

Protecting the tree and riverbank at Carleton Hall Park

There have been a number of concerns raised with Eden Rivers Trust regarding a tree at Carleton Hall Park on the river Eamont.

Due to erosion occurring following several high flow events and the removal of Carleton Hall weir, the tree – a substantial small-leaved lime - has been undermined and is likely to fall into the river during the next storm event. The tree, and the public footpath that runs alongside the river Eamont, are very popular with local walkers and users of the area and so Eden Rivers Trust, in conjunction with the landowner, have been looking at ways to protect both the tree and the riverbank.

Unfortunately, due to the nature of the site and the extent of the erosion, it has been concluded that there is no way to protect the tree in its current situation.

It would be impossible to rebuild the banks here and the installation of artificial bank protection such as boulder revetment, gabion baskets or sheet piling are unlikely to be effective. Permission would not be granted to undertake this type of work either as erosion is a natural and often desirable process and there is no infrastructure nor any sensitive sites at risk.

Instead, we (Eden Rivers Trust) have worked with specialists to develop a greener plan that will **keep the tree alive and reduce the erosion** and has the support of the consenting bodies. We will:

- Remove the tree and lay it along the edge of the river, filling the erosion bay that has been created.
- Re-bury the root-ball of the tree, enabling the tree to continue to grow. The tree in question is a small-leaved lime, a species that is very amenable to this kind of work, and it is likely to put out new suckers to root into the banks and continue to thrive.
- Use an anchor at the crown end of the tree as an additional security measure to ensure it does not pull away from the banks.
- Plant some new trees to replace the current tree and provide more new growth into the future.

This will also help consolidate the riverbank, as the branches of the tree will slow the water on this corner, reducing the erosive power and depositing sediment.

So, by carrying out these works this summer, we not only maintain the habitat value of the tree, but also provide increased in-stream habitat and prevent further erosion of the riverbank at this location. We also intend to plant some new trees in the area to replace the current tree and provide new growth into the future.

If you would like any further information, please contact Eden Rivers Trust via email at office@edenrt.org

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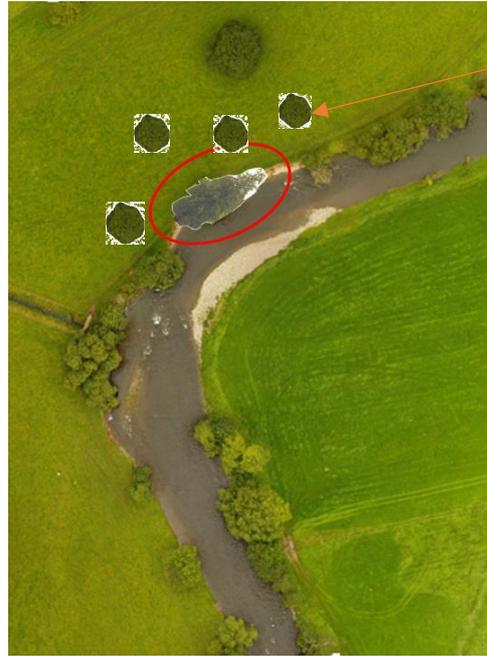
River Restoration Manager, Eden Rivers Trust.

Visual Interpretation

Before



After



Additional tree planting in wooden tree cages