Cumann Iascairí Chloich Cheannfhaola

CLOUGHANEELY ANGLING ASSOCIATION

Upper Tullaghobegley Riparian Protection and Enhancement Project 2023.

PROJECT BACKGROUND AND LOCATION

The project undertook measures along a specified reach of the Tullaghobegley River to protect river banks from a number of pressures and remediate existing impacts. The reach which is the subject of this project is in the Tullaghobegly_020 River Waterbody. This is currently at WFD Good Status and is assigned to 'Not at risk' category in the WFD Risk 3rd Cycle. The accuracy of this latter categorisation has been questioned for reasons set out in the CAA Catchment Management Plan. CAA believe the waterbody to be at risk.

The project included a Riparian Environmental Enhancement Workshop over a period of five days including demonstration of bank stabilisation, drain blocking, riparian fencing, native deciduous tree planting and an education/awareness programme delivering guidance on important aspects of river habitat assessment by expert personnel from the Wild Trout Trust. The project was informed by previous expert environmental assessments, including catchment studies and specific site assessment by the Wild Trout Trust.

The project site is located near Falcarrragh in the Tullaghobegely River catchment in northwest Donegal (Grid Ref. 55.106689, 8.098796). The demonstration area is approximately 0.5ha in extent extending along 500m of the left bank of the Tullaghobegeley River, and includes features of degraded bogland and eroding drains, and small areas of unstable river bank.

The surrounding land use is pasture, improved grassland and bog, with some coniferous forestry. At the upper extent of the project reach there is excessive macrophyte growth (*Callitriche*) in the channel which is associated with silt deposition. Areas of clean gravels with coarse cobble are present and provide spawning habitat for salmon and sea trout.

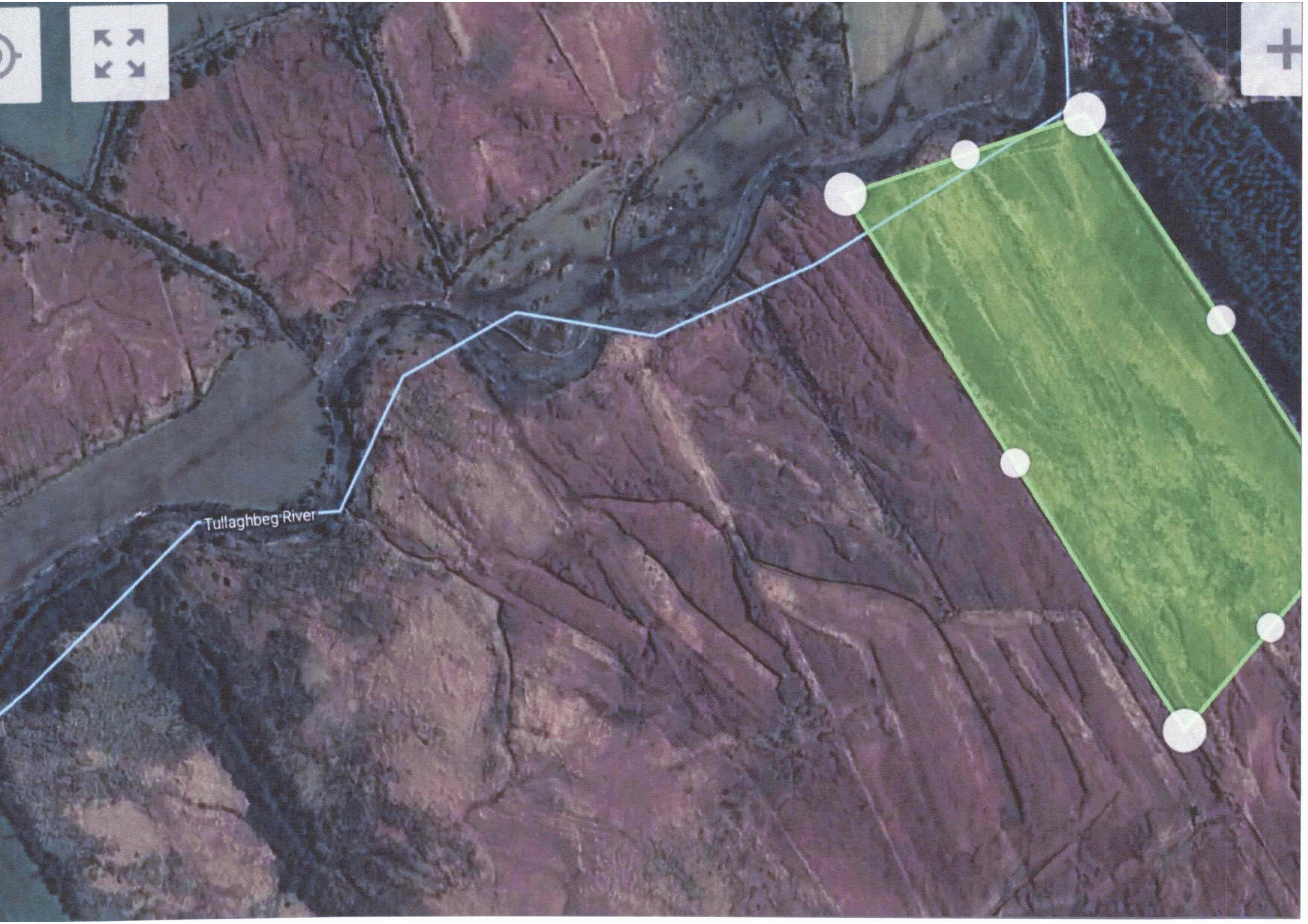
In recent years, land use in this section of the catchment has intensified. New land drainage has been installed and existing drains have been deepened. Cattle access at watering points have resulted in some damage to banks. Some lands are in production to the river's bank without defined buffer zones.

Siltation of river gravels is a significant pressure in the Tullaghobegley and impacts salmon and seatrout spawning success. Excessive macrophyte growth at the upstream section of the project reach is testimony to siltation impacts. It is critical that measures to reduce existing silt loads are implemented to ensure sustainable salmonid populations.

The landowner involved in the project's area of operations is well disposed to supporting environmental improvement and measures to enhance biodiversity. His active support was crucial to the success of the project. The benefits of landowner support in a partnership approach to environmental management is vital to long term sustainability in the catchment.

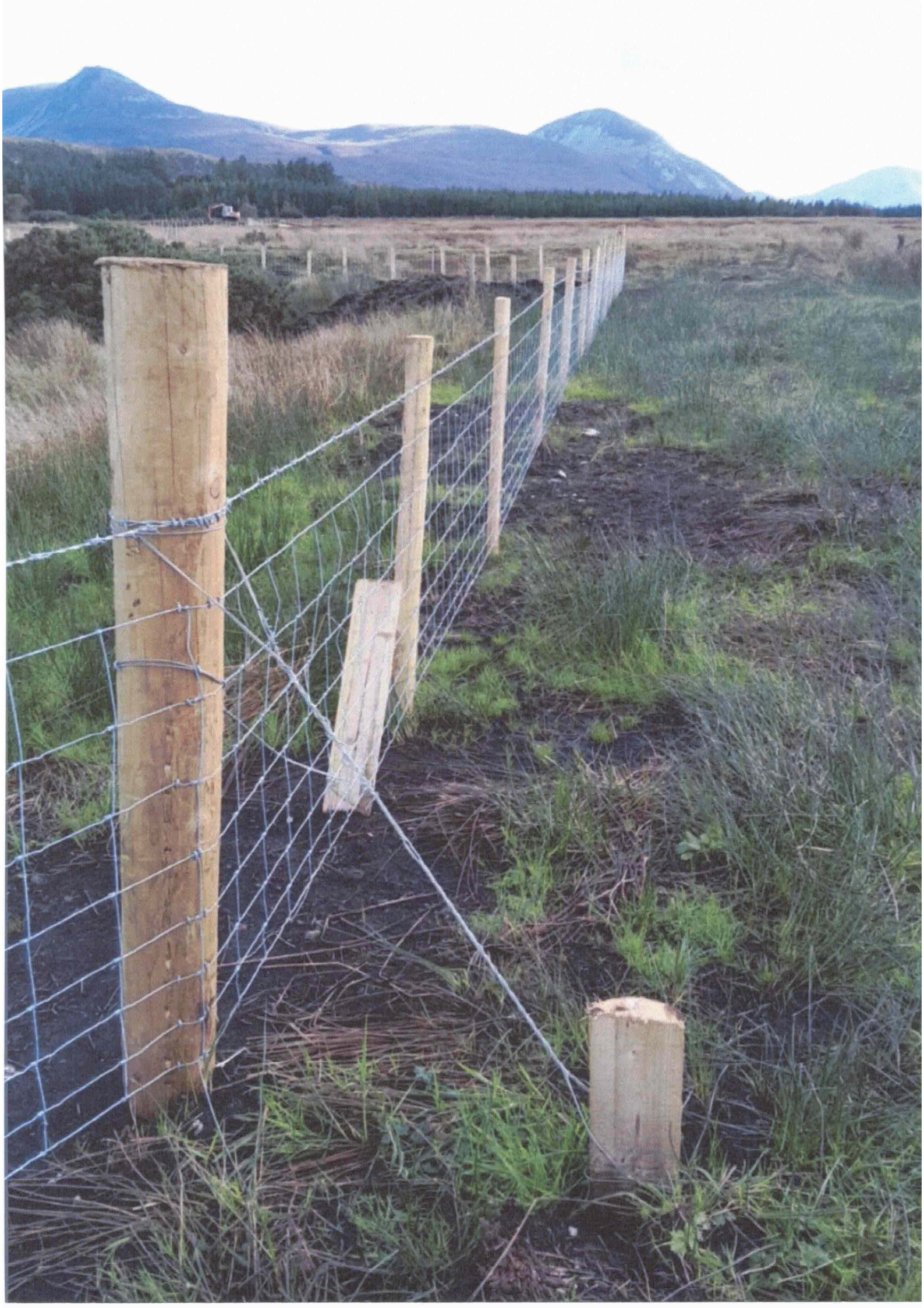
Our thanks to LAWPRO for the financial support without which the work could not have been accomplished.

MAP OF OPERATIONAL AREA SHOWING ACRES PROJECT AREA (GREEN POLYGON).


Tullaghbeg River

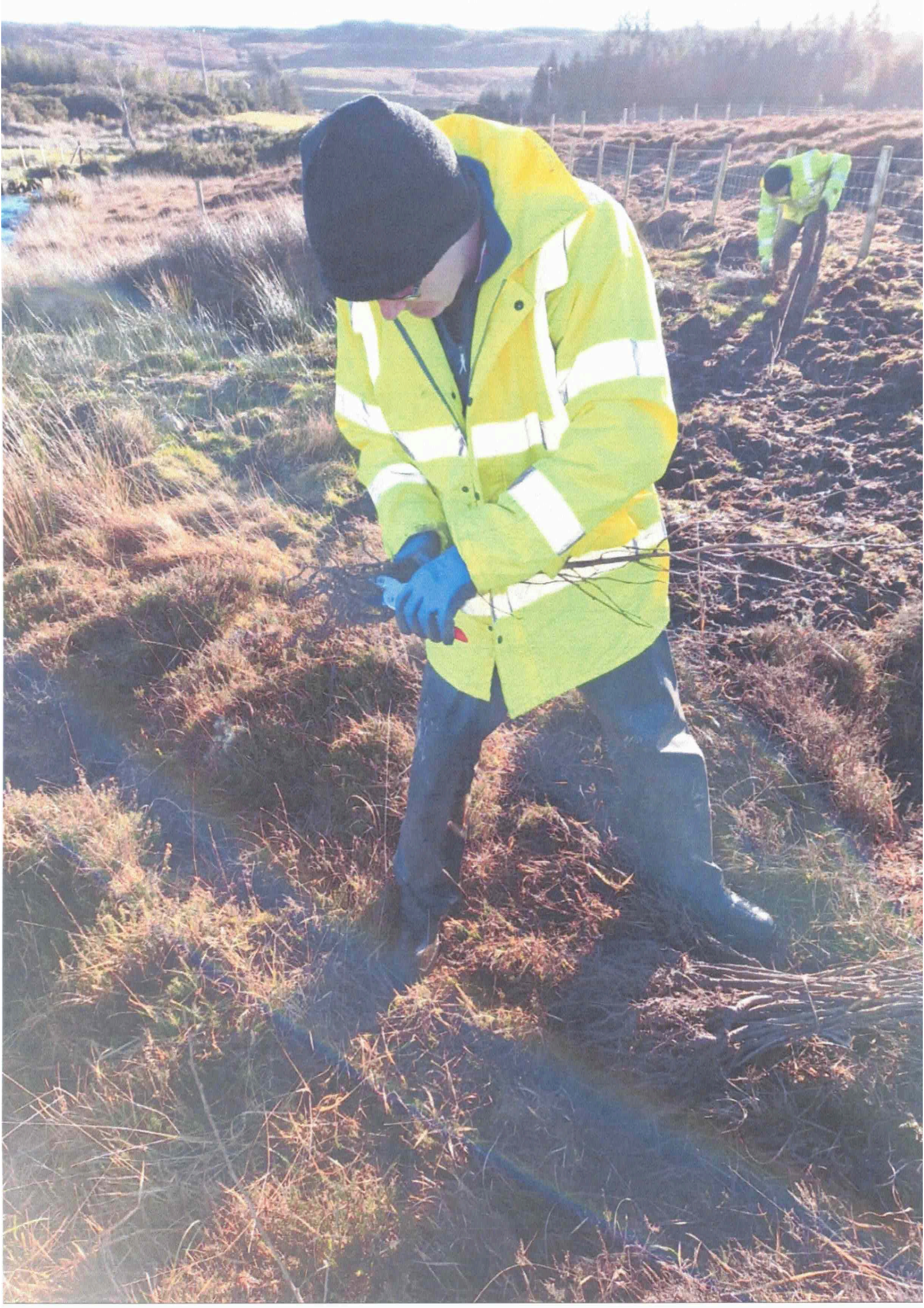
FENCING

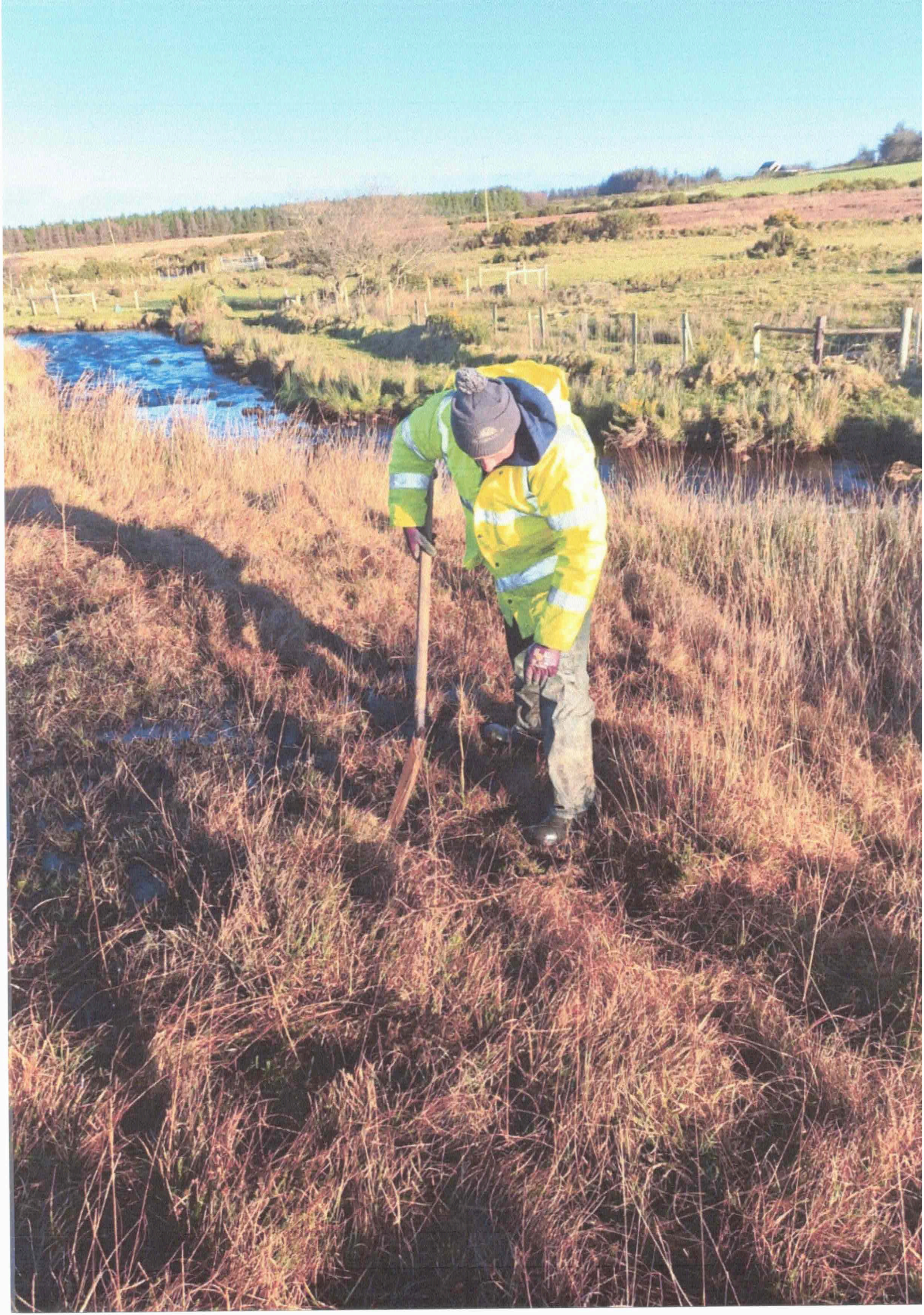
Over 500 metres of fence was installed, creating a riparian buffer zone which was utilised for tree planting.



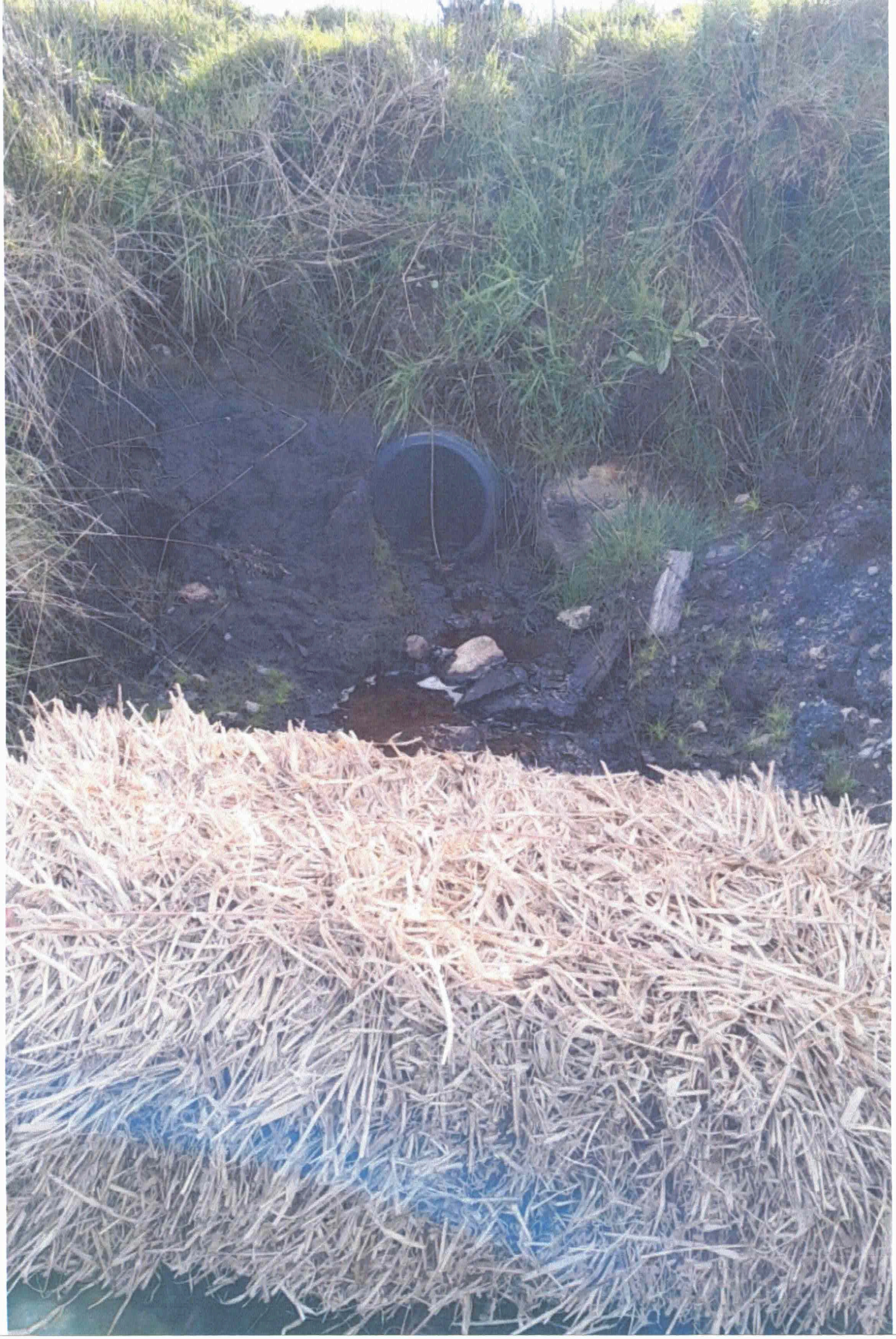
TREE PLANTING

One thousand trees were planted. A mix of alder, downey birch and mountain ash. Once these are established, some native oak may be planted among them.





DRAIN MANAGEMENT AND SILT CAPTURE.



WILD TROUT TRUST TRAINING PROGRAMME.

Wild Trout Trust River Maintenance Training Week July 17th to 21st 2023

Background

Following surveys of the Ray and Tullaghobegley rivers in June 2022 two reports were provided by Gareth Pedley, Conservation Officer with the Wild Trout Trust.

These reports recommended a number of changes to our river maintenance programme which would benefit the riparian habitat and enhance the in-river environment for both juvenile and adult salmonids. In our review of the reports the CAA Committee agreed that following up with a training week for our River Team would assist greatly in implementing this new approach.
This idea was discussed with our LAWPRO Community Water Officer, Jimmy McVeigh who recommended that we should apply for the necessary funding from the Community Water Development Fund 2023.

Therefore, a project proposal was written and submitted to LAWPRO in December 2022 and LAWPRO agreed to fund the training week with a contribution from CAA, mainly in the form of Voluntary Labour. WTT tendered successfully and it was agreed to host the river workshop during the week of July 17th to 21st 2024.

Aims of River Workshop:-

Five days of training and upskilling were planned for the Cloughaneely Angling Association river maintenance team in order to deliver:-

*Guidance on important aspects of river habitat assessment and recognition and retention of vital natural riparian habitat features

*Improved understanding of the importance of habitat features and the need to avoid over-maintenance of bank-side trees and vegetation

*On-site targeted practical habitat improvement workshops would demonstrate:-
- simple approaches to riparian habitat enhancement e.g. techniques such as willow whip planting and hinging of bankside trees
- larger-scale habitat interventions like the installation of pinned and lodged woody material
- use of brash in bank protection along an identified significant section of currently eroding bank
- establishment of approximately 0.5ha of appropriately structured, species diverse deciduous riparian woodland with suitable protection against browsing

Workshop training and expert supervision would allow significant elements of appropriate mitigation to be completed along the specified 1km river reach during this proposed project, and would complement previously implemented projects' successes.
Water – Bank restoration/protection would reduce sediment loads causing siltation of river bed
gravels and excessive macrophyte growths. Establishing appropriate riparian vegetation would deliver food to aquatic ecosystems. Exclusion of livestock would prevent further disturbance of sediments and allow gravels to recover.

Day 1, Monday July 17th - R. Tullaghobegley, Meenderry

Assembly at railway bridge 8.30a.m.
Site-specific Risk Assessment/Health and Safety briefing/Toolbox Talk.
Lyme and Weil's disease - safety measures.

Despite the wet conditions and continuing high water levels the training week began on the Upper Tullaghobegley just downstream of the old railway bridge.
Gareth Pedley gave a Health and Safety briefing and demonstrated techniques for the safe use of our new Silky Saws.

Days 2 and 3 - R. Tullaghobegley, Meenderry

Identification and harvesting of willow suitable for bank reinforcement work. Preparation of Willow sections for use in bank revetment work. It was decided that the continuing high water levels would not permit the construction of the planned wire and brash reinforcement. Instead, freshly cut willow stakes and rods were cut and hammered into the bank at water level to provide protection and support to the eroding bank.

Wed. morning - Site visit by Seán Ó'Ghaoithín, Head Gardener, Glenveagh.
Seán inspected the riparian planting from 2022. Suggestions re protection of trees from damage by deer. Advice on suitable native trees for the poorer ground on left bank. Will visit in late Winter to provide further guidance and oversee tree planting.

Wed. afternoon - Bank revetment completed. Gareth and Colm complete a walk- over of river Ray.

Day 4 - R. Ray, Lower Dunmore and Carrowcannon

Thursday morning - Gareth suggested that extensive, unnecessary bankside strimming and clearance in fished sections of the river was reducing riparian habitat quality and that it would be beneficial to cease that action, thereby also saving time and effort that could be turned to habitat improvements. A number of pools were visited and approaches to providing additional shade and shelter for fish were discussed.

Trees suitable for hinging were identified and Gareth provided practical demonstration of this technique using the Silky Zubat hand saw.

Day 5

Morning - Upper Tullaghobegley, Meenderry
The proposed site for the establishment of approximately 0.5ha of appropriately structured, species diverse deciduous riparian woodland was surveyed. Fencing lines were planned and suitable tree species, planting density and appropriate protection against browsing by deer were discussed.

Afternoon - Meeting in An tSean Bheairic with CAA personnel to round off and review the River Workshop.

PROJECT APPROPRIATE ASSESSMENT SCREENING

APPROPRIATE ASSESSMENT SCREENING FOR PROPOSED PROJECT BY CLOUGHANEELY ANGLING ASSOCIATION IN THE TULLAGHOBEGELEY CATCHMENT, DONEGAL

STEP 1. Description of the project/proposal and local site characteristics

(a) File Reference No:

LAWPRO #348

(b) Brief description of the project

Riparian Environmental Enhancement Workshop over a period of 5 days including demonstration of bank stabilisation, drain blocking, riparian fencing, native deciduous tree planting and an education/awareness programme delivering guidance on important aspects of river habitat assessment by expert personnel from the Wild Trout Trust. The project has been informed by previous expert environmental assessments, including catchment studies and specific site assessment by the Wild Trout Trust.

(c) Brief description of site characteristics:

The application site is located near Falcarrragh in the Tullaghobegely River catchment in northwest Donegal (Grid Ref. 55.106689, 8.098796). The demonstration area is approximately 0.5ha in extent extending along 500m of the left bank of the Tullaghobegeley River, and includes features of degraded bogland and eroding drains, and small areas of unstable river bank. The Tullaghobegeley River flows downstream from the application site a distance of about 5km and outfalls into Ballyness Bay at Falcarragh. Surrounding land use is largely rough grazing with some improved fields.

The site is not located within or immediately adjacent to any Natura/European site.

(d) Relevant prescribed bodies consulted:

Cloughaneely Angling Association (CAA), the project sponsors, chair a catchment management group with representatives from Inland Fisheries Ireland, Donegal County Council, LAWPRO and NPWS. The group is aware of, and inputs to CAA project proposals. CAA has consulted with IFI and LAWPRO in detail in relation to this project, and liaised closely with them during development of the project proposal.

(e) Response to consultation:

Inland Fisheries Ireland and LAWPRO have expressed their strong support for the project as proposed.

IFI, through LAWPRO's expert panel for project assessment, has suggested that an Appropriate Assessment Screening might be appropriate.

STEP 2. Identification of relevant Natura 2000 sites using Source-Pathway-Receptor model and compilation of information on Qualifying Interests and conservation objectives

The relevant Natura 2000/European Sites are listed below. These have been identified on the basis of the potential zone of influence of the proposed project, and consideration of the Source-Pathway-Receptor model in relation to potential for significant effects on the Qualifying Interests of the European Sites in question.

Relevant Natura 2000 Sites

European Site (code)	List of Qualifying Interest/Special Conservation Interest	Distance from Proposed development (km)	Connections (Source-Pathway-Receptor)	Considered further in screening Y/N
Ballyness Bay SAC 001090	7 Qis https://www.npws.ie/protected-sites/sac/001090	Approximately 4.5km north and downstream	Yes. Surface water connection through Tulllaghobegeley River.	Yes (See Step 3)
Falcarragh to Meenlaragh SPA 004149	Corncrake (*Crex crex*) [A122] https://www.npws.ie/protected-sites/spa/004149	Approximately 4.5km north and downstream	Weak surface water connection through Tulllaghobegeley River.	Yes (See Step 3)
Cloghernagore Bog and Glenveagh National Park SAC 002047	13 Qis https://www.npws.ie/protected-sites/sac/002047	Approximately 3.5km south and upstream	No SPR connections due to distance upstream and lack of any ex-situ factors of significance to these Qis.	No
Derryveagh And Glendowan Mountains SPA 004039	5 Qis https://www.npws.ie/protected-sites/spa/004039	Approximately 3.5km south and upstream	No SPR connections due to distance upstream and lack of any ex-situ factors of significance to these Qis.	No

STEP 3. Assessment of Likely Significant Effects

(a) Identify all potential direct and indirect impacts that may result in significant effects on the conservation objectives of a European site, taking into account the size and scale of the project under the following headings

Impacts	Significance of Impacts: (duration/magnitude/etc.)
Construction Phase: • Damming of drains • Bank protection • Riparian Fencing • Tree planting	During installation of drain dams, and bank protection works there is potential for release of small amounts of sediment for very short periods. The scale of the proposed works is extremely small and the site is 5km remote from downstream Ballyness Bay SAC. The Falcarragh to Meenlaragh SPA is also remote and is terrestrial with only very tenuous surface water connection to the application site. Riparian fencing will be set back several metres from the river and no disturbance of the immediate riparian zone will occur. There will be no drainage or soil preparation associated with tree planting which will be manual. The construction phase will not result in significant environmental impacts that could affect European Sites within the zone of influence of the proposed project, or any European Site.
Operational Phase: • Drain dams • Bank protection • Riparian fencing • Riparian trees	All project elements are largely self-maintaining. Inspection of dams will confirm integrity over time and any discharges will be to vegetated surfaces and ultimately restore ground water levels in degraded peatland. Bank protection will entail soft measures such as willow planting or use of brash protection. The actions proposed are beneficial to the local terrestrial and aquatic environment and will promote biodiversity enhancement, and community awareness. The operational phase will result in significant positive environmental impacts and will not negatively impact European Sites within the project zone of influence, or any European Site.
In-combination/Other	There are no other relevant projects or plans that could have in-combination effects with the current proposed project.

(b) Describe any likely changes to the European site:

Changes Considered	Likely Significant Effects
• Reduction or fragmentation of habitat area • Disturbance to QI species • Habitat or species fragmentation • Reduction or fragmentation in species density • Changes in key indicators of conservation status value (water quality etc.) • Changes to areas of sensitivity or threats to QI • Interference with the key relationships that define the structure or ecological function of the site • Climate change	The application site is not located adjacent to, or within a European site, therefore there is no risk of habitat loss or fragmentation or any effects on QI features (habitats or species) directly or ex-situ. The significant distance between the proposed project site and any European Sites, along with the nature, scale, timing, and duration of the proposed project, and the weak association between the proposed site and any Natura Site as evinced by consideration of the S-P-R model, provides a high degree of confidence that the proposal will not result in any likely changes to European sites of relevance. The proposed project will have beneficial effects on climate change impacts through enhanced sequestration of carbon in perennial woody vegetation, and reduction of GHG emissions through rewetting of peatland areas.

(c) Are *'mitigation'* measures necessary to reach a conclusion that likely significant effects can be ruled out at screening?

Mitigation measures are NOT necessary, and are not relied on to reach a conclusion of no likely significant effects on any European Site.

Step 4. Screening Determination Statement:

The assessment of significance of effects:

On the basis of the information available, which is considered adequate to undertake a screening determination and having regard to:

- the nature and very small scale of the proposed project primarily on a degraded peatland area,
- the intervening land uses and distance from European sites,
- the lack of direct connections with regard to the Source-Pathway-Receptor model,

it is concluded that the proposed project, individually or in-combination with other plans or projects, would not be likely to have a significant effect on the above listed European sites or any other European site, in view of the said sites' conservation objectives.

As such an appropriate assessment is not, therefore, required.

Conclusion:

It is the conclusion of this screening process that there is clearly **no likelihood of significant effects on any European Site** arising from the proposed project. As such the screening recommends that Appropriate Assessment is not required in respect of the proposed project.

Report Prepared by:

Dr A. McNally
MNE Environmental Ltd.

13 April 2023.