Natural Flood Management work underway in Northumberland village

The Environment Agency is working with Tyne Rivers Trust and landowners to use natural materials to slow the flow of water on the Birkey Burn and Red Burn catchments upstream of Acomb.

It includes a series of wooden leaky dams, which hold back water during heavy rainfall to temporarily slow the flow of water downstream, and structures based on the childhood game 'Kerplunk' — a series of interlocked wooden features designed to slow the flow of water while allowing for fish passage.

Newly constructed leaky barriers on the Birkey Burn

Work expected to be complete in the spring

These features are being made using trees felled on site as part of a thinning process to manage the woodland at Target Wood, reducing the need to transport materials and lowering the project's carbon footprint.

Work on the £260,000 project began at the end of last year and is expected to be completed in the spring.

It will work in support of the village's recently completed flood defences, which worked for the first time to protect Acomb from potential flooding over the New Year.

One of the 'winged' leaky dams under construction

Hopeful project will 'provide reassurance for residents'

Caroline Maarouf, Environment Agency Flood Risk Advisor, said:

At the end of 2020 we completed construction work in the village centre to better protect Acomb from flooding, which included improvements to the bridge and the construction of a new flood wall and embankment.

Now these new upstream natural features will slow the flow of water before they reach the village, working hand in hand with the defences to provide more robust protection.

We understand just how devastating it is to be flooded and have worked closely with the community and our partners to develop a solution which is right for the village. Hopefully this will provide reassurance for residents, who we know have frequently suffered from flooding issues.

Ceri Gibson, CEO at Tyne Rivers Trust, added:

Natural flood management is becoming increasingly important to help deal with a changing climate and to manage the Tyne catchment's sustainability.

We've also worked hard to keep the carbon footprint of this project to a minimum by using trees felled nearby and specialist equipment such as an alpine tractor which uses less fuel and does not impact on soil condition and biodiversity as much. Forestry Commission and other project managers have expressed interest in this way of working which we hope to roll out to many other areas in the catchment.

One of the completed 'kerplunk' structures.

Winter flood campaign

Acomb was previously affected during Storm Desmond in the winter of 2015.

Funding for the scheme is from the Government's £5.2 billion investment to better protect 336,000 properties across England by 2027 by constructing flood and coastal defences. Up to £193 million of this will be invested in the North East, with flood alleviation schemes planned for Hexham and Team Valley, among others.

The work has started during the Environment Agency's winter flood campaign, where people are being encouraged to find out more information on how to make their homes, businesses, and communities more resilient to flooding, and sign up for flood warnings.

People in flood risk areas should know what to do in a flood and they are encouraged to download the Environment Agency's 'Prepare. Act. Survive.' flood plan to help reduce their risk.

Acomb has a very active Flood Warden Group, which works with the Environment Agency to ensure the community is prepared for flooding. This includes site visits to vulnerable areas, creating and updating a Community Flood Plan and supporting residents to create personal flood plans.