

# [A trial using nature to help reduce flood risk hailed a success](#)

A trial to help test how nature based solutions such as creating wetlands can be used to help reduce the risk of flooding has been successfully completed at Marlfield Farm, in Earby.

This is one of a series of pilot projects which are part of Leeds Flood Alleviation Scheme using natural flood management (NFM) techniques to help protect the people of Leeds and those living near the River Aire from the risk of flooding.

Evidence from these projects is being gathered to fully understand the benefits of NFM and develop how best to work with landowners, tenants and key partners in the future.

A team from the Environment Agency has been working with the River Stewardship Company and landowners at Marlfield Farm, which is on the border of Yorkshire and Lancashire, since last September to slow the flow of rainwater and provide better habitat for local wildlife. Works have included wetland creation, hedge and tree planting, leaky barrier installation and fencing off corners of fields from grazing so that more vegetation can grow which helps to store and slow the flow of water across land.

The Earby project will be the first of many NFM schemes in the area. The Yorkshire Dales National Park recently organised a tour of the site for farmers who were interested in installing NFM measures on their own land so they could see the works in action and learn from the project. A video to show the success of the NFM measures during Storm Ciara in February has been produced by the owners Marlfield Farm which can be viewed below

[Natural flood management at work at Marlfield Farm, Earby](#)

Any landowners interested in using natural flood management techniques on their land can contact the NFM project team by emailing:

[LeedsFAS.nfm@environment-agency.gov.uk](mailto:LeedsFAS.nfm@environment-agency.gov.uk)

Jenny Barlow, flood risk adviser with the Environment Agency, said a time-lapse camera had been fitted on the farm to help show the difference that the project is making. It recorded the impact that these measures made to slow the flow locally during storm Ciara and Dennis.

She said:

We are very grateful to the landowners for working with us to trial these NFM techniques on their land and delighted as the initial results at Marlfield Farm are positive. This project will contribute to local flood risk reduction and provide wider environmental benefits, slowing the flow of water locally and to

downstream communities including Leeds.

Earby has a history of flooding and although these natural techniques will not prevent this from ever happening again, we hope that our success at Earby will be a catalyst for more landowners to come forward and work with us to install more of these measures. These will have a cumulative benefit and should help the landscape to hold more water during flood events.

Natural Flood Management also offers huge potential for climate mitigation, for example, creating wetlands, restoring our uplands and planting trees can help to capture tonnes of carbon from the atmosphere.

Mr Daniel Procter, together with his wife Heather and parents Howard and Lynda, own Marlfield Farm. Daniel said:

We are pleased to support the trial of NFM techniques on our farm having witnessed first-hand how quickly the river reacts to flash flooding.

The features have already been tested and have responded well to recent flooding events, in particular to Storm Ciara.

We are also excited about the added environmental benefits of these measures. We keep rare breed sheep and are keen to strike a balance between farming and conservation. The creation of new ponds, wetland habitats and hedgerows will complement our existing efforts to boost the biodiversity on our farm and in the local area.

Adam Rollitt, Chief Executive of the River Stewardship Company who are carrying out the works on behalf of the Environment Agency said:

It has been a privilege to have worked on this exciting project, complementing the river channel maintenance and engagement work that we are delivering further downstream in Leeds as part of the Leeds Flood Alleviation Scheme.

It is a fantastic example of what can be achieved when working with land owners and other partners, and it is great to see some of the early, positive results.

Leader of Leeds City Council Councillor Judith Blake said:

Natural flood management techniques are a very interesting and clever way of using the environment to help reduce the risk and impact of flooding.

The fact these measures will be in place so far upstream of Leeds shows how committed we are to a whole catchment approach to protect all our communities at risk of flooding from the River Aire.

Together with the engineering measures to be installed as part of phase two of the Leeds Flood Alleviation Scheme, this shows how a range of different methods can be used to help achieve the same goal.

Recent storm events have highlighted once again how we need to get this work done as quickly as possible so we would call on the government again to work with us to complete phase two in full so all our communities can have the best level of resilience possible.

This work is part of a wider flood risk programme which has been funded by Leeds City Council to work with nature to reduce flow of water from upstream so the landscape can hold more water in times of flood. The wider Leeds NFM programme includes tree and hedge planting, re-channelling rivers to their natural courses, soil aeration, wetland creation and moorland restoration all of which have lots of benefits for people and wildlife.