

# MULTIPLE BENEFITS OF NATURAL FLOOD MANAGEMENT

### **Biodiversity and conservation**

Wetlands are one of the most biologically diverse ecosystems due to their unique ecological features and nutrient cycling processes which supports various plants and animals. Woodland creation encourages development of a wide range of species beneath the tree canopy. Improved water quality also has the potential to improve in stream habitats for wildlife.

# Habitat creation and green spaces

Creating habitats such as wetlands, which are one of the most biologically diverse ecosystems, not only improves

biodiversity but also improves connectivity between wetlands, allowing more species to move between habitats. Developing green spaces also has massive social benefits, providing better access to green spaces, improving the environment we live in and improving quality of life.



### **Community spirit**

Making small adjustments to your land management or allowing unproductive land to be used for flood storage can make a difference to those in the community at risk of flooding further downstream, particularly if several landowners work together to implement NFM measures.

# Resilient

### ecosystems

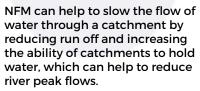
Wetlands and woodlands are efficient at accumulating and storing carbon and removing carbon dioxide from the atmosphere. Measures that reduce surface runoff and soil erosion, such as contour cultivation, can also reduce carbon loss from soil.

NATURAL FLOOD MANAGEMENT



The Countryside Stewardship Scheme has a range of grants for farmers and land managers who wish to adopt NFM techniques. These can be capital items or management options, for example in-stream structures or river bank restoration. Facilitation funds may be available in your area to assist with your application and provide up to a 20% uplift to your score.

## **Reducing flood risk**



### **Improving water quality**

Sediment

Improvements in soil structure through woodland creation or less intensive land management increases rates of infiltration. Reconnection of wetlands can help to manage high nutrient loads and reduce siltation, contributing to improvements in the status of water bodies.



**Reduced erosion** 

NFM can help restore coastal sediment processes and morphology. Saltmarshes and mudflats help reduce wave energy at shorelines, sand dunes act as natural buffers for cliffs from waves, and beach nourishment restores the natural coastal defence function of beaches.



#### NFM can improve soil structure, reduce loss of top soil and increase soil productivity which can in turn increase agricultural productivity. Measures such as run off pathway management and offline storage areas can help with sediment capture, preventing soil erosion and loss of sediments and fertilisers into the watercourse.



This resource has been produced by Newground who work in partnership with the Environment Agency Last reviewed: January 2024 For more information visit: www.thefloodhub.co.uk @TheFloodHub