

Natural Flood Management in the Calder Valley

We have undertaken investigations into the potential for natural flood management to contribute to the reduction of flood risk at key receptors in Calderdale. This showed that if we can slow the arrival of water to the rivers in Hebden Bridge, we can provide small reductions in flood flows in the town. Natural flood management can also reduce the risk of surface water flooding by keeping water in the landscape instead of on the roads, and limit its impact by reducing soil erosion off the hillside into drains and rivers. There is lots of NFM activity going on in the Calderdale catchment already – there are some examples of the ongoing work below:

Yorkshire Water

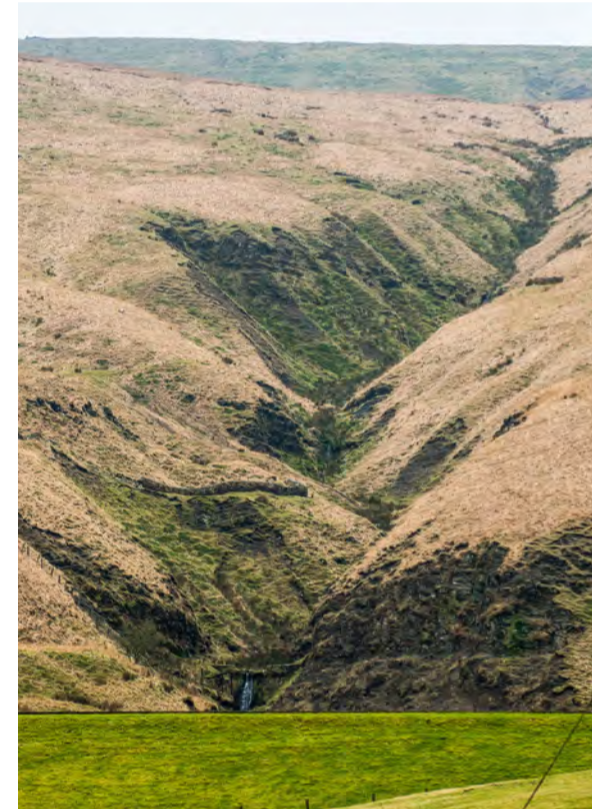
Yorkshire Water together with the White Rose Forest partnership has pledged to investigate tree planting opportunities to reduce flood risk across the Yorkshire Water estate.

For example, the moors above Gorpley have been identified as a site where tree planting can take place in the near future. Sixty hectares of species poor grassland will be planted with trees which will help slow down the rush of rain water to vulnerable locations. Approximately 3,000 trees will be planted per hectare which could mean up to 200,000 trees planted over the next couple of years. Trees responsibility will be a major delivery body for this work as well as other local community groups.

Yorkshire Water and the White Rose Forest partnership are currently in the process of preparing a design for this scheme, and undertaking the surveys and consultation necessary to ensure that the project is delivered in a way that is sensitive to the site's existing biodiversity and rights of way. We hope to be able to plant the first trees in autumn 2017.

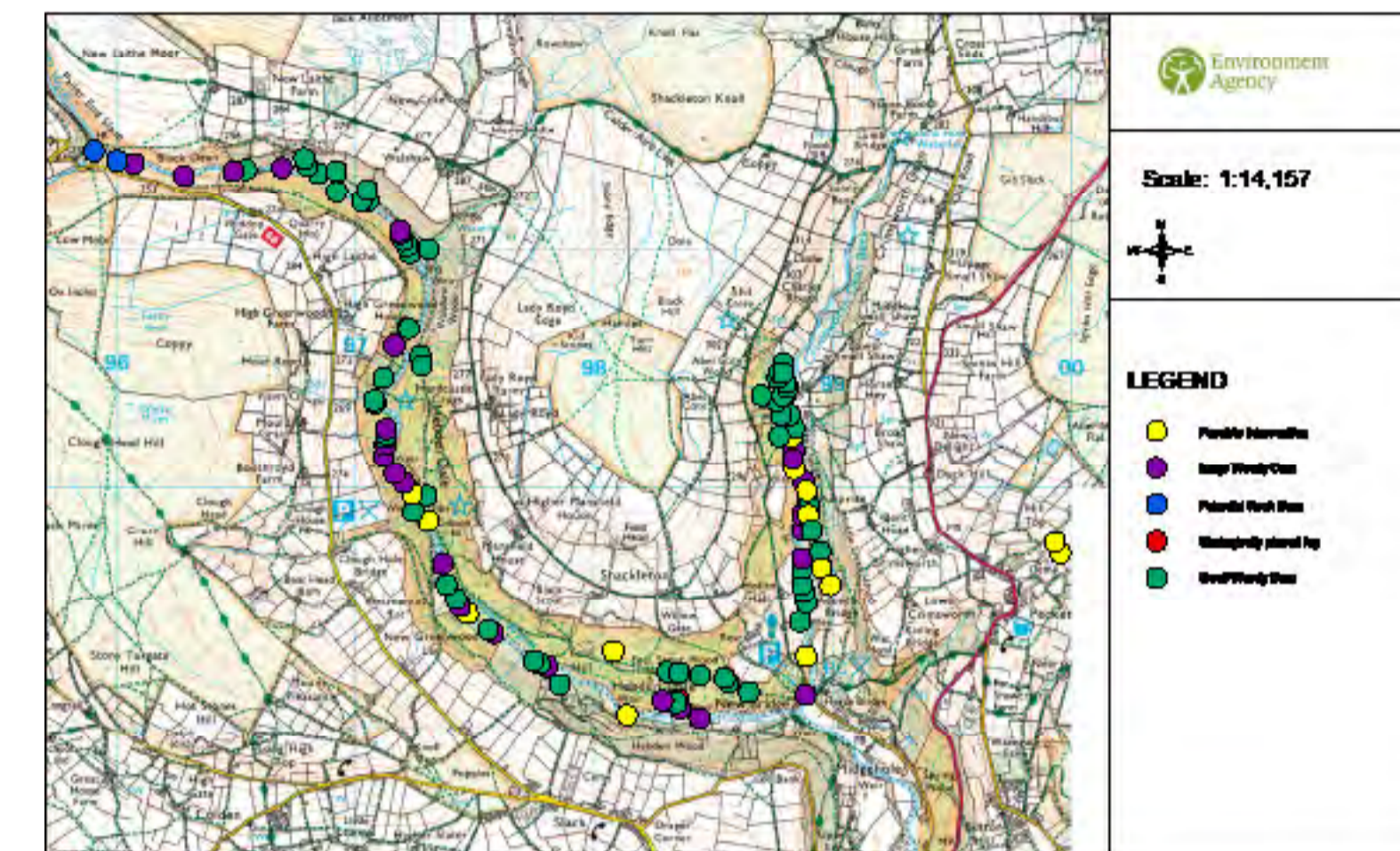
Other natural flood management flood measures will also be implemented on these moors over the next 5 – 10 years, including:

- Blanket bog restoration
- Leaky dams
- River bank protection



Slow The Flow

Hardcastle Craggs



To date, around 40 new volunteers have worked with Slow The Flow Calderdale at Hardcastle Craggs. In only 3 weeks, significant progress has been made in a number of gullies leading into the main channel in the Craggs.

Work ranges from sawing timber, trimming brush, digging, and moving trunks into place to form leaky dams and to stuff gullies. This maintains normal flow but encourages rain water onto the banks during heavy rainfall to reduce the amount of water making it into the main channels.

River Level Monitoring Project

Slow The Flow Calderdale has coordinated a professional project to install a small number of river level monitors in the Calder Valley. Plans are underway to extend the network of monitors using community workshops to build low cost monitoring and transmitting devices that will provide data for planning, warning and reassuring.

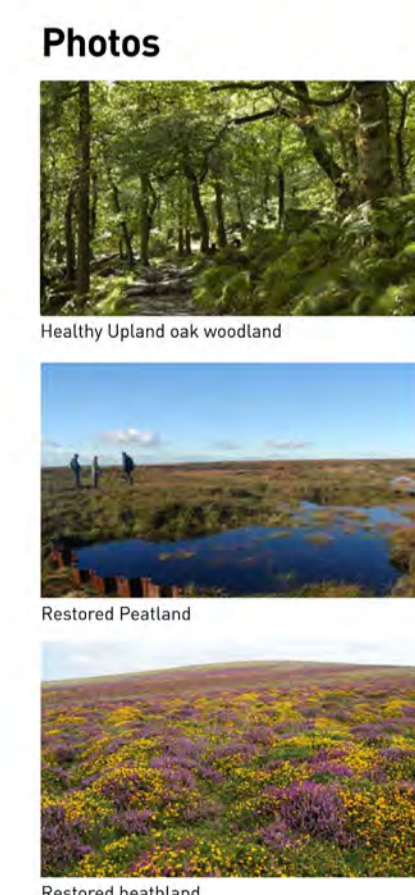
You Can Slow The Flow

Sustainable drainage systems (SuDS) mimic the natural cycle of water management, by retaining water where it lands (instead of shedding it quickly to drains and watercourses, which can lead to floods). Slow The Flow Calderdale is creating awareness of how this can be achieved by everyone in their urban environments: at home, at work, at school, in public places.

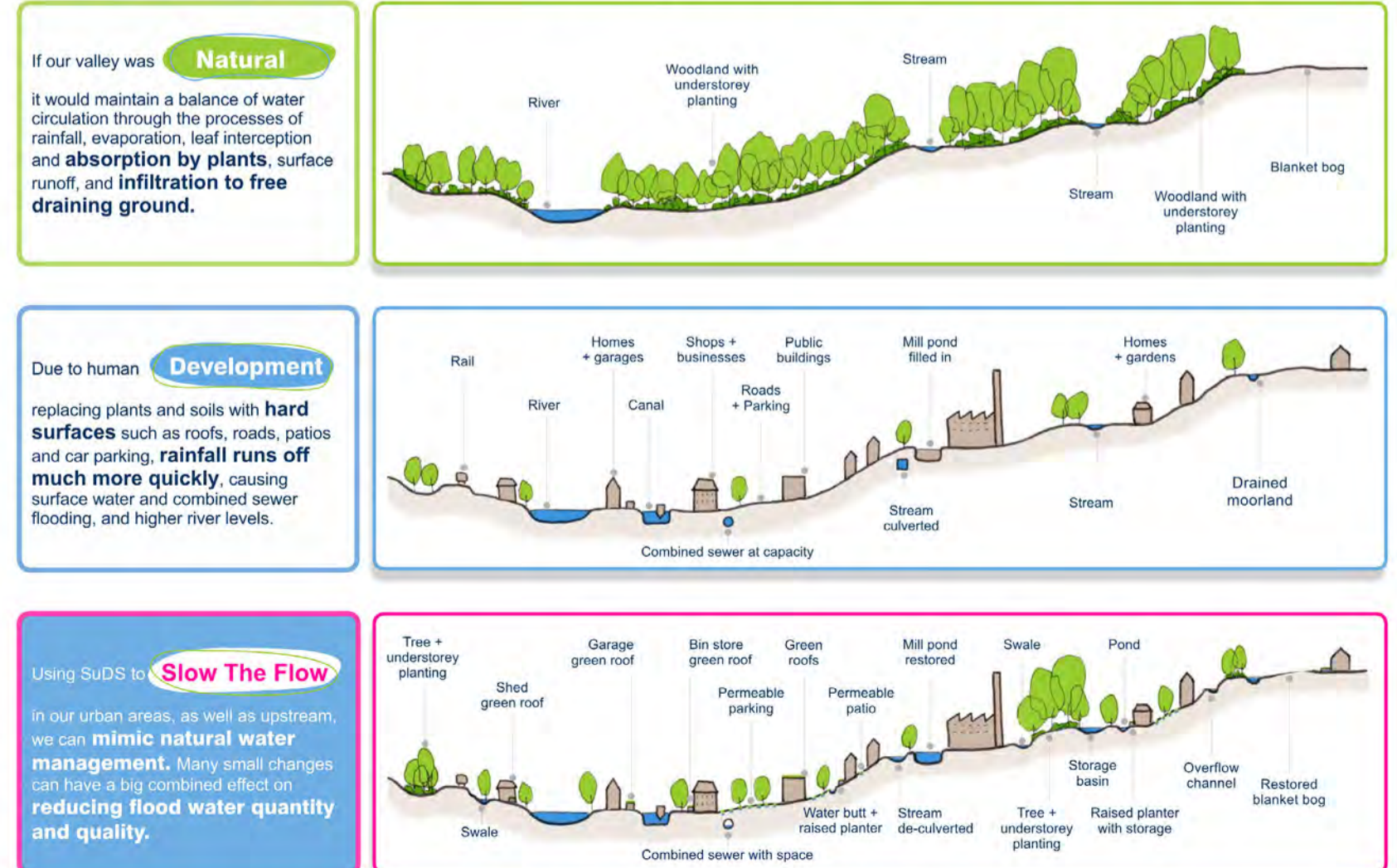


Gorpley Landscape for Water Project

- Key**
- Footpaths
 - Peat Restoration
 - Wet Grassland
 - Woodland
 - Heath Land
 - Leaky Dams
 - Scattered Trees



Slow The Flow: You Can! - general principles of urban SuDS (Sustainable Drainage Systems)



For more detail on how to Slow The Flow: At Home / At Work / At School / Public Spaces, go to: www.slowtheflow.net/you-can-slow-the-flow