

Natural flood management

Landowner case studies



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Julie's story

Leaky dams and an attenuation basin

Julie Thorpe spent Christmas Day 2015 with her sisters in Nidderdale. Only after the family set off to leave did they become aware of how bad things were back home.

“Around 10.30 pm we must have been in one of the last cars to drive through Mytholmroyd before the river breached. We reached home and joined our neighbours in building barriers to divert torrential water from our properties. The next day my daughter and I headed down to Hebden to help with the clean-up – the scale of the damage was unbelievable!”

When the opportunity to do something to help came along, Julie was keen to help. Julie heard about the Natural Flood Management (NFM) landowner scheme through a neighbour and wanted to find out more.



Leaky dams and an attenuation basin



“We are lucky to have a bit of land and the contours lent themselves to creating a range of natural flood management features,” Julie explained. The project has also created many opportunities for conversations about climate change with friends, visitors, and people who use the bridleway.

Julie adds, “It is great that CMBC has invested in natural flood management. Whilst flood defences in the valley are necessary, pouring more and more concrete can’t be the only answer. If the NFM grant scheme can be scaled up it can help safeguard homes and businesses in Hebden Bridge, Todmorden, Mytholmroyd, and further down the valley. And so many NFM features have a positive impact for wildlife – win-win!”

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Pedro's story

Tree planting

Pedro De Wit first heard about the landowner grants via Treesponsibility. Treesponsibility initially explained that grants were available for planting trees that can help prevent flooding in the valley.

After several bad floods in Hebden and Mytholmroyd and with Pedro seeing first-hand his friends suffering from flood damage, he decided to implement some natural flood management schemes on his land.

“When we moved to our house there was flooding in Hebden. We noticed how much runoff water was going over our field. Some of the houses beyond our land flooded because of water that came down the hill and across our field.” Pedro explained.

Not only are the newly planted trees helping to slow the flow, but there is a benefit for wildlife once they have grown.



Tree planting



In the future, Pedro would like to plant more trees along the border of his land to help reinforce the banking. Pedro would also like to build an attenuation basin that can collect run-off water from the hills above and in doing so stop water from getting to the estate below. An attenuation basin would be great for wildlife too and when the pond is dry it would create a sheltered space for wild plants.

Pedro said “There are many fields higher up in the valley not used for farming anymore. In my opinion, it is better to create woodland on these fields as this benefits the climate and helps to slow the flow.”

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Sarah's story

Attenuation basins and tree planting

Following flooding on an unprecedented scale that ravaged parts of the Calder Valley including Hebden Bridge during Christmas 2015 Sarah knew she wanted to help.

The town's narrow valleys are surrounded by steep hillsides carved out by rivers, making the area and its surrounding communities particularly vulnerable to flooding.

Sarah had heard about the NFM landowner grant scheme from the South Pennine Farmers Group. The creation of attenuation ponds on Sarah's land would allow safe and contained storage for excess rain and stormwater. This removes some of the potential flooding risks in the valley below as excess water can drain in a controlled way.




Attenuation basins and tree planting



The main objective of Sarah's attention basins is to store and control the flow of excess drainage, surface water and stormwater but the future woodland will enhance both biodiversity and amenity value, even if this will take a long time to establish.

Sarah's project also included planting over 600 trees and 400m of new hedging. The scheme was also designed to help create corridor habitats for wildlife in the nearby nature reserve situated below the farm to reach and extend further up the valley, creating wildlife corridors where previously there were no trees.

On completion, Sarah added "I'd like to do more of the NFM schemes, especially in local areas of land where I know that water flows can be a problem for neighbouring properties. I'd hate to see people's houses flood, there have been some near misses, as well as previous cases of properties flooding. Now that the attenuation basins have grassed over, I think they look sculptural and enhance the interest of the landscape."



If you have land that you
would be happy to use
for natural flood
management, please
contact:
NFM@Calderdale.gov.uk