



Exploring the social and natural capital impacts of the Sussex Flow Initiative

May 2020

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Executive summary

The Sussex Flow Initiative (SFI) is a natural flood management (NFM) project in the River Ouse catchment. It is a partnership between Sussex Wildlife Trust, the Woodland Trust, the Environment Agency, and Lewes District Council. The project was originally established to see if NFM can create positive benefits for flooding, the environment, and society in a lowland river catchment.

Now that the project is well established, SFI is keen to articulate to funders and local communities the extent to which its work brings benefits (or disbenefits) to the local area. In this report, NEF Consulting builds on SFI's initial work to explore how this NFM project has contributed to (1) the social capital and (2) the natural capital benefits of the local area.

1) Social capital

At the start of this process, SFI and NEF Consulting developed an outcomes framework to help measure the social capital, natural capital, and economic outcomes of the SFI project over its lifetime. We chose the outcome measures following detailed discussions and a literature review of documents on SFI and NFM. This highlighted five social outcome categories that we wanted to explore further in this report:

- Education
- Environmental behaviour change
- Community and connection
- Health and wellbeing
- Economic

Once we had established our social outcome measures, we developed a set of indicators for each of the five outcomes. These indicators are necessary to measure the magnitude of any changes that SFI did/did not achieve through its work. We then designed an online survey to measure these outcomes and circulated it to relevant SFI stakeholders between December 2019 and February 2020.¹

The survey response was relatively low, with 22 people responding, from 150 people contacted (15%). However, it is still possible to infer insights from this data, if only indicative. Key findings from the social outcomes survey include the following:

- The greatest positive outcome involved learning new skills, where there was an increase from a low starting point of 28.8% to 65.2%, an overall increase of 36.4%. When attribution is factored in (eg how much of this change was caused by SFI and

¹ The survey was circulated to all those we still had contact details for. Many of those involved with the project in its earlier stages we had unfortunately lost contact with.

not by other organisations or people¹), SFI helped respondents improve practical skills by at least 23.6%. One of SFI's key aims is to upskill local communities in NFM and to build resilience to flooding by doing so. This figure indicates how effective SFI is at improving the technical skills of the people it involves; these people often start at a (self-reported) lower skill base before engaging with SFI activities.

- Most of those surveyed positively responded to statements about taking further action because of their involvement with, and the support of, the SFI project. The highest level of agreement involved respondents stating that they would take further action for nature and the environment as a result of their contact with SFI.
- There is a slight connection between the extent respondents felt their practical skills had improved and their desire to take further action. This suggests that the SFI project's approach to improving people's practical skills as a way of promoting positive environmental behaviour change is beneficial.
- SFI saw the biggest gains in terms of increasing people's connection with nature. Many participants who attended one-off events said they felt more connected to nature after engaging with SFI.
- Although they only reported a slight improvement, 59% of respondents reported that engaging with SFI had at least some positive impact on their physical health.
- Considerable positive impacts were reported in participants' feelings of motivation and empowerment to make a positive change to their local environment & for NFM.
- The Net Promoter Score was 77. This is considered very high in terms of customer loyalty and indicates that those involved with SFI have a high satisfaction rate with how and why they are involved.



2) Natural Capital

In tandem with exploring the social impacts of SFI, we also developed a model to estimate the ecosystem services and their value, derived from SFI's natural capital contributions over its eight-year duration. We used financial proxies taken from the UK government's Ecosystem Services Databook (ESD),² alongside data from SFI staff.

Our model estimates that the measurable ecosystem services value created by SFI since it began in 2012 is £963,677. Although there are arguments for why natural capital benefits should not be monetarised in this way, through just seven key ecosystem services (timber provision, air pollution removal, carbon sequestration, flood regulation, water quality improvements, biodiversity, and volunteering), the SFI project is generating quite significant public and natural capital benefits of around £125,000 p.a. A number of these benefits are incremental and will accrue greater value the longer the project is in place i.e. carbon storage will accrue over the lifetime of trees planted.

The breakdown of this natural capital valuation shows that it is the volunteering, non-use value of water quality, and flood mitigation aspects of SFI that generate the most societal value. Using SFI project costs, we generated a cost–benefit ratio for SFI in terms of the ecosystem services value returned. This tells us that for every £1 spent, SFI generates at least £2.14 of additional ecosystem value for the public good. The relative values returned on the investment in the project by government and other organisations help to justify why continuing support should be given to local community initiatives such as SFI, and the extent to which they bring multiple benefits to society.

Our cost–benefit model only accounts for the benefits derived from natural capital services where measurable monetary valuations were available. Several other services that SFI provides were not accounted for, such as pollination. Also, SFI (and some of its project partners) are not currently documenting or offsetting their own environmental and social impacts as a project. This is an area that future reports could explore.

This research shows some of the ways in which the SFI project has achieved social impact and contributed to natural capital in the River Ouse catchment. Plenty of scope exists to improve on this study. This includes increasing the sample size of survey respondents, using more specific financial proxies and less generalised data for ecosystem services valuation, as well as valuing more ecosystem services (eg water abstraction and pollination). It is hoped that future SFI evaluations will build on the methodology and insights presented in this research.

Acknowledgements

Sussex Flow Initiative would like to thank all those who have been involved in the project – from those who believed in it from its embryonic start, to the dedicated volunteers who turn up every year to plant trees in the rain. It is these people and their commitment to improving society and their local environment, which help to make this project a success. We are also grateful to all our funders, and all those who took part in our survey, and who helped to compile this report.



1. Introduction

Sussex Flow Initiative (SFI) is a natural flood management (NFM) project in the River Ouse catchment. It is a partnership between Sussex Wildlife Trust, the Woodland Trust, the Environment Agency, and Lewes District Council. Now an established project which has been operating for eight years, it was originally set up to see if NFM measures can create positive benefits for flooding, the environment, and society in a lowland setting.

Working with local communities, stakeholders, and landowners, SFI promotes and creates natural features that slow and store water in the landscape, and help to mitigate flooding and drought impacts. SFI works with natural flood measures that are cheap, simple, and uncomplicated to implement, such as tree planting and leaky dams. NFM measures are implemented in a way which compliments more hard engineered flood risk management.

As well as helping to reduce local flood risk, SFI provides multiple benefits for both people and the natural environment, as well as raising awareness on how NFM solutions can complement traditional flood management practices. The key purposes of the SFI project are to:

1. Positively influence a reduction of localised flood peaks in the River Ouse catchment.
2. Engage and upskill local people in doing so.
3. Demonstrate the effectiveness of a range of NFM techniques in a lowland catchment.
4. Reduce the flood risk to key properties across the catchment.
5. Demonstrate multiple additional societal benefits of the work it does.

Now that the project is well established, SFI is keen to articulate to funders and local communities, the extent to which its work brings wider societal and environmental benefits (or disbenefits) to the local area. Natural flood management methods have co-benefits beyond the attenuation of flood peaks which are widely recognised.³ Among these co-benefits listed in scientific and in NFM business case studies, are health and wellbeing benefits to local communities. However, despite widespread evidence that access to green space can have huge benefits to societal health and mental wellbeing,^{4,5} the social and natural capital benefits of NFM are virtually unstudied, and have yet to be quantified.⁶

In the past, community-led environmental projects such as SFI, have had limited evidence to show the wider societal benefits that they enhance and support. The focus on proving a project's worth has tended to be purely based on economic assessment (eg value increase, £ value added, turnover, job creation), and economic growth. However, the current climate and biodiversity crises highlight how traditional economic growth models ignore far too many of the hidden costs of damage to the natural environment, while massively understating the true benefits of its restoration. This report hopes to provide a clearer insight into some of these benefits.

One approach used to factor in the true costs and benefits to society of the creation or destruction of natural landscapes and natural services is the concept of 'natural capital'. Natural capital measures and values services such as:

- **Provisioning services:** products/goods people obtain, such as food and timber.
- **Regulating services:** benefits people obtain from the regulation of ecosystem processes, such as air pollution removal and flood damage mitigation.
- **Supporting services:** while not providing direct services themselves, supporting services are necessary to produce all other ecosystem services. An example is the cycling of nutrients.
- **Cultural services:** nonmaterial benefits people obtain from ecosystems, such as recreational use and wellbeing

The natural capital approach has its flaws,² but is currently the best available means of measuring these benefits.

In previous case studies and annual reports, SFI has outlined the ecosystem services and community benefits it feels the project provides, for flood risk management, biodiversity, carbon sequestration, and human health. NEF Consulting builds on this initial work. This report outlines how the SFI project has contributed to the natural capital and social benefits of the River Ouse catchment.



² <https://neweconomics.org/2020/01/can-a-natural-capital-approach-restore-nature-in-the-uk>

2. Measuring impact

To evaluate the social impact of the Sussex Flow Initiative (SFI) project, it is important to clearly understand what SFI seeks to achieve. In this report, these are classed as outcomes, ie the changes that occur as a result of an activity or an interaction with the project (eg improving the knowledge of participants in a training event).

The diversity of SFI's project activities ensures that they impact a wide range of stakeholders. When evaluating the true social impact of a project, we need to define the outcomes and stakeholders that are most relevant and significant to SFI, sometimes referred to as 'materiality'.⁷ By materiality, we mean 'who experiences the most change and what type of change do they most experience'.

In this report, we use a social outcomes framework that brings together the most relevant and significant outcomes of the SFI project, as a foundation for an evaluation of their relative impacts. We developed the social outcomes framework through a literature review of relevant SFI and natural flood management (NFM) documents. As our researchers went through the documents, they coded mentions of stakeholders and outcomes, before refining this into one framework (Table 2.1). The document review highlighted five outcome categories:

1. Education.
2. Environmental behaviour change.
3. Community and connection.
4. Health and wellbeing.
5. Economic.

The outcomes identified under these categories were relevant for all stakeholders involved with the SFI project. Within each of these five categories, several desirable outcomes were defined, linked to the SFI project's Vision and Aims.



Table 2.1. Outcomes framework

Outcome category	Outcome	Indicator / question type	Data collection
Education	Increase people's awareness of NFM	Self-reflection question	Survey
		Number of people reached through events, press, social media, and school/youth materials	SFI internal data
	Increase people's understanding of NFM	Self-reflection question	Survey
	New skills provided to participants	Self-reflection question	Survey
	Educate a wide range of audiences	Number of different people in different groups educated	SFI internal data
Environmental behaviour change	Empower people to undertake NFM	Self-reflection questions on frequency, extent and type of actions	Survey
		Intention question on future actions	Survey
	Empower people to act to alleviate the climate crisis	Self-reflection questions on frequency, extent, and type of actions	Survey
		Intention question on future actions	Survey
	Empower people to take action for nature	Self-reflection questions on frequency, extent, and type of actions	Survey
		Intention question on future actions	Survey
Community and connection	Stronger sense of belonging to the community	Self-reflection question	Survey
		Number of partnerships created through SFI (length, size, quality)	SFI internal data
	Increase connection to the local community	Information question (number of new groups/people they met through SFI)	Survey
	Increase connection to local environment/place	Self-reflection questions on the local environment and place	Survey
	Increase connection with natural systems/wider nature	Self-reflection question	Survey
		Question on what particular aspects of nature	Survey
Health and wellbeing	Improve physical health	Self-reflection question about improvements to physical health (eg around outdoor exercise)	Survey

	Improve wellbeing	Self-reflection question on wellbeing derived from involvement with SFI activity (eg confidence, loneliness questions)	Survey
		Self-reflection question on wellbeing derived from the result of SFI's NFM	Survey
		Decrease perceived flood risk	Self-reflection question
Economic	Change in landowners' agricultural revenues	Information question	Survey
	Change in landowners' capital costs	Information question	Survey
	Reduce flood damage cost	Information question	Survey
	Change to natural capital economic account	Natural capital calculation	Data analysis

Once we had established the key outcomes for SFI, we developed a set of indicators to measure each social outcome and the magnitude of any changes which have occurred through SFI's work and influence. For the majority of the outcomes, we chose a self-reflection or information question as the most effective means of measuring the extent of change. To obtain this information, we designed an online survey that was circulated to relevant SFI stakeholders between December 2019 and February 2020.

We designed questions in the survey using a 'before' and 'after' structure, to assess whether, or how much, change had occurred since SFI started its work. Also, for each outcome category, we asked an attributive question to assess the extent to which the change was due to involvement with SFI.

After consultation with Sussex Wildlife Trust, some questions were altered so they did not take the 'before' and 'after' format. This was due to concerns that the survey was too long and would reduce completion and response rate. Most of these alterations were for questions relating to health and mental wellbeing. While it is therefore not possible to gauge the extent of change for these particular outcomes, it is possible to get a broad sense of how effective SFI was in having an impact on mental and physical health through other 'agreement statement' questions. The complete survey can be found in the Appendix.



3. Findings – In what ways does SFI contribute positively to society?

This section presents the findings for the social impact by each outcome category. The survey response was relatively low, with 22 from 150 respondents in total (15%). While low, it is possible to infer insights from this data, if only indicative. Of the 22 respondents, 5 were categorised as landowners (23%), 9 were professionals (41%), and 8 were volunteers (36%). Sixty-eight percent of respondents were involved with SFI multiple times; the other 32% only once at one-off events.

Education

Figure 3.1 presents the amount of change experienced by respondents for education outcomes, such as understanding of natural flood management (NFM) issues, skills and techniques. There is an increase in the educational outcomes after involvement with the Sussex Flow Initiative (SFI). The increase in the understanding of flooding issues and the understanding of NFM techniques are similar, with approximately a 17% increase attributable to SFI. However, the understanding of NFM issues starts at a higher baseline than the understanding of NFM techniques, 49.2% compared to 39.7%, suggesting that stakeholders had a greater understanding of the issues surrounding NFM before their involvement with SFI, than they did for NFM techniques.

The largest positive change from the online survey involved people learning new skills through working with SFI. Survey respondents indicated that there was an increase of 36.4%, from a low starting point of 28.8% to 65.2%. When attribution is factored in, SFI helped respondents improve their practical NFM skills by 23.6%. This indicates how effective SFI is at improving the NFM skills of the people it involves, with people often starting at a (self-reported) lower skill base before engaging with SFI activities.



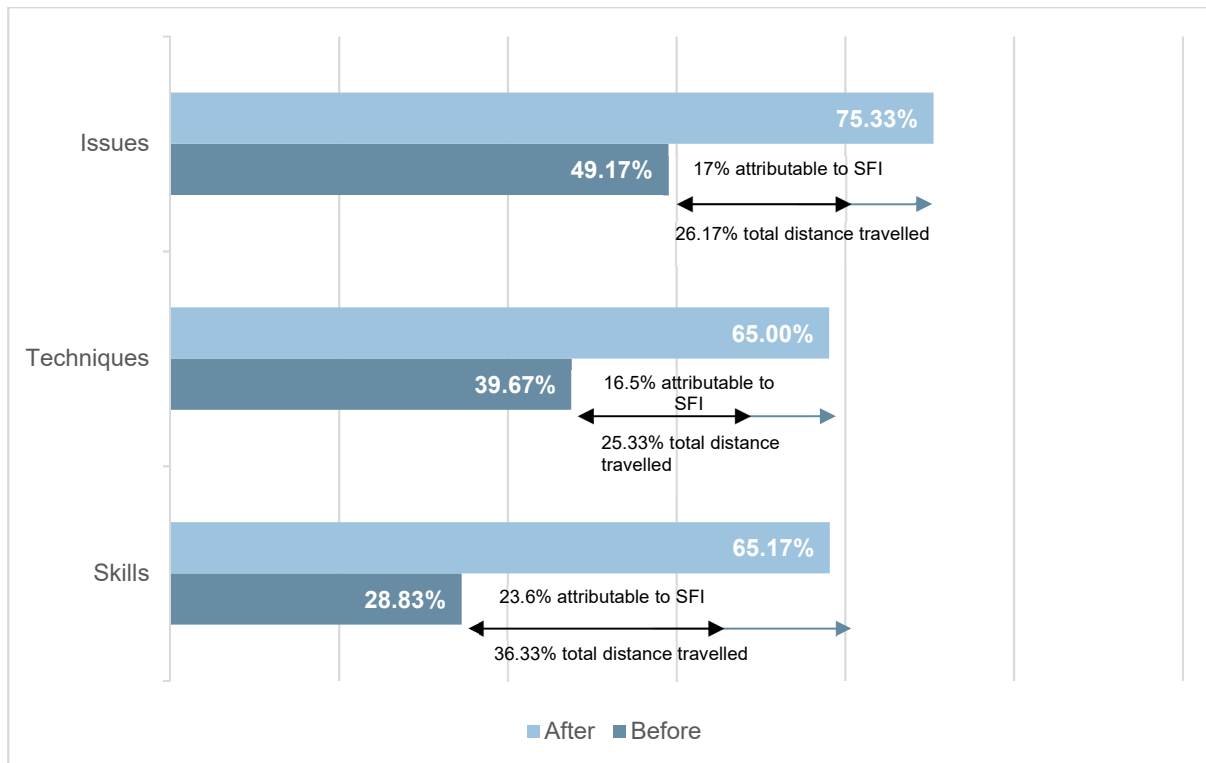


Figure 3.1 Distance travelled for education outcomes

Respondents to the online survey were also asked to rank on a seven-point scale the extent to which they felt they had received professional training in NFM from SFI. As Table 3.1 shows, the mean response from respondents was marginally favourable (4.5, with 4 the centre-point of the scale). Some people clearly felt that they had received professional training, while others clearly did not. The mode response was 4, suggesting there was an element of ambivalence in most people’s perspectives around receiving professional training. This contrasts with the responses regarding their ‘understanding techniques’ and ‘practical skills’, suggesting that any ambivalence might be around the term ‘professional’.

Table 3.1. Response to ‘do you feel you have received (professional) training in natural flood management from the Sussex Flow Initiative?’

Average	4.50 (58.3%)
Mode	4
Median	4
Max	7
Min	1

Environmental behaviour change

Generally, people in the survey positively responded to statements about taking further action for nature because of their involvement with SFI (Figure 3.2). The highest level of agreement involved taking further action for nature and the environment, with an average score of 6.14 (1 = strongly disagreed, 4 = neither agreed nor disagreed, 7 = strongly agreed). Their level of agreement on taking further NFM actions following their involvement with SFI was marginally lower but still high (5.82). Spending more time outdoors working on community projects had an average response of 4.95. This indicates that people involved with SFI felt that SFI only marginally increased their involvement with community projects outdoors.

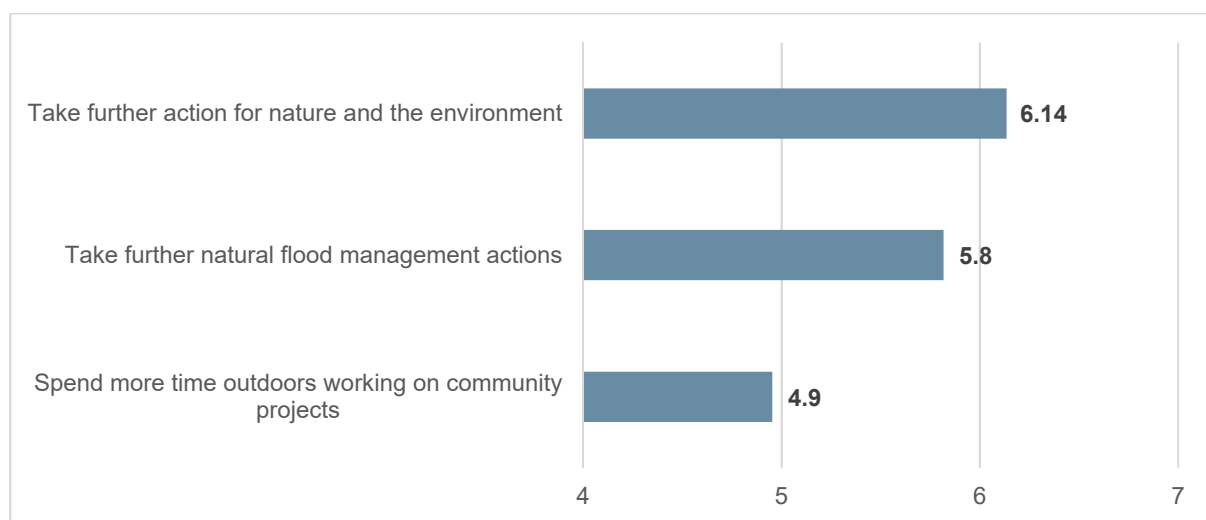


Figure 3.2. Average responses to statements about taking further action ((1=strongly disagreed, 4 = neither agreed nor disagreed, 7 = strongly agreed)

When asked to describe what kind of actions they now take as a result of SFI involvement, respondents mentioned volunteering on community projects around NFM, increased wild swimming, and a better appreciation of the landscape. For some, SFI helped their confidence in knowing how they could act. Others described how they had joined a professional small group working on Climate Change Adaptation after SFI.

Table 3.2 shows a slight connection between the extent respondents felt that their practical skills had improved and their desire to take further action. Those who improved their practical skills the most (ie travelled four points across the seven-point scale) agreed most strongly that they would take further action. This suggests that the work that SFI does to improve people's practical skills is a good way to promote positive environmental action and behaviour change for NFM.

Table 3.2. Further actions responses split by distance travelled for practical skills (respondents voted on a scale of 1-7, 1 being low and 7 being high).

Skills - distance travelled	Number of respondents	Average of 'take further natural flood management actions' response	Average of 'take further action for nature and the environment' response	Average of 'spend more time outdoors working on community projects' response
1	8	6.00	6.50	5.63
2	6	6.17	5.83	4.67
3	4	4.25	5.00	2.75
4	4	6.50	7.00	6.25

Community and connection

Respondents to the online survey also saw increases in their connection to their local environment and their sense of community through working with SFI. These increases were relatively small but still notable: a 10.61% increase for nature connection and a 5.56% increase for community connection (Figure 3.3). Furthermore, the attribution for this outcome category was quite low (31%). As a result, the total distances travelled for these two outcomes attributable to SFI was 3.3% and 1.7%, respectively. One explanation for the lower scores could be that most of those involved with SFI feel relatively connected to nature and community before engaging with its activities, so there is less distance to travel. Furthermore, if they start at a high level of community and environmental connection before engaging with SFI, then they might be less likely to attribute changes to SFI, but to other factors that have contributed to their previous high level of connection.

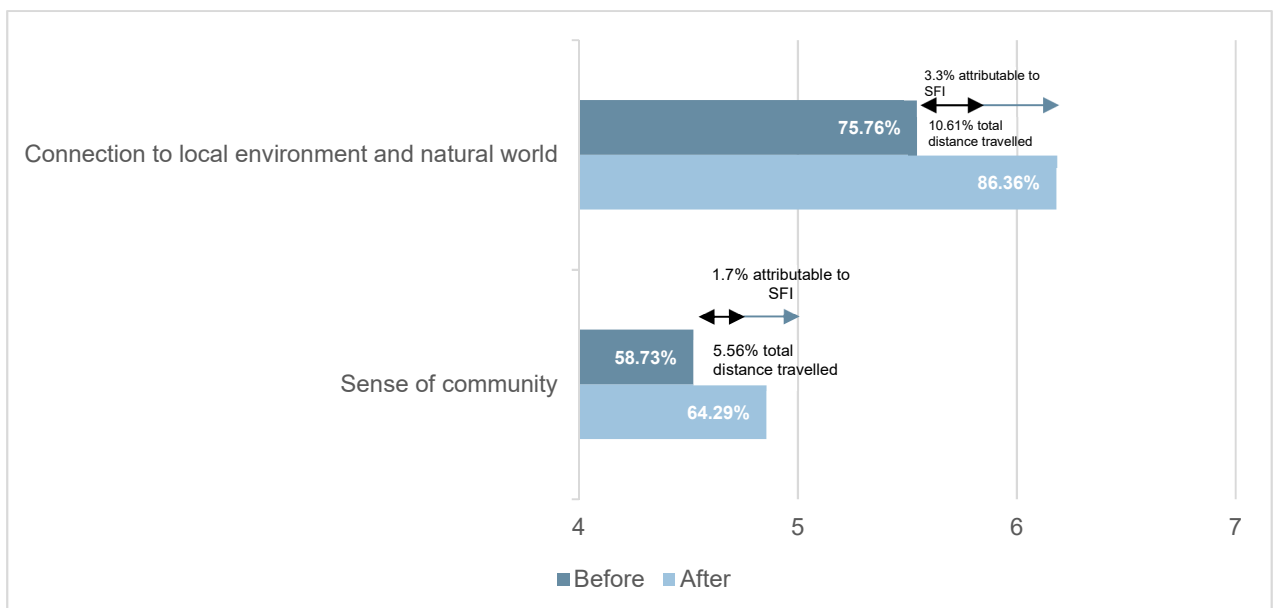


Figure 3.3. Distance travelled for community and connection outcomes

When respondents are split into those who have had multiple engagements with SFI and those that have had one-off involvement, it is interesting to observe the differences in community and connection outcomes and the subsequent distances travelled. As shown in Table 3.3, those who engaged with SFI started at 50% in terms of nature connection, but after engaging with SFI, their average connection rose to 71.5%, an increase of 21.5%. The rise in engagement is much higher than for those who engaged with the project multiple times; they start at a level of nature connection of 87.8% and increase to 93.3% (on average). This suggests the SFI has the biggest impact on connecting people to nature with its one-off events in terms of those who start off being less connected with nature.

Table 3.3. Community and connection outcomes by engagement type (multiple or one-off)

	Average of sense of community - before	Average of senses of community - after	Average distance travelled - community	Average nature connection - before	Average nature connection after	Average distance travel for nature connection
Multiple	63.3%	68.8%	5.5%	87.8%	93.3%	5.5%
One-off events	47.2%	52.8%	5.5%	50.0%	71.5%	21.5%

Health and wellbeing

The online survey provided some interesting insights into the SFI project's impact on people's health and wellbeing. Fifty-nine percent of respondents reported at least some positive impact on their physical health, although those who did, reported only a slight improvement. Of those who did report improvement, the mean response was 42% (on a scale of 0% = not at all, and 100% = a lot).

When asked in general terms about the influence of SFI on their mental health, the average response was close to 0, indicating no change (1 = greatly worsened, 0 = no change, 7 = greatly improved).³ Forty-one percent of survey respondents saw some improvement in mental health as a result of SFI involvement. Considerable positive impacts were reported regarding participants' feelings of inspiration and motivation, and their feelings of empowerment to make positive changes to their local environment (Figure 3.4).

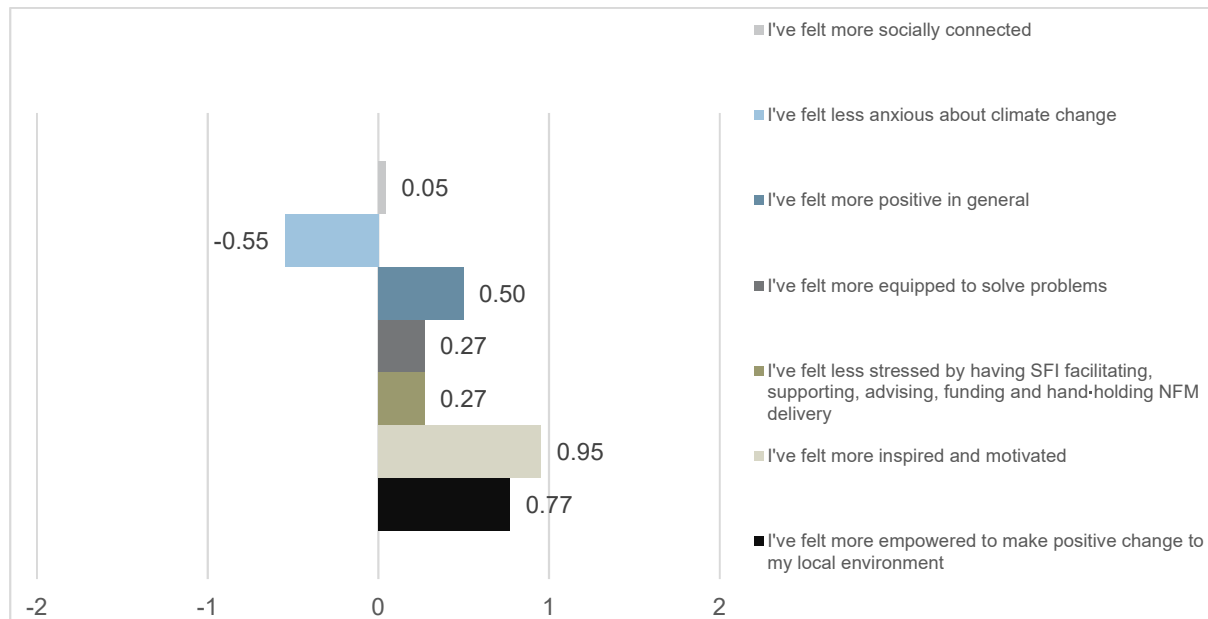
The survey also asked about several other aspects of wellbeing. Notable was SFI's impact on anxiety related to climate change. Approximately 40% of respondents reported a negative impact (meaning that their anxiety increased through contact with SFI), while only 10% of respondents reported a positive impact (or a reduced level of climate anxiety due to contact

³ Questionnaire wording might have contributed to lower mean for this outcome. Twenty-three percent of participants said their mental health greatly worsened (1 on the scale) as a result of SFI involvement. However, responses to wellbeing questions by these respondents seem to contradict this opinion. This suggests question wording might have led to inaccurate responses, especially as it followed the physical health question where '1' meant 'not at all'.

with SFI). This may in part be attributable to the recent rise in awareness of climate change and climate anxiety, and not just to involvement with SFI projects.

While the net impact of SFI on physical health and mental stress was positive, the changes could be considered negligible given the sample size. However, the signs are good that SFI has and could have further positive impacts in this area.

Figure 3.4. Agreement with a set of statements relating to wellbeing, on a scale from -2 (strongly disagree) to 2 (strongly agree)



The project had a negligible impact on the sense of risk that the survey respondents experienced around flooding. Only 32% of respondents reported any change in how they felt about flood risk, and most changes reported were only slightly positive.

Economic

Of the 22 survey respondents, 7 reported that they owned land involved with or affected by the SFI project. Of this sub-population, a series of economic questions was asked about whether landowners felt that their involvement with SFI had had positive or negative economic impacts.

In terms of the net economic impact on the landowners' operations, five reported no change, one a slightly positive impact, and one a slightly negative impact. It was not possible to accurately quantify the economic changes experienced based on the data provided by the two respondents who experienced a change. Of the seven landowners responding, six (or 86%), reported that they would have been unlikely to carry out the NFM work without the involvement of SFI. Of the seven respondents, five also thought the work carried out would reduce flood risk downstream.

It is interesting to note the responses to this question. All landowners involved with SFI receive some form of economic investment in their land through staff time and advice, or direct payment for trees, fences, scrapes, etc. That this economic investment does not appear to be recognised or valued may require further investigation.

Outreach and Net Promoter Score

SFI estimates that over the last eight years, it has reached out through the web, media, and social media channels more than 655,921 times. There is uncertainty over the levels of engagement that accompany these figures.⁴ There is also uncertainty as to how much of this number relates to people having been ‘reached’ more than once (ie the same person has multiple engagements across a range of media types).

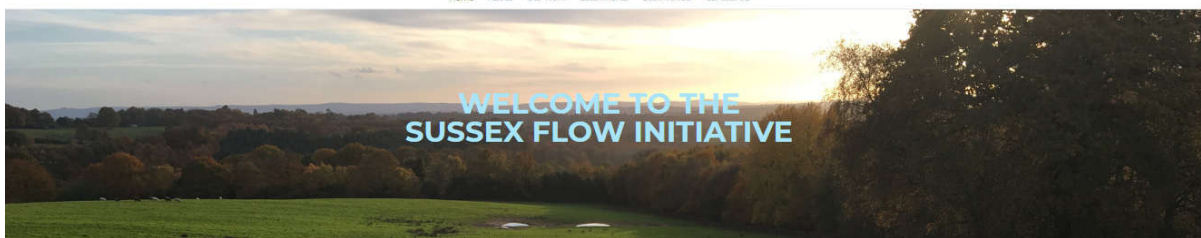
In addition, we used a Net Promoter Score (NPS), as a management tool designed to measure loyalty between an organisation and a customer (in this case, loyalty between the SFI project and the people who engage with it). The NPS tool is based on one question, ‘how likely is it that you would recommend...’, with respondents being asked to choose from a scale of 1 to 10 (1 = not at all likely, 10 = very likely). To calculate an NPS, respondent answers are first categorised. Those who select 6 or below are categorised as ‘**detractors**’; those who select 7–8 are categorised as **passives**, and those who select 9–10 are **promoters**. From these responses, an equation calculates an NPS:

$$(number\ of\ promoters - number\ of\ detractors) / (number\ of\ respondents) \times 100$$

An NPS score can range from -100 to 100. For SFI, the NPS score was 77, which is considered to be very high in terms of customer loyalty. Indeed, 14 (63%) choose the maximum score for this question. This would indicate that those who are involved with SFI are very likely to recommend it as a project and are loyal to SFI’s NFM ‘brand’.



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⁴ If a magazine in which SFI had an article is known to have a distribution to 30,000 households, then it is assumed that 30,000 people read the SFI article (although it could be both more or less than this).

4. Findings – In what ways does SFI contribute positively to natural capital?

Natural capital is essentially the values and benefits that our natural environment brings to people through the ecosystem services it provides. The failure of our current economic system to effectively recognise the costs and benefits involved in protecting/destroying the natural environment has led to the evolution of the idea of natural capital. Natural capital benefits are described as being provided through several key ecosystem service areas:⁸

- Provisioning services – ie food, timber, fresh water
- Regulating services – ie climate, noise and flood regulation, pollination
- Cultural services – ie recreation and tourism, physical and mental wellbeing
- Supporting services – ie soil formation, nutrient cycling, water cycling

Natural flood management (NFM) is as a key natural capital benefit, and specifically a regulating service. However, NFM has multiple benefits to society and the environment, which go beyond just the flood risk benefits. This report assesses the extent to which the Sussex Flow Initiative (SFI) project has provided wider natural capital benefits to society. The social or cultural benefits are assessed in Section 3, and the remaining natural capital benefits are here, in Section 4.

In January 2020, the UK government published new guidance on natural capital and its calculation. This guidance provides a wealth of resources on valuing natural capital and ecosystem services.⁹ This system is currently the best means we have of evaluating the natural capital value of the work that the SFI project has done.

Using references taken from its Ecosystem Service Databook (ESD), combined with data provided by the SFI team, we developed a model to estimate a natural capital valuation for the NFM activities that SFI carried out over the last eight years. While the ESD provides an overview of the wide range of potential environmental effects and benefits, it is not, in their words, “intended to be a definitive or exhaustive typology”. **Error! Bookmark not defined.**

Values and proxies used to estimate natural capital come with limitations. The results of our estimations here are exploratory and indicative only. Nevertheless, they offer real insights into the type of natural capital and ecosystem services that the SFI project supports. We chose the ecosystem services included in this model after consultation with SFI staff, mostly because we were able to measure their size and scope.

In the following sub-sections, we describe each ecosystem service and how it is valued. Table 4.1. summarises this information. For the model, we have assumed that SFI’s activity is spread evenly across its eight-year duration. For example, an eighth of its planted

hedgerows occurred in year one, another eighth in year two, and so on. Some natural benefits, such as carbon storage, accrue over time. For example, the annual benefits of hedgerows planted in year one will accrue across eight years, those planted in the second year across the next seven years, and so on.



Ecosystem services

Provisioning services

The SFI project contributes to several provisioning services. One example is how the work by SFI contributes to greater water storage in the landscape, and therefore to providing greater potential for water abstraction. Quantitative data to measure these types of provisioning services within the scope of this report is limited. Therefore, we can only qualitatively acknowledge these services here.

One provisioning service that the SFI project contributes to is timber through the planting of trees. Therefore, we have included timber here as a measurable SFI provisioning service. Calculating timber provisions is complex, especially for specific sites. For the model, we

have taken an estimate based on the total annual value of timber in the UK in 2018 and divided by the total amount of woodland in the UK. This assumes a value of £221.95 per hectare of woodland.¹⁰ SFI estimates that it has planted 8.58 ha of woodland since 2012, and 9.3 km of hedgerows (where 320 m of hedgerow is equivalent to 1 ha of woodland, 29.08ha). With this in mind, and with several caveats,⁵ we estimate that SFI has generated a value of £15,017 in timber provisioning services.

Regulating services

Through the planting of trees and hedgerows and the natural management of flooding and drought, SFI clearly enhances the natural regulating services of the Ouse River Catchment. It contributes to regulating services, such as:

- Air pollution removal.
- Carbon sequestration.
- Flood regulation.
- Pollination.

Due to difficulties in valuing pollination services, we have not included this service in the natural capital model. However, we acknowledge that in planting 8.58 ha of woodland and 9.3 km of hedgerows on previously low-grade pollinator land, improved pollination services will be provided for the foreseeable future.

For air pollution removal, we have taken a per hectare value for rural woodland from a recent Office for National Statistics (ONS) study,¹¹ which values this regulating service as £271.789/ha (adjusted for inflation). The total woodland used in the model is 37.66 ha, a combination of the woodland and hedgerows planted. Total value over the eight-year project lifespan is £35,821.

For carbon sequestration, we used an estimate taken from the ESD that 5.4 tonnes of carbon are captured per hectare of (broadleaved) woodland.¹² The value of carbon is taken from the government's Business, Energy, and Industrial Strategy's central scenario for 2020, which values carbon at £13.84 £/tCO₂e.¹³ Using the total woodland created by SFI as 37.66 ha, the total carbon sequestration value for the project so far is £9,850.⁶

Flood mitigation is valued as the average annual costs of reservoir floodwater storage per litre (£0.42 per litre per annum), which the ESD describes as being towards the conservative end of value estimation).¹⁴ SFI estimates that if 30 flood events per year are avoided as a result of its activities, over the project lifespan it has stored 420,154.20 m³. This provides a total value of £176,465.

⁵ For example, we cannot guarantee that all the trees planted will be used as timber

⁶ It is assumed that this value is cumulative, as trees will generally store more carbon as they grow and mature.

Cultural services

A full summary of SFI's social and cultural impacts can be found in the social impacts section. The services in the social impacts section have not been valued, but we can assume that SFI has contributed further natural capital benefits to health and wellbeing.

In addition to these unvalued services, using references from the ESD, three other cultural services were considered in this model:

1. Non-use value of water quality.
2. Non-use value of biodiversity.
3. Volunteer hours.

For the non-use value of water quality, we used the National Water Environments Benefits Survey,¹⁵ which estimates the value of improvements to water bodies per km per annum. In discussion with SFI, we estimate that the activities of the SFI project have contributed to 27.5 km of water body improvement from 'poor to moderate' (£22,297 per km, adjusted for inflation) since 2012, although not directly. To factor this indirect involvement in the model, we only attribute 10% of this value in the estimation, of which the total value is £214,608.

We estimated Biodiversity's non-use value for ancient and semi-natural woodland, and for hedgerows, using two different sources found in the ESD.**Error! Bookmark not defined.**¹⁶ SFI estimates it has influenced the maintenance of 30 ha of ancient or semi-natural woodland through the advice it has provided to landowners. To account for the fact that other organisations have also influenced this woodland with advice, in the model we have estimated this influence as 10% of the total value for this ecosystem service (the equivalent of 3 ha). We have added this land area to 8.58 ha of woodland SFI has planted since 2012. A Forestry Commission study estimates the non-use biodiversity value of ancient/semi-natural woodland as £2,211.33 (adjusted for inflation) per hectare p.a.. For hedgerows, a Department for Environment, Food and Rural Affairs (Defra) study¹⁶ estimates the annual non-use biodiversity value of hedgerows as £63.29/ha (adjusted for inflation). As mentioned, SFI estimates it has planted 29.08 ha of hedgerow. Taken together, the total value for non-use biodiversity is £91,466.

The number of volunteer hours and in-kind support from other people to the SFI project (ie staff giving their free time to support the project) shows just how much added value this community initiative brings to society. SFI estimates the value of volunteer and in-kind support over this period of eight years to be at least £420,450.⁷ It is clear that the value that the community itself brings to this project is significant, and it shows how important community and stakeholder involvement in these projects is for there to be successful outcomes. It also shows how much free time the community is willing to invest in these schemes, and subsequently supports the idea that the community, therefore, believes that the project (and through it themselves) is contributing to positive benefits to society.

⁷ With volunteer days calculated at £100 per day, and staff and landowner days valued at £250.

Natural capital valuation

Our research estimates that the total natural capital value created by SFI since it began in 2012 is at least £963,677, with cultural services providing the largest contribution (Table 4.1 and Figure 4.1). Figure 4.2 shows the breakdown of this estimated value, with volunteering, non-use water quality, and the flood mitigation aspects of the initiative generating the most natural capital value.

Using figures of the actual amount of money that we know has been invested in the SFI project over the last eight years, we can generate a cost–benefit ratio for SFI in terms of ecosystem services return. The total monetary cost of running the SFI project since 2012 stands at approximately £450,257. With the total ecosystem service value estimated as £963,677, this puts the SFI cost–benefit ratio as at least 2:1. Effectively, for every £1 spent, the SFI project generates at least £2.14 of ecosystem service value.

Over the eight-year SFI project period (from the records that we have),⁸ the three main project partners have invested 80% of the overall cash in the project, with SFI attracting an additional 20% cash funding over the project lifetime. This includes:

- Lewes District Council = 24% of total project cash income
- Environmental Agency = 38% of total project cash income
- Woodland Trust = 18% of total project cash income
- Other grants, landowner investment, and donations = 20%

Proportionately, each project partner can see how much they have received as a return on their investment in terms of the value of ecosystem services. Importantly, the cost-benefit ratio meets the government criteria for investment in these types of initiatives, where a return of 200% funding is required to secure government support.

The majority of SFI project funding (approx. 56%) goes towards employing a professional member of staff and staff manager on the project. This is essential to enable continuous and efficient delivery, to develop and maintain relationships of trust with landowners and to generate additional income for the project. SFI staffing is very low cost & the project uses large amounts of volunteer time to help with delivery. Including staffing costs in the overall project budget is essential for funders to consider when investing in a project designed to contribute to the enhancement of natural capital. Without staff, projects are rarely delivered to the standard and timescales needed, and even with staffing costs included, the cost benefit ratio of the work is still high enough to justify this investment.

With this evidence on the natural capital benefits of the SFI project, discussions can now take place around where and how this natural capital benefit is created, invested, and attributed. For instance, does each project partner investing in the project want to offset its carbon

⁸ These records may have some minor errors or omissions.

emissions through this project? Does it want to offset the environmental impacts of delivering the SFI project itself (transport, etc.)? Or does it want these natural capital benefits to be attributed to wider society?

Another element that we have thus far not considered in the cost : benefit analysis is whether there are any ongoing costs for maintenance or re-visiting and monitoring SFI projects. These costs are currently assumed to be absorbed by SFI.

This is a first attempt at documenting the wider benefits to society of the SFI NFM project. Our methodology can no doubt be refined, as new evidence emerges on valuing ecosystem services. In the future, we hope to be able to value more of the ecosystem services which we omitted in this report, and to document others more accurately. It has been a useful exercise in terms of gathering evidence. SFI is now clearer about the type and range of records that it needs to keep to effectively value the project's contributions to multiple benefits in society.



Figure 4.1. Ecosystem services valuation created by SFI by ecosystem service type

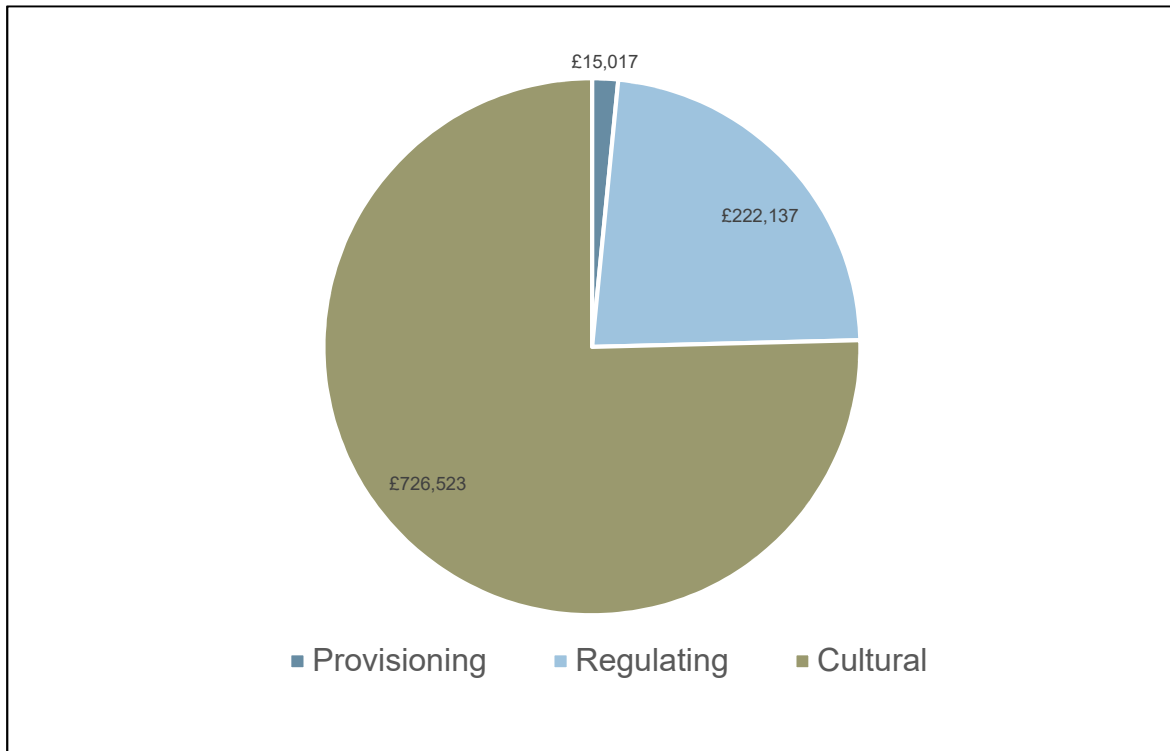


Figure 4.2. Ecosystem services valuation created by SFI by ecosystem service

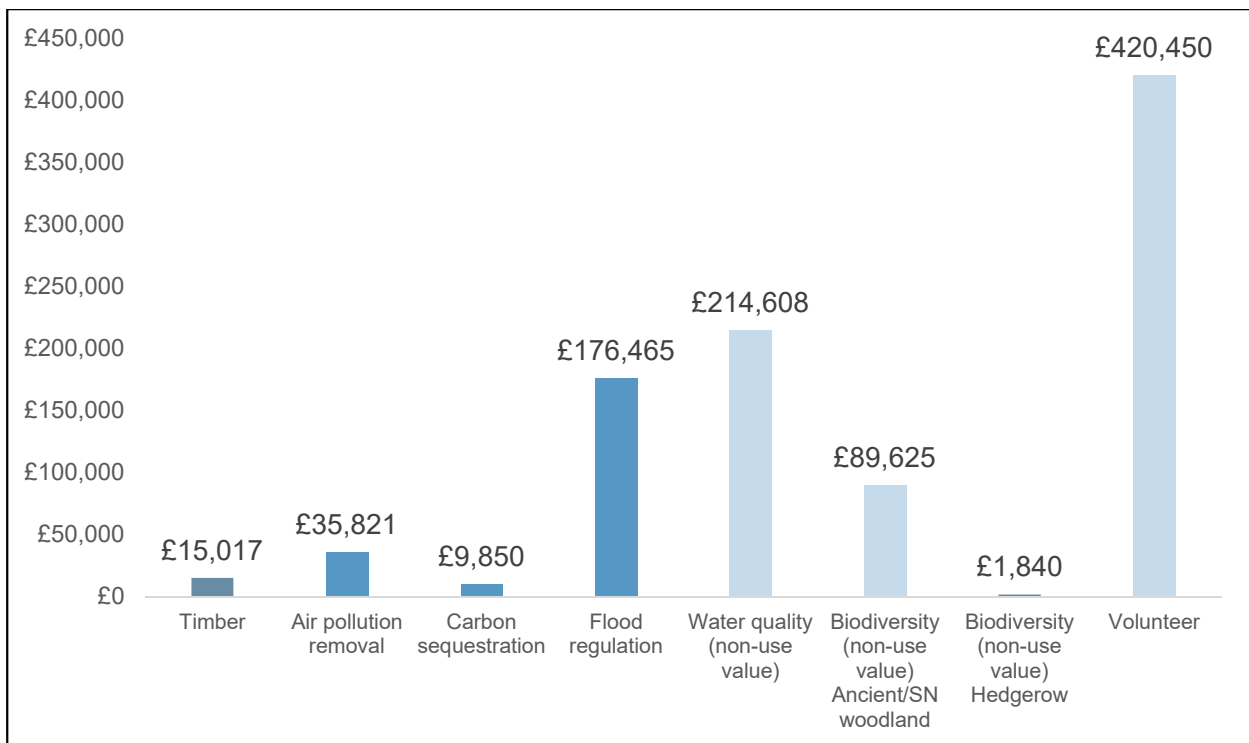




Table 4.1. Ecosystem services used in the model with monetary values and SFI's contribution

Ecosystem service type	Ecosystem service	Service sub-category	Original value per unit (£)	Unit	Proxy year (£)	Proxy per unit (adjusted for inflation - 2018 prices)	SFI Total	Cumulative calculation over 8-year period	Value (£)	
Provisioning	Timber	Tree planting	£113.94	/ha	2018	£113.94	37.66	131.80	£15,017	
Regulating	Air pollution removal	Rural woodland	£245	/ha	2012	£271.78	37.66	131.80	£35,821	
Regulating	Carbon sequestration	Woodland	£74.74	/ha	2017	£74.74	37.66	131.80	£9,850	
Regulating	Flood regulation	Flood water storage	£0.42	/m ³	2018	£0.42	420,154.20	420,154.20	£176,465	
Cultural	Water quality (non-use value)	Recreation, amenity, and non-use values	£20,100	per km	2012	£22,296.92	27.50	96.25	£214,608	
Cultural	Biodiversity (non-use value) ancient/ semi-natural woodland	Ancient and semi-natural woodland	£1,564	/ha	2003	£2,211.33	11.58	40.53	£89,625	
Cultural	Biodiversity (non-use value) Hedgerow	Hedgerows	£55	/ha	2010	£63.29	29.08	29.08	£1,840	
Cultural	Volunteer	Volunteer	n/a	n/a	n/a	n/a	n/a	n/a	£420,450	
									Provisioning	£15,017
									Regulating	£222,137
									Cultural	£726,523
									Total	£963,677

5. Conclusions



This report captures and values the range of positive societal benefits that the Sussex Flow Initiative (SFI) seeks to achieve through its natural flood management (NFM) activities. Given the diversity of the project's activities, a framework that effectively captured all aspects of change created by the project (either positive or negative) was not possible. Nevertheless, the system that we designed gives us some insight, and creates a foundation on which future evaluation work can be built.

Our findings are presented as two separate entities: social impacts and natural capital. There are considerable overlap between these two categorisations. Together, the findings point towards the different kinds of positive impact SFI has achieved. The social impacts survey shows how it achieved its most notable impact in terms of education and connection to nature outcomes with participants who started off with (self-reported) lower skills and less connection to the natural world. This suggests that SFI can have more impact if its efforts are focused on reaching people with fewer NFM skills and less of a connection to nature, rather than those who are already skilled or have a connection to nature.

The positive ripple effects of a project such as this being able to upskill and train both volunteers and professional staff can be considerable, but they are not documented in this report. However, by providing training and support in NFM within communities, SFI is helping considerably to build community resilience to flooding. In addition, although our findings show only a slight improvement regarding participants' physical and mental health, a high Net Promoter Score indicates how nearly all those involved with SFI were extremely satisfied with their involvement and would recommend the SFI project to others.

Our natural capital valuation was limited in the range of SFI activities and their benefits that could be monetarised in a standardised way. Indeed, there are arguments for why natural capital should not be monetarised at all.¹⁷ However, it is a useful tool with which to show how much public benefit small community projects such as SFI are able to bring to society.

Through just seven key ecosystem services (timber provision, air pollution removal, carbon sequestration, flood regulation, water quality improvements, biodiversity, and volunteering), the SFI project accrued not insignificant public and natural capital benefits of nearly £1 million in eight years (around £125,000 p.a). A number of these benefits are incremental and will accrue greater value the longer the project is in place, and in theory have a long-term accrual of benefits, i.e. carbon storage over the life of trees planted.

SFI clearly provides multiple benefits to society in provisioning, regulating, and cultural services – most notably cultural services through its volunteer programme. We were unable to put a monetary value on other services such as pollination, and the physical benefits to those involved, for example, in SFI tree-planting work parties, but we know they have intrinsic value. In many natural capital valuations, we deliberately underestimated the contribution that the SFI project may be making. For example, if there were 50 flash flood events in one year (which is increasingly likely with climate change), then this would accrue a much greater natural capital value than the 30 flood events accounted for in this report.



By developing a model estimating SFI's contribution to ecosystem services, we have begun exploratory work to capture aspects of a local community project's impacts that are historically difficult to value. Through this evaluation, we estimate that every £1 invested in the SFI project accrues at least £2 in natural capital benefits, with further benefits accrued to partners and society from the project bringing in other funding and in-kind support.

The limitations of this research have been outlined throughout the report. As such, plenty of scope exists to improve on this study. This includes increasing the sample size of survey respondents, using more specific financial proxies and less generalised data for ecosystem services valuation, as well as valuing more ecosystem services (eg water abstraction and pollination). Refinements in the social impact survey would ensure that connections between the outcomes framework and survey questions are as robust as possible.

We hope that future SFI evaluations will build on this methodology and the insights presented in this report. With the growth in the recognition that our natural environment supports human society and that these natural capital services need urgent restoration and protection, we also hope that the methods can be used to help evaluate and report on the true value of other local community and environmental projects to people and nature.



6. Appendix

Sussex Flow Initiative Social Outcomes Survey

Introduction

Thank you for agreeing to take part in our survey.

The aim of the survey is to understand the impact that the Sussex Flow Initiative natural flood management project has had for those who have been involved since it began in 2012.

Whether as a volunteer, a professional, or a landowner, we are interested in how the Sussex Flow Initiative has changed your understanding and skills in relation to natural flood management, the natural flood management actions you have taken, the community benefits you have experienced, or the changes in your wellbeing and natural capital and economic impacts. This survey should take no more than 15 minutes.

The survey is confidential and anonymous: any data collected will only be used for the purpose of this study. Deadline for responses is 5pm on Friday, 31st January 2020.

If you have any queries, please contact Fran Southgate at Sussex Wildlife Trust (fransouthgate@sussexwt.org.uk) or William Davies at NEF Consulting (william.davies@nefconsulting.com).

0 General information

0.1. What best describes your involvement with the Sussex Flow Initiative?

Professional

Volunteer

Landowner

Other

If other, please describe _____

0.2. Where was the project you were involved with based?

_____ (open text box)

0.3. Was your involvement with Sussex Flow Initiative a one-off event or were you involved on multiple occasions?

One-off

Multiple

If multiple, how many times have you engaged with Sussex Flow Initiative? ____ (number)

0.4. Which of the following do you consider yourself to be?

- School educated
- University educated
- Retired
- Part-time employed
- Full-time employed
- Unemployed
- Civil servant
- Landowner (private)
- Landowner (Community or public body)
- Non land owning
- eNGO employee
- Policymaker
- Practitioner
- Conservationist
- Philanthropist
- Funder
- Lead local flood authority
- Parish councillor
- Local flood action group
- Member of local community group
- Local charity
- Local business
- Local employer
- Other _____(please specify)

1. Understanding and skills

1.1 (a) How much do you feel you understand about natural flood management?

Issues?	Nothing at all							A lot
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	1	2	3	4	5	6	7	A lot
Techniques?	Nothing at all							
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	1	2	3	4	5	6	7	






1.1 (b) **Looking back to before your involvement** with the Sussex Flow Initiative, how much do you feel you understood about natural flood management?

Issues?	Nothing at all							A lot
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	1	2	3	4	5	6	7	
Techniques?	Nothing at all							A lot
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	1	2	3	4	5	6	7	

1.2 Has your understanding of natural flood management been influenced by any of the following Sussex Flow Initiative resources?

- | | |
|---|--|
| <ul style="list-style-type: none"> • Website • Blogs • Case studies • Facebook page • Videos • Leaflets • Press articles | <ul style="list-style-type: none"> • Landowner reports • Technical documents • Talks and events • Twitter • Mentoring and one-on-one advice • Other (please state) |
|---|--|

1.3 To what extent have the changes in your understanding of natural flood management been the result of your involvement in or support from the Sussex Flow Initiative?

Not at all (0%)	A little (25%)	Some (50%)	Quite a lot (75%)	A great deal (100%)
				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Taking action

2.1 (a) To what extent do you now feel like you have the skills to undertake practical natural flood management?

Not at all							A lot
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
1	2	3	4	5	6	7	

2.1 (b) **Looking back to before your involvement** with the Sussex Flow Initiative, to what extent do you feel like you had the skills to undertake practical natural flood management?

Not at all A lot

1 2 3 4 5 6 7

2.2 To what extent do you feel you have received (professional) training in natural flood management from the Sussex Flow Initiative?

Not at all A lot

1 2 3 4 5 6 7

How much to do agree with the following statements:

Based on my experience with the Sussex Flow Initiative, I intend to...

2.3 (a)... carry out further natural flood management actions

Strongly disagree Neither agree nor disagree Strongly agree

1 2 3 4 5 6 7

2.3 (b)...take further action for nature and the environment

Strongly disagree Neither agree nor disagree Strongly agree

1 2 3 4 5 6 7

2.3 (c)...spend more time outdoors working on community projects






Strongly disagree Neither agree nor disagree Strongly agree

1 2 3 4 5 6 7

2.3 (d) Please describe any further actions you have taken and the frequency in which you have taken them (eg weekly, monthly, occasionally)

_____ (text box)

2.5 To what extent have your intentions to take further action been the result of your involvement in or support from the Sussex Flow Initiative?

Not at all (0%)	A little (25%)	Some (50%)	Quite a lot (75%)	A great deal (100%)
				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Your community

3.1 (a) To what extent do you agree with the following statements?

	Strongly disagree			Neither agree nor disagree			Strongly agree
(a) I have a strong sense of being involved with my local community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	1	2	3	4	5	6	7
(b) Before my involvement with the Sussex Flow Initiative, I had a strong sense of being involved with my local community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	1	2	3	4	5	6	7

3.2. How many new groups/people have you connected with through your involvement with the Sussex Flow Initiative?

People _____(estimate number)

Groups _____(estimate number)

3.3 (a) To what extent do you agree with the following statement?

I have a strong connection with my local environment and the natural world.






Strongly disagree			Neither agree nor disagree			Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	2	3	4	5	6	7

3.3 (b) To what extent do you agree with the following statement?

Before taking part in the Sussex Flow Initiative I had a strong connection with my local environment and the natural world.

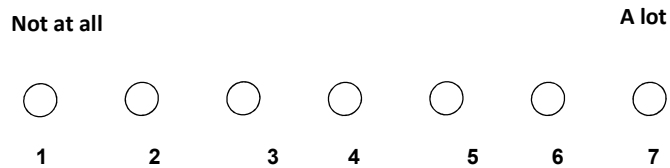
Strongly disagree			Neither agree nor disagree			Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	2	3	4	5	6	7

3.4 To what extent has your sense of connection to your local community and environment been the result of your involvement in and support from the Sussex Flow Initiative?

Not at all (0%)	A little (25%)	Some (50%)	Quite a lot (75%)	A great deal (100%)
				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Health and wellbeing

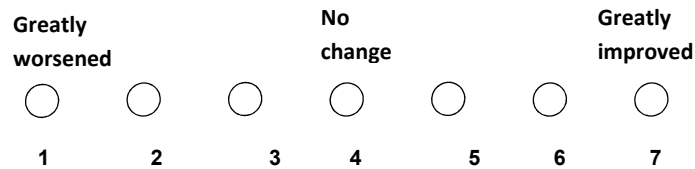
4.1 (a) To what extent has your involvement with the Sussex Flow Initiative improved your physical health?



4.1 (b) If possible, please describe any changes in your physical health and activity that occurred following your involvement in the Sussex Flow Initiative

_____ (text box)

4.2 On balance, how has your involvement with the Sussex Flow Initiative impacted your mental wellbeing?



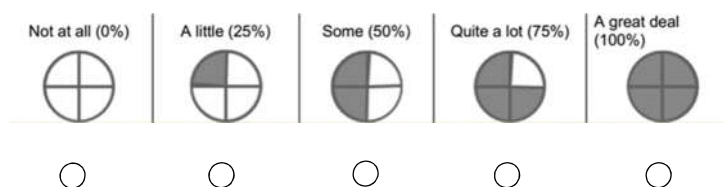
4.3 To what extent do you agree with the following statements?

Following my involvement with the Sussex Flow Initiative...

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I've felt more empowered to make positive change to my local environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've felt more inspired and motivated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've felt less stressed by having SFI facilitating, supporting, advising, funding and 'hand-holding' NFM delivery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've felt more equipped to solve problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've felt more positive in general	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've felt less anxious about climate change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've felt more socially connected	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4.4 To what extent have your physical and mental wellbeing been the result of your involvement in the Sussex Flow Initiative?

(a) Physical wellbeing



5.1 (a) What impact has the delivery of a Sussex Flow Initiative project had on your net income (ie through grant-aided practical work, support of CS applications, Single Farm Payment losses, provision of free labour, etc ?) *Note: '3' on the scale indicates 'No change'.*

Strongly decreased		No change		Greatly increased
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	2	3	4	5

5.1 (b) If possible, can you provide a monetary value of this change?

£ _____

5.2 (a) What impact has delivery of a Sussex Flow Initiative project had on your capital costs? (ie through grant-aided practical work, support of CS applications, Single Farm Payment losses, provision of free labour etc?) *Note: '3' on the scale indicates 'No change'.*

Strongly decreased		No change		Greatly increased
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5.2 (b) If possible,¹can you provide a monetary value of this change?

£ _____

5.3 (a) What impact has delivery of a Sussex Flow Initiative project had on your flood damage costs? *Note: '3' on the scale indicates 'No change'.*

Strongly decreased		No change		Greatly increased	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	I do not know
1	2	3	4	5	

5.3 (d) If possible, can you provide a monetary value of this change?

£ _____

5.3 (e) Did you contribute any of your own funds to carrying out the work on your land?

Yes No

5.3 (f) If possible, can you provide a monetary value of this contribution?

£ _____

6. About you:

6.1 What is your age?

- 12–15 years old
- 16–19 years old
- 20–25 years old
- 26–34 years old
- 35–44 years old
- 45–54 years old
- 55–64 years old
- 65+ years old

6.2 What is your gender?

Drop down list

- Female
- Male
- Prefer not to say
- Prefer to self-describe _____(text box)

6.3 What is your ethnic group?

A White

- English/Welsh/Scottish/Northern Irish/British
- Irish
- Gypsy or Irish Traveller
- Any other White background (please specify) _____(text box)

B Mixed / Multiple ethnic groups

- White and Black Caribbean
- White and Black African
- White and Asian
- Any other mixed/multiple ethnic background (please specify) _____(text box)

C Asian/Asian British

6.4 Do you consider yourself to have disabilities?

Drop down list

- Yes
- No
- Prefer not to say

- Indian
- Pakistani
- Bangladeshi
- Chinese
- Any other Asian background (please specify) _____(text box)

D Black/African/Caribbean/Black British

- African
- Caribbean
- Any other Black/African/Caribbean background (please specify) _____(text box)

E Other ethnic group

- Arab
- Any other ethnic group (please specify) _____(text box)

7. Other:

7.1. How likely are you to recommend people get involved in the Sussex Flow Initiative?

Not at all likely Very likely

○ ○ ○ ○ ○ ○ ○ ○ ○ ○

1 2 3 4 5 6 7 8

7.2. Where was your involvement with the Sussex Flow Initiative?

- River Ouse catchment
- Powdermill catchment
- Adur catchment
- Cuckmere catchment
- Other (please state) _____

Thank you for completing the Sussex Flow Initiative social outcomes survey. We very much appreciate your time.

Endnotes

¹ SROI Network. (2012). *A guide to Social Return on Investment*. Retrieved from <http://www.socialvalueuk.org/app/uploads/2016/03/The%20Guide%20to%20Social%20Return%20on%20Investment%202015.pdf>

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⁵ Houlden, V., Weich, S. & Jarvis, S. (2017). A cross-sectional analysis of green space prevalence and mental well-being in England. *BMC Public Health*, 460. Retrieved from <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-017-4401-x>

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