

# Sussex Flow Initiative

## End of Year Summary 2017-2018



The Sussex Flow Initiative (SFI) is a Natural Flood Management (NFM) project focused on the River Ouse catchment in East Sussex. The project is the result of a collaboration between the Sussex Wildlife Trust, the Woodland Trust, and the Environment Agency. This document provides a summary of the full end of year report, highlighting the project's achievements in terms of NFM demonstration and advocacy.

### Demonstration

#### *Woodlands and hedgerows*

- Planted > 17,900 native shrubs/trees as hedgerows (2.97 km) and woodland (1.77 ha) in strategic locations, including 1.80 km of cross-slope hedgerow and 0.15 ha of floodplain woodland
- When mature we estimate that our new cross-slope hedgerows (1.80 km) will help to store and slow down over 5,400 m<sup>3</sup> of water (5,400,000 litres) during rainy periods<sup>1</sup>

#### *Flood storage ponds*

- Created over 30 'pocket ponds' and blocked drainage grips on Chailey Common, providing around 1200 litres of additional water storage, and important habitat for wildlife
- Collaborated with East Sussex County Council and Freshwater Habitats Trust to create a series of small ponds on Chailey Common

#### *Other seasonal water storage*

- Created a series of scrapes to hold between 350,000 L and 1,350,000 L of floodwater, whilst providing important temporary habitat for waders, amphibians and aquatic invertebrates

#### *Woody material*

- Constructed 40 woody material structures to hold back an estimated 40,000 L of water per flood event, and advised on a further seven structures (with an additional 7,000 L of water stored/slowed).

#### *Catchment wide influence of SFI*

- Influenced approximately 507 hectares (1903 hectares if including advice given to landowners) of land, of which approximately 40 hectares (advice given to 1520 hectares) is floodplain (Flood Zone 3)
- Influenced at least 2.25 km of the river network using instream work<sup>2</sup>, and at least 7.8 km through land-based activities<sup>3</sup> (>100 km if including advice given)
- Created/restored 11.55 hectares (11.1 ha of woodland<sup>4</sup> and 0.45 ha of open/standing water) of priority habitat contributing to Environment Agency targets in 2017/18

<sup>1</sup> Hedgelink, <https://bit.ly/2IIPKRJ> [accessed 2018] - A 50m hedgerow at the bottom of a 1ha field can store between 150 and 375 cubic metres of water during rainy period.

<sup>2</sup> Based on 50 m per woody structure

<sup>3</sup> Only including waterbodies downslope and adjacent to tree planting (i.e. not including downstream effects)

<sup>4</sup> Including hedgerow (320 m of hedgerow is equivalent to 1 ha of woodland in terms of number of trees/shrubs planted)

- Gave advice on land adjacent to > 7.5 km of watercourse failing to meet Water Framework Directive (WFD) environmental quality standards for phosphorous
- Supported landowners and contributed to Countryside Stewardship applications, with two of these landowners entering into stewardship in 2018
- Our NFM delivery has taken place upstream of 16 properties considered to be at “very significant risk” of flooding, according to the Environment Agency

#### *Ecosystem services*

- Contributed to provisioning services, including biodiversity, food, shelter, and timber
- Contributed to regulating services, including pollination (>17,900 native flowering trees/shrubs planted), carbon storage (up to 8,800 tonnes of CO<sub>2</sub> stored by planting), water purification and water storage
- Contributed to cultural services benefitting human health and welfare, connecting people with their environment and restoring historic landscape features

#### *Volunteers & ‘in kind’ support*

- More than 115 volunteers contributing > 900 volunteer hours, with a value in excess of £12,800<sup>5</sup>
- Main partner organisations have contributed approx. £33,250 of their time ‘in kind’<sup>6</sup>, and other organisations have contributed at least £10,200 of their time ‘in kind’

## **Advocacy**

Sussex Flow Initiative NFM advocacy has included:

#### *Engaging with landowners*

- Visited 29 landowners of 34 sites, covering approximately 3% of the land upstream of Lewes, on a total of at least 1,893 hectares of land
- Of these 34 sites, 13 included floodplain areas on ‘main river’ or ‘ordinary watercourses’

#### *Contributing to the evidence base*

- Working with academics and students at four UK universities, and with national flagship NFM projects

#### *Working in partnership*

- Working with over 20 local and national groups and stakeholders

#### *Working with local communities*

- Working with volunteers from local communities, including Chailey School and Hurtlepierpoint College

#### *Events and conferences*

- Presented at national and local events/meetings reaching an audience of approximately 300 people

#### *Websites and media*

- Our articles and social media have reached > 150,000 people
- A radio interview with SFI reached a potential audience of 260,000 weekly listeners on BBC Sussex

## **Future of NFM in the River Ouse catchment**

SFI have set out ambitious targets in a five-year vision document

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<sup>5</sup> Based on £100 per day for volunteers

<sup>6</sup> Based on Woodland Trust, EA, Sussex Wildlife Trust & Sussex Biodiversity Records Centre including trees and comms support