



Action for people, places and
wildlife along our rivers and
streams

Natural Flood Management Clarborough and Welham catchments

Trent Rivers Trust has been working on a project funded by Nottinghamshire County Council to install Natural Flood Management (NFM) in the upper catchment of Clarborough and Welham. Trent Rivers Trust is a registered charity which aims to improve watercourses within the Trent catchment for both people and wildlife. As part of the project, this newsletter has been written to update residents of Clarborough and Welham of the positive actions which have been taken so far.

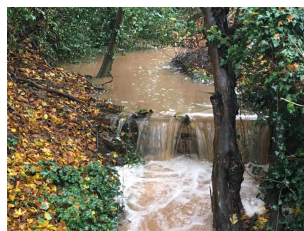
What is Natural Flood Management?

NFM is a relatively new concept which aims to work with the natural process of the landscape to reduce flood risk for communities. This is achieved by installing interventions on private land which hold water during high flows, releasing it slowly once high-water levels have passed. NFM works to slow the flow of water into the downstream community which can delay flood peaks and reduce the peak water level during a flood. The idea is to install many small interventions which cumulatively hold a significant amount of water.



NFM can also create wider benefits such as habitat creation and sediment capture. Many types of interventions exist such as tree planting, leaky barriers, floodplain connection, storage pond creation and corner of the field bunds. Each one is designed to store water for up to 12 hours and release it slowly once flood levels have subsided. As can be seen in the bund image taken from another NFM project delivered by Trent Rivers Trust, the bund itself is storing a significant amount of water whilst slowly draining through an outlet pipe.

Other interventions, such as leaky barriers, work in a different way to reduce flood risk. Although they do store water upstream, they also add roughness to a channel. This means that water travels through the channel more slowly as it hits resistance. It takes us much longer to run through a woodland than a field! When we install leaky barriers, there are many design considerations that we make. First, they need to be in the right place. We install them in the upper reaches of the watercourse away from the urban area. Second, we make sure that each one is secure so that it does not move. Each one is dug into the bank and braced against trees or stakes to prevent movement.



For more information, visit our website - www.trentriverstrust.org

What has been done so far in Clarborough and Welham?

The first step of the project was to identify locations which were suitable for NFM interventions. This was achieved by working closely with Clarborough and Welham Parish Council as well as local landowners and key stakeholders. We have to remember that these features are installed on private land, at the goodwill of the landowner; therefore there is much to discuss before any works on the ground are started.

The project moved to the delivery phase in late 2020 with the construction of an earth bund and storage pond. These two interventions are located on a flowpath found during the site walkover and will help to store water during high flows when overland flow is present. Although the bund doesn't look like much at the moment, it will soon green over and become part of the landscape.



Is there more to come?

Of course! We have been working hard to design further NFM interventions and hope to deliver many of them over the course of 2021. We have plans for more bunds, tree planting, leaky barriers, floodplain storage areas and storage ponds; all of which will store water during high flows. Watch this space!

