



Foss Catchment Revival: Nature, Water, Community.

FOSS CATCHMENT PROJECT (FCP) is a **partnership project** with the long-term aims of improving water quality by reducing the amount of sediment and pollution entering the watercourse, as well as mitigating flood risk throughout the Foss catchment and improving habitat for the River Foss wildlife.

Yorkshire Wildlife Trust (YWT) has been working on the Foss Catchment Project in partnership with North Yorkshire Council, and in 2023 YWT obtained funding from the Environment Agency to continue the work on the Foss Catchment Project for the next 3 years.

FCP's **ambition is to be a joint effort and across-catchment collaboration** with a wide range of stakeholders such as landowners, land managers, farmers, local communities, organizations such as North Yorkshire Council, North Yorkshire and York Local Nature Partnership, Environment Agency, St Nicks, River Foss Society, the York St John University, the University of York, City of York Council Yorkshire Dales Rivers Trust, Natural England Freshwater Habitats Trust, Foss IDB, National Farmers Union, Championing the Farmed Environment.

Improving water quality, mitigating flood risk throughout the Foss catchment and improving riparian habitat can be achieved through **Natural Flood Management (NFM)** (Fig.1), which complements other flood management approaches and involves working across the landscape to protect, restore and mimic the natural hydrological processes that occur. The primary functions of NFM are: holding back sediments, storing water, slowing the flow of the water and increase infiltration. Additionally, NFM provides co-benefits such as habitat creation, biodiversity enhancement, soil improvement and retention, water quality improvement, carbon storage, and boosting the local economy through recreation and tourism. The FCP takes a catchment-based approach, meaning a whole catchment view of the issues and remedies is taken into consideration. **Please visit the Foss Catchment Project webpage for more information:** <https://www.ywt.org.uk/foss-catchment-project>.

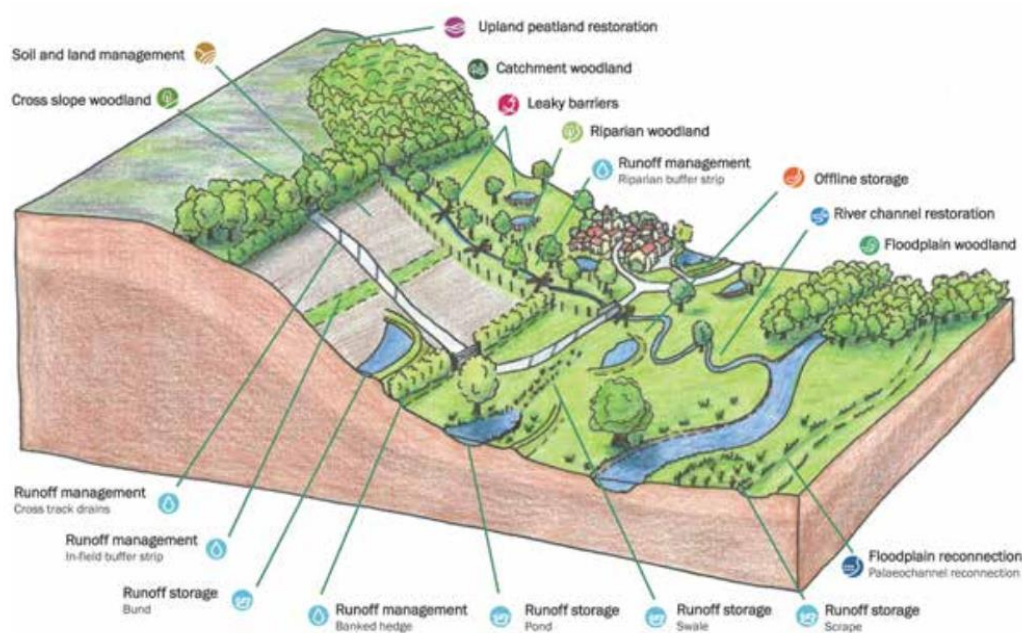


Figure 1 Natural flood management measures across a river catchment.
Author Emma Wren, in 'The natural flood management manual'; Wren et.al, 2022.



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About Yorkshire Wildlife Trust...

Yorkshire Wildlife Trust (YWT) is a charity dedicated to conserving, protecting, and enhancing Yorkshire's wildlife and wild places. Creating a wilder Yorkshire for the benefit of people and wildlife is what we at Yorkshire Wildlife Trust strive for every day. We are experts in our field and our passion for what we do makes it all possible. We work in partnership to create a better future for wildlife and people in our county. YWT is one of the 46 individual Wildlife Trusts in the UK, each of which is a place-based independent charity with its own legal identity, formed by groups of people getting together and working with others to make a positive difference to wildlife and future generations, starting where they live and work. At Yorkshire Wildlife Trust we aspire to make a positive and significant difference for wildlife and people in Yorkshire. If you would like to find out more about YWT please visit: <https://www.ywt.org.uk/>

About the River Foss...

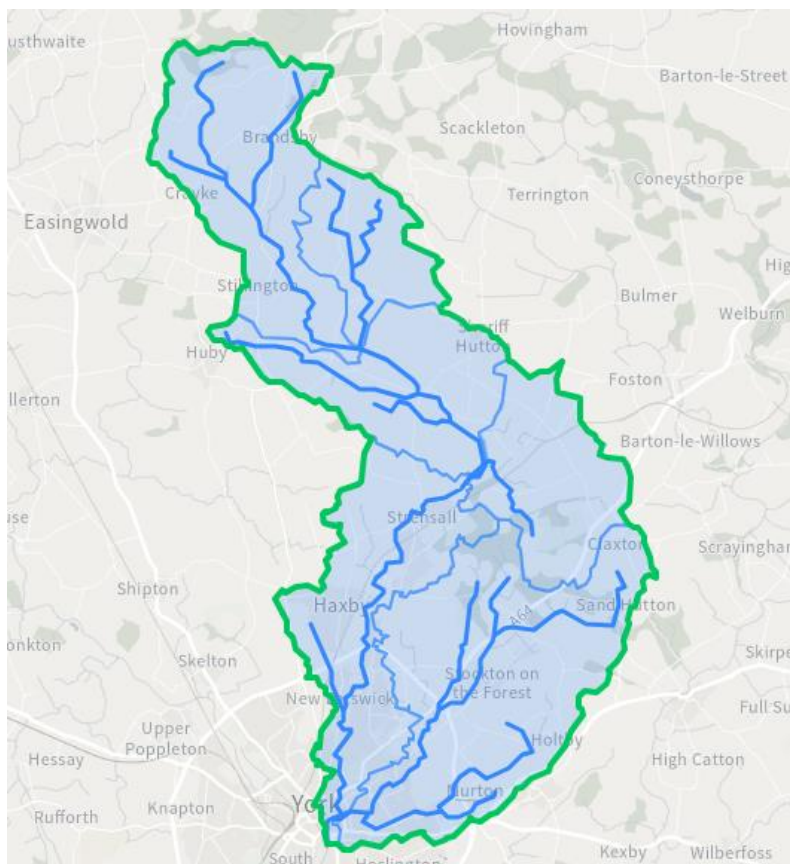


Figure 2 River Foss Catchment.

Map source: <https://environment.data.gov.uk/catchment-planning/OperationalCatchment/3190>

The Foss is a large tributary of the River Ouse, starting as a spring near Oulston Reservoir before flowing south through the Vale of York and joining the Ouse in York city centre. Foss catchment includes 6 water bodies (Fig.2). To the north of the catchment, the river runs through largely rural agricultural land, while to the south this becomes a more urbanised landscape, particularly as the river passes through York. In the River Foss catchment, precipitation drains overland carrying sediment, which then settles out clogging road gullies and building up within a watercourse, resulting in less space for water within the river cross-section, which can lead to an increased risk of flooding downstream and increased risk of surface water flooding. Sediment accumulation also has a negative impact on aquatic habitats and wildlife – for example, finer silts can fill up the spaces between gravels in riverbeds, preventing fish spawning and egg survival.





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Why should you get involved?

Land managers, landowners, and farmers have an extremely important role in managing and preserving soil, water, and land for current and future generations. We believe local communities hold a key to understanding local environmental conditions, which alongside environmentally friendly management practices can help us protect, conserve, and restore wildlife in the River Foss Catchment, whilst managing flood risk. **Without your help, it will be extremely hard to reach the aims of this project and precious river habitats and species may be irreversibly lost.**

'The catchment-based approach holds people at the heart of the restoration and conservation of river habitats. We want to work together to make the nature around us wilder.'

YWT can offer a wide range of NFM solutions*, which aim to recreate natural processes to remedy the imbalance within a river basin such as tree planting; creating and increasing buffer strips; hedge planting; aquatic vegetation planting; creating drinking points for livestock; installing new fencing; creating wetland areas; creating freshwater ponds; controlling invasive species; reprofiling riverbanks; riverbank stabilization to prevent erosion; introducing sediment traps; creating leaky dams and ponds; wildflower meadow planting; creating habitat piles for insects. **If you would like to find out more about these methods please visit <https://www.ydrt.org.uk/what-we-do/nfm/> & <https://www.youtube.com/watch?v=KWLzB3loFcA&t=78s>.**

We want to work collaboratively with land managers and farmers to find **mutually beneficial solutions for people's livelihoods, improving water quality, natural flood management, and the River Foss wildlife.** We aim to work with local communities and land managers to create personalized strategies based on individual needs and local environmental conditions.

***We would like to highlight that none of these methods will carry a risk to people's livelihoods or increase flood risk. Natural Flood Management methods will not eliminate the incidence of flooding, but they will reduce the frequency and impacts of flooding.**

People's livelihoods come first. As such we want to also help raise awareness of land and soil management practices that are environmentally friendly while carrying financial benefits for farmers and landowners. It is estimated that soil erosion in the UK results in the annual loss of around 2.2m tonnes of topsoil. This costs farmers across the country £9m a year in lost production. This alongside high costs of fertilizers and loss of subsidies, puts extreme pressure on people's livelihoods. Let us help you, whilst taking care of our wildlife. ***As an incentive, we also offer advice on environmental schemes available to farmers and landowners.***



ywt.org.uk

Yorkshire Wildlife Trust is the only charity entirely dedicated to conserving, protecting and enhancing Yorkshire's wildlife and wild places



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What happens, if you decide to get involved in the Foss Catchment Project?

- **STEP 1** - Initial chat between YWT and land managers/ farmers to understand individual needs and potential worries.
- **STEP 2** - YWT obtains permission from land managers/ farmers to conduct a survey of the river habitat. Pre-restoration monitoring is conducted, which may include sampling of water, surveying of biodiversity, and picture taking.
- **STEP 3** - YWT will produce a map with the proposition of works and a timeline.
- **STEP 4** - YWT will discuss the proposition of works, potential contractors, and timeline with land managers/ farmers. We will work with our stakeholders until we reach a mutually beneficial solution. We are happy to discuss alternative solutions, as well as preferred contractors.
- **STEP 5** - YWT drafts individual farm agreements and management plans. Land managers/ farmers, as well as contractors, approve and sign prepared documents.
- **STEP 6** - YWT applies for any consents, if they are required (this may take between 6-12 weeks, however, this is an important step, which allows us to avoid any future conflict).
- **STEP 7** – Once consents are in place, YWT contacts land managers/ farmers, as well as contractors to agree on the date of commencing the works.
- **STEP 8** – Contractor commences works, YWT will be present on-site to coordinate and supervise the works.
- **STEP 9** – Works completed, YWT will be returning to the site after several weeks/months to check on the progress of the site. Post-restoration monitoring will be conducted.

YWT will provide resources e.g. funding and volunteers, meaning we do not expect by default that land managers/ farmers need to offer something to get involved in the project. Nevertheless, we are very happy for the land managers/ farmers to be directly involved in work e.g. providing additional workforce/ materials. Land managers/ farmers involved in the project are expected to offer YWT their knowledge and experience of land and soil conditions, issue permission for works/ surveys, as well as future maintenance of features if needed.

If you have any queries regarding the Foss Catchment Project or would like to get involved, please contact Monika Smieja, River Restoration Project Officer by email: monika.smieja@ywt.org.uk; or by phone: **07721961104.**

*Foss Catchment Project is a
partnership project
supported by:*

