# Natural Flood Management in the River Swale catchment in Yorkshire

Farmers and land managers in eastern Yorkshire make up the small Swaledale Countryside Stewardship Facilitation Fund (CSFF) network to share knowledge on how to provide Natural Flood Management (NFM) and maintain soil health.



The Swaledale CSFF group was one of the first to be set up in the UK and has benefited from other similar CSFFs being set up across the North of England region as part of the 2017 Northern Flood Round. This was viewed both as a necessity given the magnitude of the flooding issue, both on farms and further downstream, but also due to the need for farmers to diversify their income sources due to low farm incomes.

The 17 farmers involved at the outset wanted to engage with NFM measures and had expressed particular interests in soil management, flood water infiltration and planting of trees and hedges; all these are issues that are addressed in the monthly meetings to build up knowledge of different practices.

#### Objectives

- NFM such as woody debris dams to improve water quality by reducing phosphate and sediment within the catchment
- Soil health
- Tree Planting/woodland creation
- Maintenance of field boundaries to reduce flooding
- Understanding catchment flood risks
- Funding streams through Countryside Stewardship



#### **Problem description**

The Swaledale NFM CSFF was funded through the Northern Flood Round of the CSFF in response to impacts in the area from Storm Desmond in 2015. Damage to farmland, flash flooding and high flood waters were all strong driving forces for collective action and the group were keen to begin working together better; CSFF was a good way to support this.

Water often backs up and floods where the rivers meet, for instance at Arkle Beck, but the worst effects are felt further downstream as the water takes longer to drain away in the flatter areas. There was a desire to work collectively to slow the flow of water moving downstream and also reduce pollution washing downstream. Awareness has been raised about different types of NFM as well.







### **PUBLIC GOODS**



Water quality



Soil quality (and health)



Landscape and scenery



Resilience to natural hazards



Rural viability and vitality



# CONTRACT

The financing party is the government (with EU-funding). It is a public – private contract.

**Contract conclusion:** Written agreement



Payment mechanism: incentive payments



Funding/Payments: Government funding, up to £500 per year, per farmer in the CSFF group.

Length of contract: 3 years Length of participation: 3 years



Start of the program: 2017 End: 2020

## LOCATION

#### UNITED KINGDOM



North Yorkshire UKE2

## **Data and Facts - Contract**

**Participation:** The Swaledale NFM CSFF started with 17 farmers; potentially up to 20 farmers attend meetings. The area of focus is the River Swale catchment. The land coverage is 4,009 hectares.

**Involved parties:** Three major types of partners are involved in the CSFF group; farmers, network facilitator and funding body. The facilitator of the group is employed to bring the group together, organise meetings and invite key stakeholders and experts to provide training as well as bring new members into the scheme. They also oversee the expenses of participants and will apply for funding renewal as appropriate. Natural England provides funding, oversees the functioning of the group and provides crucial information on pressing environmental needs in the region and the actions of other CSFF groups in the area.

**Indirect effects:** There is a beneficial spill-over effect from the formation of several NFM groups that allows for better knowledge transfer, jointly held meetings and farm visits in the general area that promotes better results and well attended meetings and training courses.

**Conditions of participation:** The minimum number of farmers needed for a CSFF to be set up and be eligible for funding is 4 and the network should have no more than 80 members. The land covered by all members' farms must exceed 2,000 hectares; land cannot be included if it belongs to a public body. The farmer's/land manager's land should be part of a catchment area to be included.

**Risk/uncertainties of participants:** More than three-quarters of the income comes from Basic Payment Schemes (BPS) contracts. The grass quality is not sufficient for finishing sheep for market meaning they have to be sold on for fattening elsewhere removing some opportunities for the farmers. Lack of certainty for the future of AES payments and farming income brings CSFF farmers together but there are no guarantees for the future.



# **Context features**

**Landscape and climate:** The Swaledale NFM CSFF network is located in a high rainfall upland area with very shallow soils, lots of limestone and a history of lead mining. Many of the farmers have access to common land in the upland areas, and much of the land area is permanent pasture. Woodland and tree cover is low, and trees that are present tend to follow the river system. Iconic stone walls and field barns are scattered across the landscape. Several

of the meadows in the area are SSSIs while National Parks are also in the vicinity of the farms. Historic features such as drystone farm walls and boundaries are important to local cultural heritage and tourism.

**Farm structure:** All the farms in the Swaledale CSFF are sheep and beef farms apart from the one dairy farm. Most of the finishing for the sheep is done elsewhere as it is not possible to do in the area due to the quality of the grass, some finishing of the sheep is indoor. All of the farmers rely on an additional income from other activities, such as second jobs, or through diversification of what is done on the farm, such as bed and breakfast accommodation, holiday cottages or tea rooms. Swaledale is a very popular holiday destination within an iconic Yorkshire landscape.

The average farm size is about 200 hectares, but this does not include access to moorland and common land with grazing rights which many of the farmers also rely upon. Half the farms are owner-occupied and half are tenanted. In the bottom reaches of the catchment many of the farms are rented; this can be a problem for these tenants as they can be tied by what the land-owner wishes to do and those wanting to install certain NFM measures need to seek permission. Experience shows this can be an extremely lengthy process.

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## ASSESSMENT OF CONTRACT SOLUTION



There are a mixture of different contract solutions being operated by CSFF members and an overall assessment of their success is not possible at this time. The Swaledale CSFF group of farmers benefit from the proximity with other CSFFs which allows for positive spill-overs and common meetings between the groups. The expected target of NFM cannot be evaluated but attendance has been solid and several meetings have taken place.

# **SWOT** analysis

#### Main Strengths

1. Homogeneous group with common interests in NFM

2. Social aspects of meetings brings more farmers along

3. Swaledale is a key tourist destination which encourages environmental management and farmer engagement

#### Main Weaknesses

1. Lack of a broader scope of Agri-Environmental Goods; focus is on NFM, soil health and water quality/biodiversity and maintaining cultural land features

#### Main Opportunities

1. Better environmental benefits from close cooperation with other CSFF and NFM groups

2. Tourist visits and generated income can be a support for farmers, allowing them to focus on AES

#### Main Threats

1. Low livestock prices will mean farmers will have to change their practices, such as reducing feed and other inputs to the system

2. Lack of spending of available funds as meetings might not be as frequent; leads to losing funding overall.



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