



Nature Recovery
Shropshire and
Telford & Wrekin

Helping nature to recover with...

Natural Flood Management schemes



Shropshire Slow the Flow

This is an initiative that began in 2016 and takes an alternative approach to the management of flood risk. Rather than constructing traditional flood defences, 'Slow the Flow' focuses on river catchments as a whole and looks for ways to reduce or slow the flow of water nearer to the source.

Slow The Flow 2 is building on the success of the first project where some 1000 natural flood management interventions were installed across the Corvedale catchment to increase water infiltration, intercept and store storm water, and reduce peak flows of flood water.

The second phase of the project is working with farmers and land managers in 7 river catchments across the county to reduce flood risk and enhance biodiversity.

Activity includes creating ponds, swales, woody debris dams, sward lifting, improving field infiltration, tree and hedgerow planting. This work has the added benefit of enhancing or creating a range of valuable habitats for wildlife.



Natural Flood Management (NFM)

What is it?

Working with nature to reduce the risk of flooding for communities. It uses various techniques to restore or mimic the natural functions of rivers, floodplains and the wider catchment. It aims to store water in the catchment and slow the rate at which water runs into rivers, to help reduce flooding downstream.

How does it work?

By restricting the progress of water through the catchment in 3 ways:

- **Increasing soil infiltration** and allowing water to soak away.
- **Storing water** by using natural features such as ponds, ditches or low-lying land or by creating new ponds and areas to store water.
- **Slowing water** by increasing resistance to flow. For example, by planting trees on the floodplain or constructing "leaky wood barriers" in channels.

Shropshire Wildlife Trust delivers Slow the Flow on behalf of Shropshire Council and Environment Agency. They liaise with local flood action groups and the National Flood Forum to target activity where it is most needed.



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"Natural Flood Management has other benefits too. It helps to enhance habitat diversity for river insects and animals, trap pollutants, and enhance the supply of sediment to the floodplain."

Researcher, Cardiff University

Impact of Slow the Flow (phase 1)

In the Corvedale catchment over 9,000 native trees and shrubs were planted across 17 sites. This has created a combined woodland area of 820m² and a hedgerow length of 1225m, providing new habitat and 'steppingstone corridors' for wildlife.

Over 100 landowners were engaged with and more than 350 people attended events linked to the project.

Cardiff University was involved in the project to monitor the effectiveness of NFM features and to establish a method of quantifying the benefit of wood debris dams in a computer model. Read more about their findings here:

- [Field-based monitoring of instream leaky barrier backwater and storage during storm events](#)
- [Why beaver-like dams can protect communities from flooding](#)



Ways to slow the flow of water:

- Leaky wood barriers to slow the flow in streams
- Construct ponds, scrapes, swales and bunds to temporarily store rainwater
- Create wetlands to intercept the rainfall
- Floodplain reconnection, allowing the river to flow onto the floodplain
- Improve soil health to allow the rain to infiltrate
- Tree and hedgerow planting to disrupt surface water flows

"By working with natural processes we can store water in the catchment; enhancing and restoring habitat as well as reducing and delaying peak flows reaching communities downstream"

Sarah Mackness, Water Resources Project Manager, Shropshire Wildlife Trust

Slow the Flow funding is from Shropshire Council via the English Severn and Wye Regional Flood and Coastal Committee to deliver a programme of Natural Flood Management measures across Shropshire.

Click on SWT logo for more information:



**Shropshire
Wildlife Trust**