

Torridge River Restoration Project Gravel Augmentation Project Invitation to Tender



Devon Wildlife Trust

Introduction

We are seeking an experienced environmental contractor to develop and implement a major gravel augmentation project in North Devon on the River Torridge. This complex piece of work is part of the ambitious Torridge River Restoration Project (TRRP) and will require excellent project management, landowner liaison, a thorough understanding of technical river restoration and significant practical experience of delivering this type of work.

Despite its undisputed ecological value, the Torridge catchment has experienced significant negative land use change in recent years. Over 50% of Culm grassland was lost during the 1985-1995 period alone. Agricultural intensification and the accompanying drainage works have impacted the ability of the land to slow the movement of water through the catchment, increasing soil erosion rates and reducing the catchment's capacity to purify water and act as a buffer during flood events. The catchment is subject to long-term, severe, diffuse pollution (mainly phosphate and sediment), predominantly from agricultural activities, impacting fish populations and the endangered freshwater pearl mussel.

Torridge River Restoration Project

The TRRP aims to restore the water quality and ecological health of the River Torridge catchment, through a targeted programme of integrated farm advice, capital works, community action and training. The TRRP is led by Devon Wildlife Trust (DWT) and is supported by a Water Environment Grant administered by the Environment Agency and funded by the European Agricultural Fund for Rural Development. The project is part of the second phase of the Northern Devon Nature Improvement Area (NIA) programme. The NIA is one of 12 programmes in England designed to achieve a step-change in landscape scale conservation and understand the wider services to communities provided by the natural environment.

The project targets two groups of waterbodies within the Torridge catchment, covering more than 22,000 hectares. These were carefully selected through work with the North Devon Catchment Partnership and partner organisations, using data and experience from current and previous projects with Torridge landowners. They were judged to be the areas where key issues on the river were magnified, and where significant change in land and water management could be achieved during the project period (July 2019 – March 2021).

This project is supported by
a Water Environment Grant
through the Environment
Agency



The European Agricultural Fund
for Rural Development: Europe
investing in rural areas

This project is part of the Northern Devon Nature Improvement Area Programme

Devon Wildlife Trust, Cookworthy Forest Centre, Beaworthy, Devon, EX21 5UX, Tel: (01409)
221823 E-mail: contactus@devonwildlifetrust.org Web site: www.devonwildlifetrust.org Registered
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River restoration in the upper Torridge – this project

Restoring the upper Torridge to a more natural state, to which natural ecological processes can return and allow it to support a greater biodiversity, requires a holistic approach. This document outlines the work that will be required of the contractor, to begin to restore the geomorphological characteristics of the upper Torridge.

Restoration reaches

The Torridge River Restoration Project team and the Environment Agency have identified a focus area for gravel augmentation – a 3 km length of the River Torridge (up to 9 landowners). A preliminary fluvial audit has been conducted on the reaches over this length of river and the report will be made available to the selected contractor.

Gravel augmentation

Changes to the catchment's hydrology has resulted in the gravels and cobbles that were once present in the upper Torridge, being transported downstream. As the upper Torridge has a limited supply of coarse gravel from floodplain material and bedrock, this part of the catchment has become depleted of gravels and therefore habitat suitable for fish spawning. This lack of gravels has also left the riverbed and bank vulnerable to erosion, causing the channel to deepen and widen - degrading the limited gravels/riffles that remain.

The TRRP have funding and targets to deliver a significant programme of river restoration, which includes 1750 tonnes of gravel (size range 5 mm - 350 mm) to be introduced into the river over several locations.

Supporting channel restoration works

To ensure that the gravel augmentation is a success, the reaches may require some moderate channel reprofiling to restore the original bed level and bank line, as well as bank protection including large woody debris, willow spiling, willow staking and tree-hinging.

Supporting riparian restoration works

To ensure long-term success of the restoration works, some management and restoration of the riparian zone will be required. This is likely to include tree planting, bankside tree management and watercourse fencing (fencing to be delivered by TRRP).

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Scope and outputs of this contract

This tender focuses on conducting the Gravel Augmentation Feasibility Study (GAFS; Part A) and the Gravel Augmentation Delivery (GAD; Part B). The GAFS is an essential planning phase which will inform the GAD. The contractor will be required to work alongside DWT throughout the project, with regular consultation, progress reviews and walkovers to ensure that the work achieves the desired outcomes and is delivered on schedule. The following tasks are based on our experience and understanding of the work requirements, however, we are interested in discussing these with the successful contractor based on their experience.

Task & brief description		Deadline
Part A	<p>Task 1: Literature review and project scoping</p> <p>Conduct a literature review of both peer-reviewed and grey literature (incl. case studies of similar projects in the UK) with the aim of identifying and reviewing the positive/negative impacts and risks associated with gravel augmentation work of this type (e.g. similar river 'types' in the UK). Produce a short, written summary (with references and in MS Word format) of the findings. This must include consultation with an EA Fisheries Technical Officer, the Torridge Fisheries Association and Westcountry Rivers Trust (concerning fishing rights and beats) and a walk-over survey to identify any existing fish spawning habitat along the Woodford Bridge reaches.</p>	3 rd April 2020
	<p>Task 2: Upper Torridge fluvial audit report</p> <p>Assist EA staff for five full-time days to contribute to the field surveys that will feed into the upper Torridge fluvial audit and inform the GAD. The EA will complete the remaining field surveys and provide the data to the contractor. The contractor will then be required to liaise with the Environment Agency and use this data to write up the upper Torridge fluvial audit report. The data will include Wolman pebble count data, field notes identifying erosional and depositional features/zones as well as other geomorphic features (e.g. woody debris, relic bed).</p> <p>The upper Torridge fluvial audit report should include:</p> <ol style="list-style-type: none"> 1. Introduction to the upper Torridge and the pressures relevant in this area 2. Analysis of the data collected during the fluvial audit 3. Discussion of the data collected during fluvial audit and justification (if supported by the results) for future works 4. Identify the particle size distribution, quantities, and type of gravel required for the gravel augmentation based on the fluvial audit 	13 th November 2020

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<p>5. Highlight target areas and provide recommendations for future (post-TRRP) river restoration projects in the upper Torridge</p> <p>The report should also include a scoping exercise to determine the feasibility of utilising small farm quarries to provide local gravels (e.g. identifying number and locations of farm quarries, planning/legal requirements for opening disused quarries, machinery requirements and hire costs, risks of doing so).</p> <p>The fluvial audit report must be signed off by Matt Turley and Julian Payne before completion.</p>	
<p>Task 3: Stakeholder consultation</p> <p>Engage with the necessary stakeholders (including landowners, owners of fishing rights, Torridge Fisheries Association) to inform the detailed work plan and delivery of works. The initial landowner buy-in will be developed by DWT, but the contractor will be required to work with the landowners, DWT and EA to carry out site surveys to determine the site-specific restoration design, logistics and risks.</p>	8 th May 2020
<p>Task 4: Detailed work plan</p> <p>Following consultation with DWT and EA geomorphologists, produce a detailed work plan for the project. The plan should be informed by the Woodford Bridge fluvial audit which will be provided by Julian Payne (Environment Agency Geomorphologist) prior to the contract commencing, as well as following consultation with landowners and the TRRP.</p> <p>The contractor is required to identify local quarries with the capacity to supply gravel with the required particle size distribution and type (outlined in the Woodford Bridge Fluvial Audit) and obtain quotes for the required materials (three quotes required).</p> <p>The detailed work plan will need to provide details of the overall GAD, accounting for the 1750 tonnes of gravel, particle size distribution, quantities and type of gravel, all of which will require consultation with EA geomorphologists. The contractor will also need to provide a timeline for the GAD, to include timings of delivery in relation to environmental conditions and aquatic organism life cycles, and outline any legal requirements or other constraints. The work plan will also include a breakdown by landholding, to include quantification and size range of gravels required for each site/location, along with detailed drawings of the</p>	15 th May 2020

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	<p>design, informed by the Woodford Bridge fluvial audit. The plan must also include information on site access, gravel storage locations, gravel input points, timings and site-specific risk assessments.</p> <p>The detailed work plan must utilise a minimum of 1750 tonnes of gravel at multiple locations along the 3 km of river and should include:</p> <ol style="list-style-type: none"> 1. Introduction to the Woodford Bridge reaches and one additional reach near West Putford, and justification for works. 2. Detailed maps of each restoration area showing river features (pools, riffles, bars, depth, width etc.) and reference to the relevant fluvial audit. 3. A plan for each restoration site (8 - 10 sites) to include: exact locations for gravel augmentation, strata design, gravel quantity, gravel clast sizes, gravel distribution, thickness of layer, and associated channel restoration and riparian work, including sourcing and positioning of subsoil, sourcing and positioning of bank protection material (e.g. live stakes, large woody debris), bankside tree management and habitat creation. 4. A plan (as above) for an additional site in the upper Torrige to act as a backup to those identified in Appendix A. 5. Installation and distribution method, timing, machinery required and access to restoration locations. 6. Full costings for delivering this restoration work, 7. Site-specific risk assessment (to include ground condition, bank condition, access, trees (woody debris, ash dieback, flooding, protected species, invasive species). 8. Further recommendations (for each site), linking to TRRP capital items/funding (e.g. watercourse fencing, riparian habitat creation/restoration). 	
	<p>Task 5: Consent and permits</p> <p>Contact the Environment Agency, Devon County Council and other regulatory bodies to determine the requirements in terms of permissions and consents. Act as an agent for landowners (must be signed by the landowner) to obtain the necessary permits and consents from local authorities, providing the necessary supporting documents. Any fees related to these will need to be covered by the landowner. The contractor must ensure that there is appropriate liaison with landowners and EA and make sure responsibilities are clear and agreed at all stages of the process.</p>	<p>15th May 2020 (submission to LFA)</p>

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	<p>Task 6: Landowner report</p> <p>Produce an individual report for each landowner, which should be informative but intended for a non-specialist audience. Where relevant this should also be shared with holders of fishing rights. A draft must be provided to Matt Turley and approved before it is given to the landowner. It should include:</p> <ol style="list-style-type: none"> 1. Background information and site information. 2. Justification for works (informed by the fluvial audit). 3. Maps of proposed restoration locations highlighting notable ecology/sensitive areas (informed by the fluvial audit). 4. Diagrams illustrating the design of the in-channel works. 5. Maps showing agreed (with landowner) access points, routes and storage areas. 6. Schedule for delivery of works (agreed with DWT, landowner, EA and LA) and details of any costs which may be incurred by the landowner. 7. Detailed site-specific risk assessment including road access, weather, liability, invasive species, protected species, future flood risk and legal implications etc. 8. Future management of works and a description of liability, including what changes are likely to be seen over the years following restoration. <p>A landowner agreement letter that refers to the landowner report and future management will be produced by DWT and must be signed by the landowner, any farm tenants and the TRRP Team Leader (Matt Turley). This will outline the five-year agreement to which the landowner must adhere to. The letter will be provided to the contractor when required.</p>	<p>27th May 2020</p>
	<p>Task 7: Produce a detailed timeline</p> <p>The timeline should indicate the timings of the various aspects of the GAD and once approved by TRRP will be provided to the landowner. This should include details of machinery hire, material delivery dates, as well as the approximate dates for delivering the accompanying channel and riparian restoration works, with consideration of restrictions regarding the timing of delivery (e.g. bird nesting, fish spawning). Accompanying this should be a summary of the likely risks regarding timing of delivery.</p>	<p>16th June 2020</p>

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	<p>Task 8: Summary report Produce a report for DWT that provides a brief (approx. 7-10 pages) overview of the proposed works, justification for works and maps to illustrate restoration locations and design. This will be used as a case study to engage with landowners and other stakeholders in future DWT projects.</p> <p>Accompanying this summary should be a project risk register identifying mitigation measures for potential risks, and details of any outstanding concerns.</p>	<p>16th June 2020</p>
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At present, we cannot specify the exact number of landowners that will agree to proceed with this restoration work. However, based on our progress and landowner engagement the number will be between 6 and 8 landowners.

	Task & brief description	Deadline
Part B	<p>Task 9: Sourcing of materials Using the quotes from local quarries, acquired in Part A, obtain gravels of the required size and type as outlined in the detailed work plan. Other materials including willow stakes and poles, clay subsoil, topsoil, coir matting and large woody material will also need to be sourced as locally as possible (to minimise the transfer of pests and disease) as outlined in the detailed work plan.</p> <p>Following an assessment of the ground conditions, organise hire of the most suitable machinery and equipment to deliver the restoration works. This may include machinery track mats to minimise soil compaction and damage to wet areas.</p>	<p>3rd July 2020</p>
	<p>Task 10: Inputting the gravel and delivering accompanying channel works Following the processes outlined in the detailed work plan (produced in Part A), the gravels should be introduced into the channel along with the necessary in-channel and riparian restorations works, observing the requirements of any permits/consents and the relevant risk assessments (including biosecurity). This will include felling/coppicing of selected bankside trees, which can be used for bank protection purposes. As this will necessitate tree work during bird nesting season, the contractor will need to sub-contract Devon Wildlife Consultants to carry out surveys for nesting activity in the relevant trees.</p>	<p>27th August 2020</p>

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	<p>Task 11: Walkover and 'sign off' of work The contractor will host a walkover with DWT, EA and landowners to ensure that work is delivered to the desired specification and all parties are satisfied. If DWT feel that any adjustments need to be made, or if the landowner is unhappy with the condition of their fields/land after the work, the contractor will be asked to carry out any remedial work as part of this contract. When the work is deemed satisfactory it will be 'signed off' by DWT.</p>	<p>10th September 2020</p>
	<p>Task 12: Final report The final report will include photos from before, during and after the work has been delivered (using fixed point photography), a description of the work that was delivered and management recommendations. DWT reserve the right to use photographs in print and digital media.</p>	<p>18th September 2020</p>

The contract will be managed by the TRRP Team Leader, Matt Turley, at the Devon Wildlife Trust with the support of the other TRRP team members and the Environment Agency. The initial liaison with landowners will be managed by Devon Wildlife Trust, with advice and support from EA geomorphologists.

This contract will end once the required work has been delivered on the ground and all write-ups and reports are approved, which should be no later than 13th November 2020. All required documents must be signed off by Devon Wildlife Trust before the contract is deemed complete and final payment (10% of Part B) can be made.

Landowner communications

DWT will be responsible for all initial site visits and initial communications with landowners to identify suitable landholdings and feasibility.

DWT may provide support and staff where required to ensure smooth delivery.

The contractor will be required to work with DWT, EA and landowners, to carry out site surveys to determine the site-specific restoration design, logistics and risks, and any other tasks that are required to inform the production of the details work plan, landowner report and management plan.

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Contractor specification - Skills/knowledge/experience

To be considered for this role you:

- Must be a highly skilled group of consultants and contractors with an excellent knowledge and understanding of ecological (incl. fisheries), hydromorphological and geomorphological processes in rivers/streams.
- Must have extensive previous experience of giving advice regarding river restoration and working with landowners.
- Must be professional in your approach to the project, particularly with landowners, as you will be working with landowners with which we have developed excellent working relationships and you will be seen as a representative of DWT.
- Must have an excellent track record of delivering projects on time and within budget.
- Must be able to demonstrate the successful delivery of substantial holistic river restoration work including gravel augmentation based on your advice and practical work and provide examples of both feasibility studies and project delivery relating to gravel augmentation or similar work.
- Must have staff/contractors suitable qualified and experienced to utilise plant and machinery to deliver the work effectively and in an environmentally sensitive way.
- Should ideally be familiar with the characteristics of the upper Torridge.
- Must have excellent communication skills and experience of working with local councils, regulatory agencies, landowners/farmers and other stakeholder groups.
- Must be familiar with environmental regulations relating to the work and be used to working in sensitive environments.
- Must be compliant with DWT policies (e.g. Biosecurity, Environmental Management Systems).

We require potential contractors to detail the skills, knowledge and experience of all personnel who will be involved in the delivery of the contract. Detail must be given of how skills, knowledge and experience are relevant to the delivery of the contract and how they will help to make it a success.

Full CVs of all personnel must be included with your proposal, together with two references.

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Contractual arrangements

The contract for this work will be with Devon Wildlife Trust.

Contracts for the work will be drafted. It is important to note at this stage that contracts will include:

- **On completion of Part A, a break clause between Part A and Part B will be used to ensure that both parties are satisfied with the arrangement and work to date. Continuation of the contract must be confirmed by both parties by 18th June 2020. If DWT deem that Part A has been delivered to an unsatisfactory standard, the contractor will not be awarded Part B of the contract.**
- **A mid-point review in Part B and a 2nd break clause to evaluate how the Project is progressing and to ensure that both parties are satisfied and wish to proceed.**
- Agreement to provide all information secured through the contract to Devon Wildlife Trust
- Agreement that all intellectual rights will be held by the Devon Wildlife Trust
- Agreement that the contractor will be bound by the Data Protection Act and relevant employment law
- Agreement that the contractor will provide Public Liability Insurance and Public Indemnity Insurance of up to £10,000,000 for the contract
- Agreement that the contractor will be liable for all Health and Safety aspects of work required to carry out the contract. The contractor must share their risk assessments with DWT who will feed into these where necessary.
- Agreement to report all “minor” accidents to DWT who will keep a record as part of their safety management system. For more serious accidents, the Contractor must report this under RIDDOR.

Payments for the work will be in two parts (to cover parts A and B respectively) and will be divided into payments within these sections, with a proportion of the contract funding only released on successful completion of the work.

Guidelines for tendering

Applications are invited to submit proposals to undertake the above work by contract, for the period 23rd March 2020 to 13th November 2020 inclusive. This will include regular meetings with the TRRP Team, NIA Project Manager and Environment Agency geomorphologists.

Please provide the cost breakdown for Part A and Part B separately. The costs for Part A must not exceed a total of £14,000 (including VAT). Part B must not exceed £110,000 (including VAT). Please provide all budget information inclusive of VAT. Reimbursements for travel expenses, hospitality and materials should be included within the above figure.

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Any increases in the cost once the contract is awarded must be agreed in writing with DWT prior to the costs being incurred.

The contract will be awarded based on the most economically advantageous and effective tender, as assessed against the following criteria:

- Cost
- Skills/knowledge of proposed deliverers*
- Capacity to deliver

*Evaluation will be based on an assessment of the CVs held for proposed deliverers (plus any supplementary information on these individuals contained in tender bids) against the skills/knowledge requirements for the contract (as set out in this specification), plus performance at interview.

The contract will be awarded to a single contractor.

Interviews will be held with potential contractors to assess their suitability. Interviews will be held on Monday 16th March.

Application can be sent electronically or by hard copy, and should be received **no later than 5pm on Monday 9th March**, sent to Matt Turley (TRRP Team Leader) at the following address: mturley@devonwildlifetrust.org or,

Matt Turley
TRRP Team Leader
Devon Wildlife Trust
Cookworthy Forest Centre
Cookworthy Moor
Devon
EX21 5UU

For an informal discussion and/or any questions relating to the project please speak to Matt Turley (TRRP Team Leader) on 01409 221823.

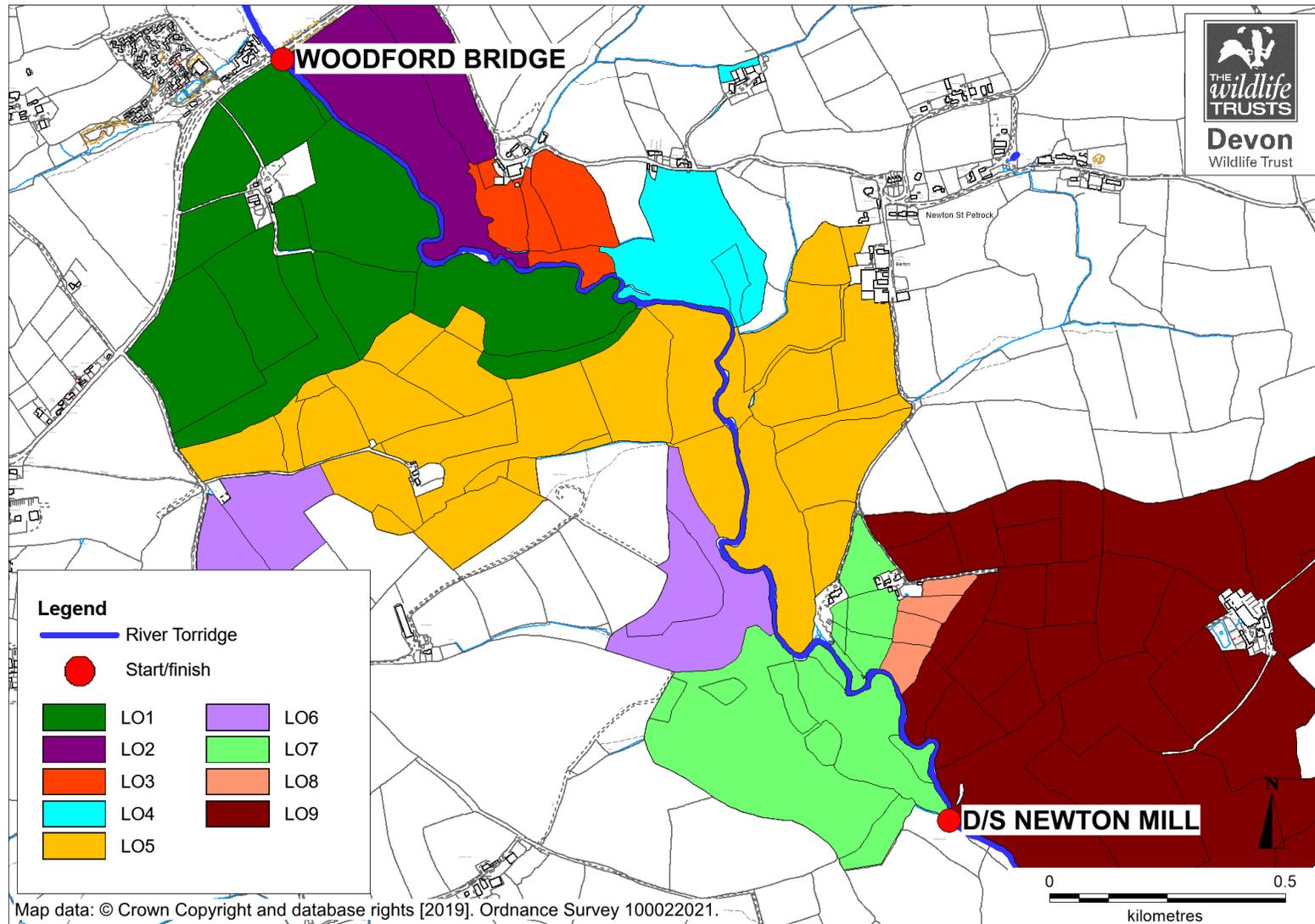
Torridge River Restoration Project funding

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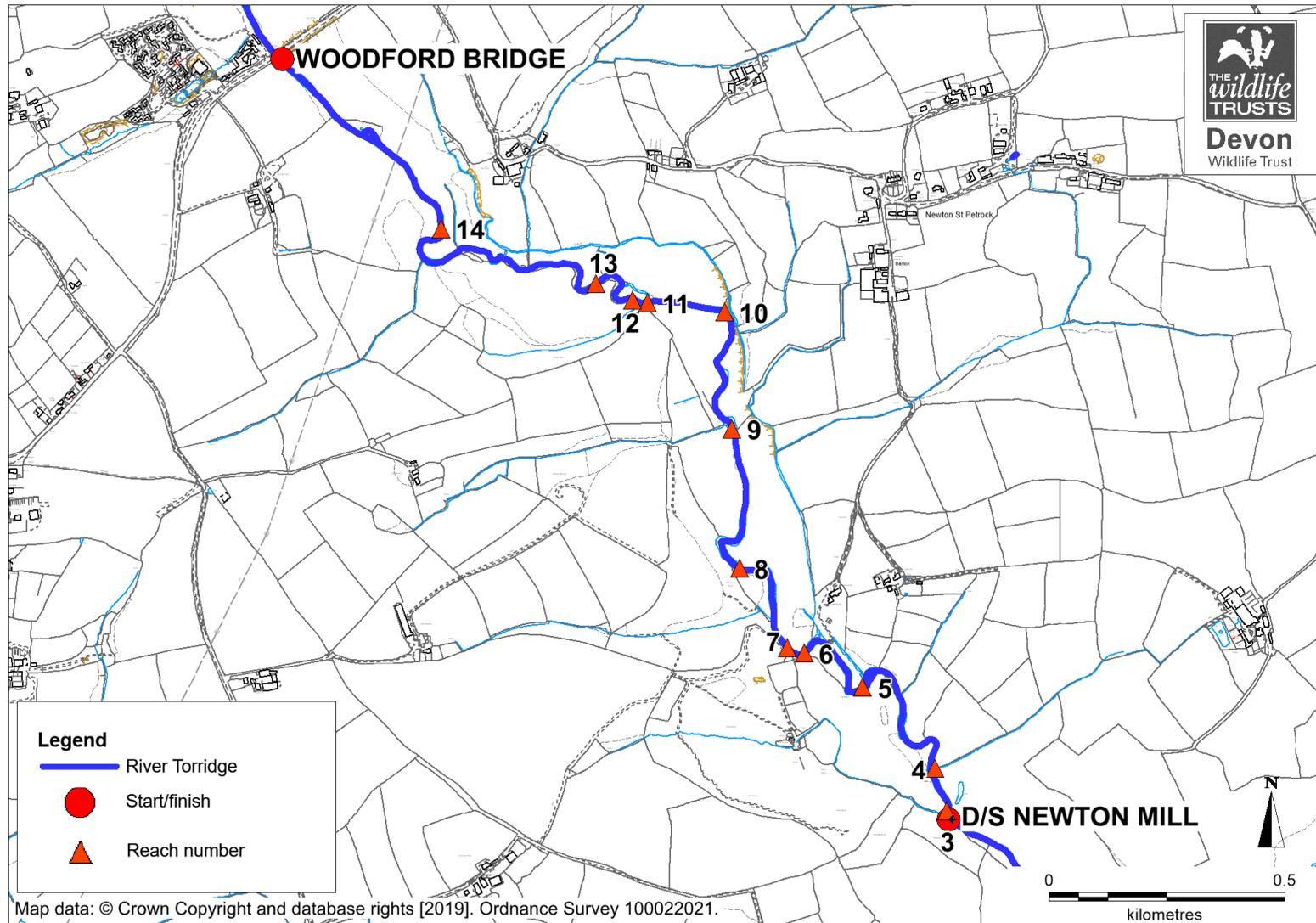
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Appendices

Appendix A. Landowners in the river restoration focus areas with whom TRRP are seeking agreement for the work



Appendix B. Reach number in the river restoration focus areas (refer to in the accompanying Woodford Bridge to Coombe Lake recommendations document)



Appendix C. Photos of potential restoration reaches



Appendix C cont. Photos of potential restoration reaches

