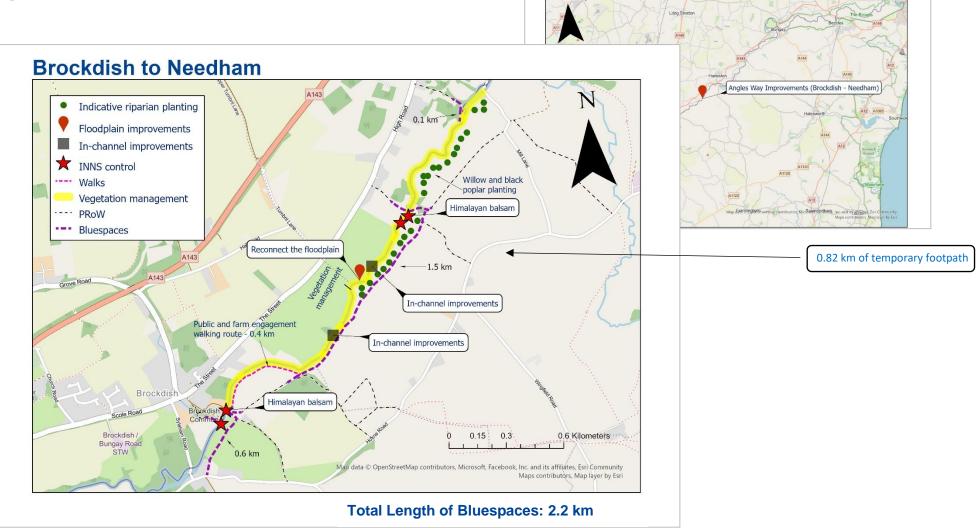
Highlights

- Circular footpaths created off the Angles Way to give the public direct access to the river's edge.
- Tree planting along the river provides shade and enhances the diversity of habitats along the river, linking to black poplar reintroduction.
- Engagement with local volunteer groups, including conservation work parties, balsam bashing sessions and citizen science activity to monitor water quality.
- Landowner engagement has helped improve river access and water protection, and advice given to cattle landowners will help improve poached areas impacting sediment runoff into the river.





Maps



Bluespaces improvements along Angles Way from Brockdish to Need



Project Outputs, Benefits & Evidence Against Criteria

	Access, Facilities & Recreation			
	Expected Project Outcomes	Benefits		
1. 2. 3.	Work with the local council and landowners to establish further footpaths to create circular routes will increase public access to the water environment Public and landowner engagement and the offer of guided river walks to the public will increase access to the water environment, increase education and influence positive environmental behaviours Engagement with local volunteer conservation groups will benefit health and wellbeing and enjoyment of the water environment	 A1: Increases access to, engagement with and enjoyment of the water environment A2: Benefits health and wellbeing A3: Influences positive environmental behaviors 		
	Outputs			
1. 2. 3.	 through the floodplain, extending access by an estimated 0.8 km. The first guided walk was held on Monday 9th October in partnership with fully booked event exploring Needham Floodplain, Instead Dale, Plateau a local expert and conservationist Tim Holt-Wilson as the guide. Work was undertaken during the project with local volunteer groups, incluster meadows with the local Environment Agency team, a small tree-project stateau and the stateau and	th the Pathmakers Walkers' Festival. This was a u Landforms and Waveney Valley Landforms with luding a conservation work party held to manage planting work party held with the landowner and		
	Environment Agency staff, and three balsam bashing sessions undertak volunteer group and local The Conservation Volunteers group.	ten with The Harleston River Waveney Trust		
	Extension of Angles Way landowner has reated a mown pathway around the flood meadow allowing access to the river between Brockdish and Needham	Key: Angles Way Mown Paths		





Riparian Tree Planting at Upper Weybread

Balsam Bash at Needham Mill





Tickets

Don't forget to add tickets to this event

Explore Needham floodplain, Instead Dale, Plateau landforms and Waveney valley landforms with a local expert and geoconservationist Tim Holt-Wilson as your guide. Drawing on his vast knowledge of the historic landscape Tim will take you on a fascinating walk back through the past 450,000 years.

Tickets £5 Booking via Pathmakers Website www.pathmakers.org.uk

- The walk begins and ends in the village of Needham, at the intersection of the High Road and Mill Lane (near NGR TM 22844 81600 / w3w
 modifies.puppy.static / postcode IP20 9LN)
- Walk distance 4.6 km / 2.8 miles
- Time allocation two hours.
- Only 20 places, booking through Pathmakers website

Advert and sign up page for the Waveney walk with local geological expert Tim Holt-Wilson



Wildlife & Biodiversity			
	Expected Project Outcomes	Benefits	
1.	 Riparian tree planting, removal of dense aquatic vegetation and lowering of the riverbank to reconnect the river to the floodplain will improve the quantity, quality and connectivity of habitats 	B1: Improves the quantity, quality and	
2.	Creation of berms and woody debris will help diversify the channel and improve the quality and amount of habitat available for aquatic species	connectivity of habitatsB3: Reduces risk or impact of invasive negative	
3.	Management of Himalayan balsam and tackling the source of floating pennywort along the river will reduce the risk, spread and impact of INNS along the Waveney	native species (INNS)	
	Outputs	1	

1. 61 trees have been planted along the river to provide shade and enhance diversity of habitats along the river. This includes riparian black poplars – these are both male and female with genetics identified as part of a wider Waveney valley project to re-introduce black poplar along the river valley.

The feasibility of vegetation removal was discussed during site visits with EA; due to the siting of in-channel enhancements and EA cutting, no cutting was required in this stretch. The EA undertook cutting at the Needham Mill gauging station, which improved access to the portage point upstream of the mill. A work party was held just upstream of this section to remove duckweed from the channel – this site was chosen as duckweed was worse here and critically had a shallow bay that allowed safe access for volunteers.

- 2. A fallen tree was pinned to create habitat and improve flow, which naturally led to increased flow and removed obstructing vegetation from the channel. Other channel diversifications include berm creation and installation of gravel in an area with problem vegetation that will clear obstructions naturally.
- 3. Volunteer work parties have managed Himalayan balsam at the site and floating pennywort work parties are held weekly (weather permitting). A volunteer has been trained to control this invasive with herbicide, contributing to the activities of the steering group for floating pennywort eradication on the Waveney.



Evidence

Before and after images of the tree pinned upstream of Needham Mill, improving flow and creating habitat



River Wardens at a site congested with duckweed

The duckweed removal work party was captured on video

bluespaces | NWG

Water Quality		
	Expected Project Outcomes	Benefits
1.	Landowner engagement and advice on habitat improvements and water quality interventions will help to reduce pollutants entering the water from the surrounding catchment	 C1: Reduces pollutants entering waters from point or diffuse sources C3: Improves state and function of water, including naturalisation, visual appearance, litter and odour
2.	River Warden canoe-based surveys to identity obstacles within the river, and subsequent work to address these, will help improve the state, function and visual appearance of the river	
3.	Work to lower the riverbank and create woody structures will assist with naturalisation of the channel	
4.	Removal of excess river vegetation will help improve the function and visual appearance of the river	
	Outputs	1

- 1. Landowner visits were undertaken, including through partnership working with Norfolk Rivers Trust which led to installation of a woody dam to slow the flow and capture sediment. Advice was given to cattle landowners to improve poached areas. A report from Norfolk Rivers Trust is available.
- 2. River Warden surveys were carried out, which identified areas of Himalayan balsam, canoe obstructions and fallen trees which were subsequently managed.
- 3. The berm and woody material, tree pinning and natural management of excess river vegetation through installation of inchannel features have improved flow and helped naturalise the river.
- 4. A citizen science programme supported by Anglian Water has started regular testing above and below sewage treatment works just upstream of this section. This is leading to a better understanding of the water quality in this area and the impact of wastewater discharges.



River Wardens at work by a fallen tree

Evidence



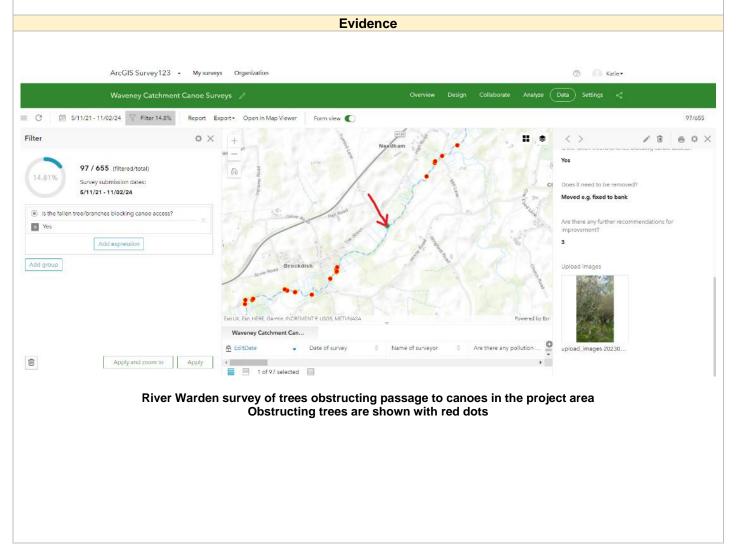
Brockdish – upstream and downstream of sewage treatment works and an area of very excessive plant growth in the river channel. To help understand inputs into the river and how they affect plant growth.

Site of water quality testing by volunteers

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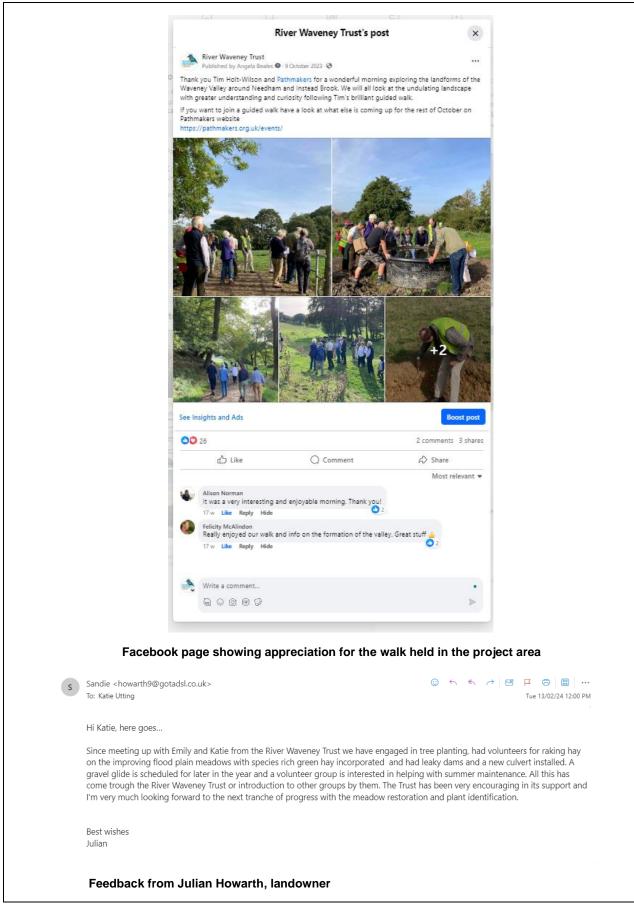
	Expected Project Outcomes	Benefits	
1.	River surveys and removal of obstacles blocking the channel will help reduce the risk of localised flooding	D1: Provides resilience and adaptation to climate change and/or reduces the risk of flooding	
2.	The creation of circular footpaths will provide a benefit to the local community through increased access bluespaces	D2: Provides benefits to local communities, the local economy or NWG	
3.	Working on projects with Anglian Water will support further strategic partnership working in the future	D3: Supports strategic project or investment into strategic partnership or landscape/regional activity	

- 1. River Warden surveys have been carried out, and obstacles addressed which have improved flow.
- 2. Circular footpaths off the Angles Way were created by landowners to give the public direct access to the river's edge and through the floodplain, extending temporary access by an estimated 0.8 km. The landowner has stated they intend to keep the paths there, but they are not hardstanding or permanently marked.
- 3. The project has led to the development of a joint citizen science water quality testing programme, and the River Waveney Trust continues to engage Anglian Water on other projects in the catchment





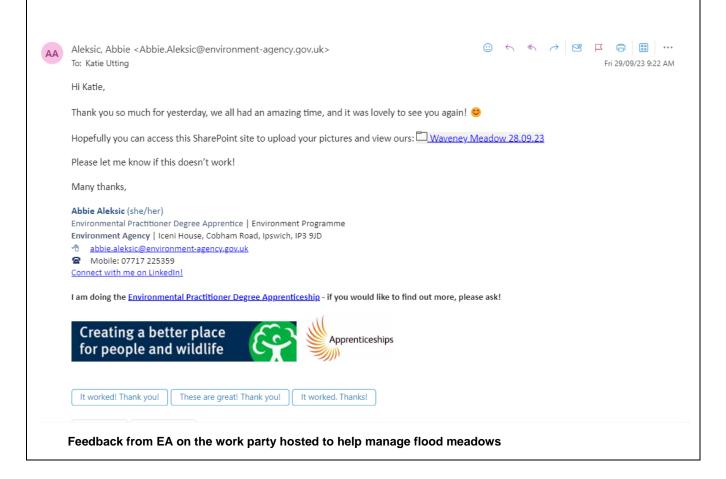
Customer Testimonies & Media





Lead Partner Quotes & Testimonials

"The funding from Bluespaces allowed us to really focus in on a short stretch of river as part of our River Access project, working with local landowners and the community to improve access and habitat for nature" Martha Meek, the lead partner at The River Waveney Trust



Other Supporting Evidence & Data

A report from Norfolk Rivers Trust is available – this outlines the joint visit with the Bluespaces project worker and our Farm Cluster Advisor that resulted in the installation of natural flood management woody dams along the driftway ditch



Volunteers and surveying and enjoying the river environment. This project was identified as a need from canoe surveys