



Project Proposal: Marden Valley Blue Corridor

October 2023



Wednesday 26th October 2023

Sue Deedigan

Calne Without Parish Council

Subject – Marden Valley Blue Corridor

Dear Calne Without Parish Council,

Further to the discussions in the summer of 2023, I have put together a grant proposal on behalf of Bristol Avon Rivers Trust (BART) to compliment the river restoration work delivered by BART at Spray's Farm, Calstone in April 2023 and previous work on the River Marden at Castlefields Park.

BART has been working with Calne Without Parish Council, as well as Calne Town Council, and Robert MacNaughton, Calne Town Mayor as the "Fiends of the Marden Valley", and the Bremhill Farm Cluster group to discuss ideas that could come together to form a vision for the Marden Valley that creates, and enhances blue spaces, and which delivers for the Wiltshire County Council Green & Blue Infrastructure Strategy.

Funding is required to progress the development of a vision and a 7-year strategy until March 2030 that provides targeting action for the Marden Valley and assess opportunities for private finance to work alongside government funding to deliver against the national, county and parish climate emergencies for the area detailed in Figure 1.

In addition to the development of the strategy, BART are a grass roots organisation that thrives on delivering projects where they will make a tangible impact to both wildlife and local communities. This proposal therefore sets out the details of proposed river restoration and floodplain restoration work formerly identified during walkovers by BART and set out within the *River Marden and Tributaries Walkovers and Sediment Pathways – Opportunities Report (2021)* and will be targeted along the River Marden upstream of Calne. During the Eco Fair in September 2023 and attendance at prior Eco Fairs laid on by Calne Without Parish Council, BART has developed excellent relationships with nearby schools and with this we would like to deliver our long-standing, successful project, *Eels in the classroom*. The delivery of work will be focussed in Priority Area 1 (Figure 2).

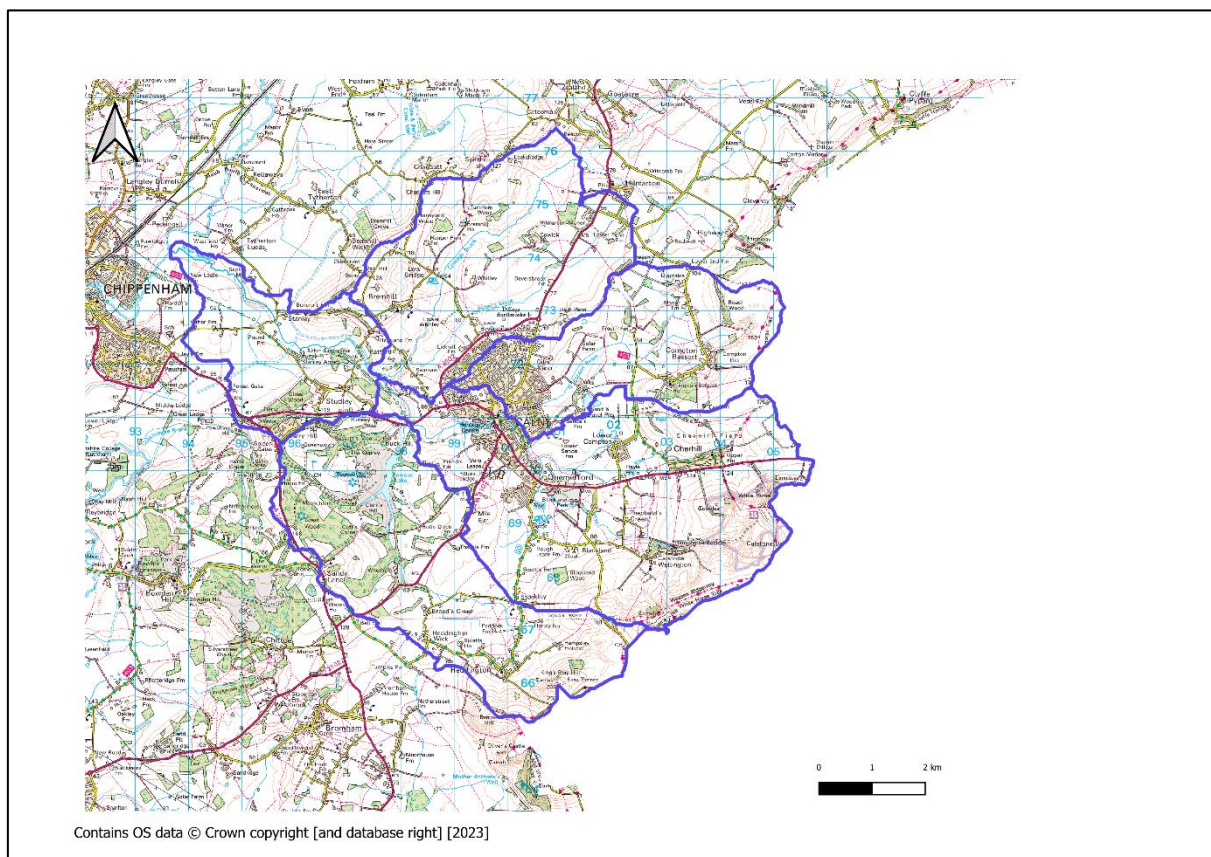


Figure 1. River Marden catchment area

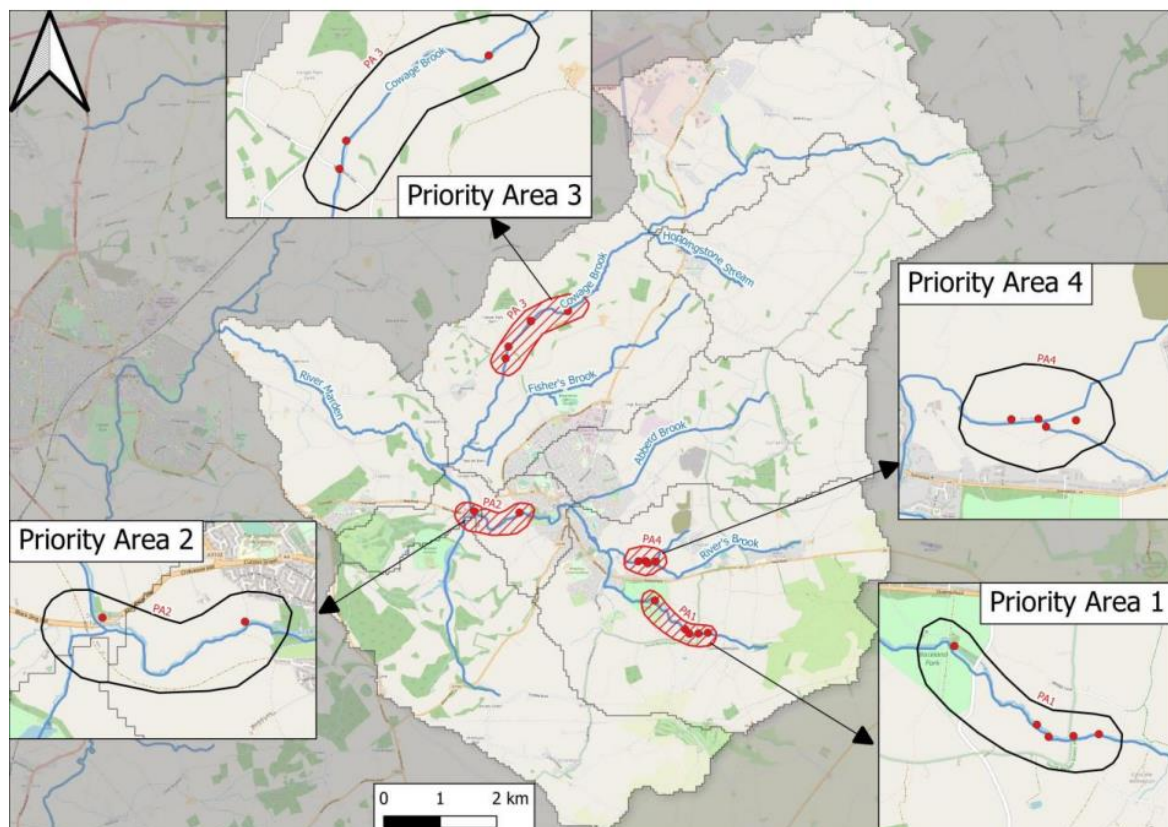


Figure 2. River restoration measures will be targeted within Priority Area 1.

Deliverables

Strategy

There is substantial interest from Calne Without Parish Council, Calne Town Council, Bremhill Farm Cluster Group, the Friends of the Marden Valley, Wiltshire County Council, Wiltshire Wildlife Trust, Bristol Avon Rivers Trust, and potentially a number of other organisations to enhance the catchment area around the River Marden and its tributaries which would deliver for both national and local targets. Currently all these organisations are delivering piecemeal projects which are excellent in their own right, however it is a scattergun approach. This proposal would develop a single strategy in collaboration with the aforementioned groups in order to provide a comprehensive, yet focused approach to delivering nature-based solutions on the ground. The strategy could then be used by organisations to request future funding with a more coordinated approach.

The Marden Valley Blue Corridor Strategy could deliver a multitude of ecosystem services benefits including:

- Reduced surface water flooding
- Increased areas for pollinators
- Habitat creation
- Enhanced carbon sequestration
- Improved water quality
- Enhanced health & wellbeing in green & blue spaces
- Enhanced biodiversity within local towns and rivers



Natural Flood
Management



Habitat creation



Water Quality



Social



Carbon

What drivers would be met:

The delivery of this project would meet the following national and international targets:

- COPS26
- UK 25 Year Environment Plan
- UK Biodiversity Action Plan
- Water Framework Directive (WFD)
- Local Biodiversity Action Plan
- Local Green Infrastructure strategies

BART have an excellent track record of developing strategies with a wide number of stakeholders, and one recent example is the [Bristol Avon Fish Recovery Strategy](#) which BART was commissioned on behalf of the Bristol Avon Catchment Partnership to lead.

River Restoration

In alignment with the guiding principles set out in the Bristol Avon Fish Recovery Strategy, BART aims to address the barriers to fish movement, increasing water temperatures during summer months, and lack of flow diversity and instream habitat by working with the Council and local landowners on a programme of practical habitat improvements to improve the biodiversity throughout the headwaters of the River Marden.

Fish populations within the River Marden and throughout the Bristol Avon have decreased dramatically over the past 15 years with a mirrored 93% collapse of migratory fish species in Europe. Freshwater habitat covers around 12% of land in the UK. However, Just 16% of our waters (14% of rivers) meet 'Good Ecological Status', the same percentage as in 2016, with 1/3rd of all freshwater species are threatened with extinction. This demonstrates a need for action. BART will look at the full removal or easement of weirs on the River Marden upstream of Blackland Park. This work will enable fish to move more freely between upstream headwaters for spawning and between other areas of the river to feed. The lack of connectivity between areas of a river is one of the biggest causes of fish population collapse. In addition to this work, BART will deliver in-stream habitat work at dedicated sites in the river reach between Blacklands Park and Calstone. We will install woody debris flow deflectors in the channel which will create pinch points, which will encourage bed scour creating pools, and sorting of riverbed gravels to provide a variety of habitat niches for aquatic invertebrates. Woody deflectors will help create a more diverse river cross-section as well as provide refuge for juvenile fish.

BART aims to use existing relationships with landowners and build on our relationship with the *Bremhill Farm Cluster* group in order to deliver the river restoration measures.



Figure 1. Weir removal/ notching opportunity on the River Marden between Blackland and A4



Figure 2. River Marden near Calstone – over wide, silty and needing riparian fencing and brushwood berms.



Figure 3. Lack of in-stream habitat and over wide and silty just us of Blackland Park. In need of brushwood berms and in-stream restoration.

Eels in the Classroom

BART are seeking funding for our *Eels in the Classroom* project which we have been running since 2016, giving thousands of children the chance to engage with their local rivers and streams like never before – by bringing critically endangered European eels into the classroom.

The project links with the school curriculum, covering a range of subjects (chosen from a selection by teachers) including food webs, water pollution, hydrology, climate change and habitats; offering learners opportunities to develop their knowledge and skills in ways that add value to their everyday experiences in the classroom. The classroom sessions provide knowledge of river systems and biodiversity and the risks posed to water courses. By caring for and releasing the eels, children will engage in a wider campaign to improve river habitats and address the risks to aquatic wildlife. This is a truly inspirational and engaging project that forms a crucial element of BART's work to protect and enhance our rivers.



Eels in the Classroom provides the platform for BART to engage with our future river guardians - school children – who will be the generation most impacted by climate and ecological breakdown. By bringing eels into their school environments and taking pupils to their local rivers, the project will increase knowledge of the natural environment, the issues facing our rivers and inspire an interest and care for nature.

Though awareness of environmental issues is increasing significantly, particularly amongst the younger generation, there are still gaps in education and resources in schools which means there are still limited opportunities for school children to connect with nature and learn from the experts. This is particularly true of river-related education, indicative of a lack of understanding and appreciation of the importance of the river environment.

Project Outcomes

- Production of an overarching strategy for the Marden Valley to enable targeted delivery of activities that will help organisations meet climate emergency goals among others.
- Deliver in-stream river restoration measures throughout a 3Km reach of the River Marden.
- Remove/bypass or provide easement to at least 1 barrier to fish movement on the River Marden.
- Deliver floodplain reconnection, wetland, scrape and or pond creation throughout a 3Km reach of the River Marden.
- Engage 210 school children with Eels in the Classroom with both river visits and classroom-based activities linked to the National Curriculum.

Cost Breakdown

We are looking for funding of £19,740 from Calne Without Parish Council towards the following project costs and have confidence that the remaining funding can be secured from Wiltshire Heritage & Nature Grant.

No.	Activity	Fee (£) No VAT
1	Project Management & Coordination	1,625
2	Marden Valley Blue Corridor Strategy	2,660
3	In-stream River Restoration Woks	22,300
4	Floodplain Restoration Works	13,550
5	Eels in the Classroom	2,935
6	Landowner Engagement6	1,670
Total		44,740