



Department
for Environment
Food & Rural Affairs

The enablers and barriers to the delivery of natural flood management projects

Appendix B: Interview report

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Introduction

A series of short, semi-structured interviews have been completed with a variety of stakeholders who work in different areas of natural flood management (NFM) implementation. During these short interviews, participants were prompted to share their experiences of NFM and explain what they considered to be the main barriers and enablers to NFM implementation based upon their work. From information gathered through the 50 interviews, a number of key themes have been identified and are used to structure the findings in this report. These themes are similar to those previously identified in the literature review. The findings of the literature review are drawn upon in this section. Text in italics and quote marks signify verbatim quotes from interviews. A list of the organisations who have been interviewed as a part of this research can be found in Appendix A: Literature Review.

Method

Following on from the desk-based review, a set of semi-structured interviews were undertaken to gather interviewees' thoughts and opinions on NFM. The sampling strategy identified typical groups who are involved in the various stages of NFM development and implementation, and stakeholders were mapped within these groups. In a report published by the Foundation for Water Research (Starkey and Parkin, 2015), key groups of stakeholders within catchment partnerships were identified (Figure 1).

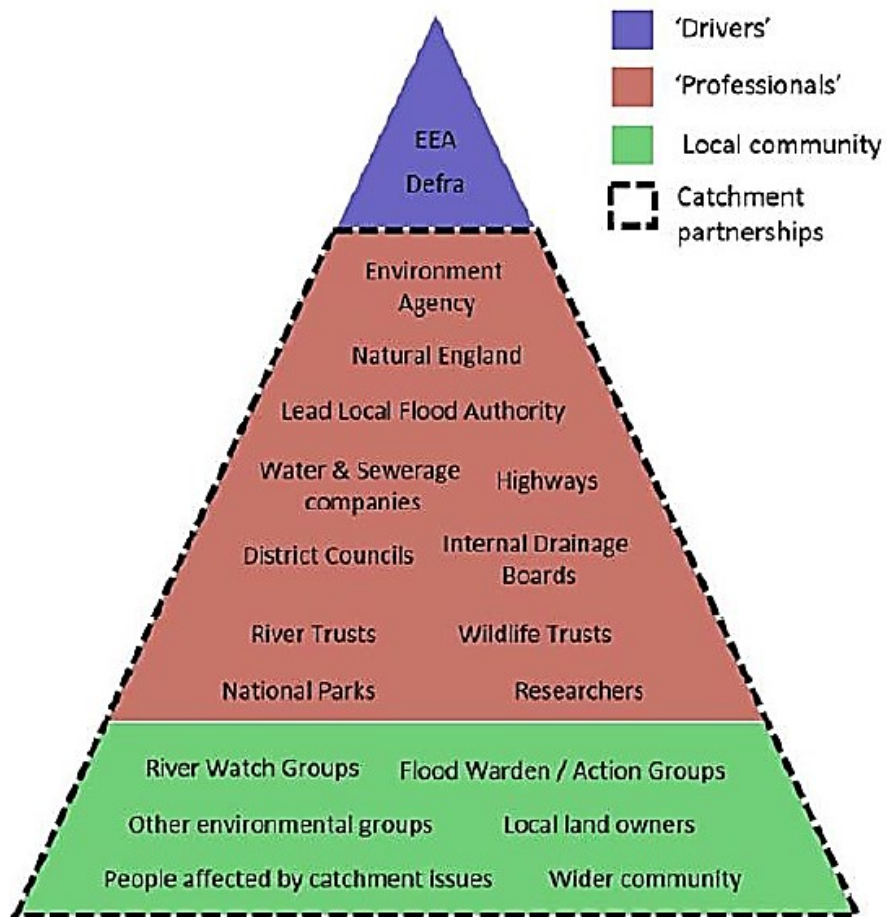


Figure 1. Stakeholder involved in NFM (Starkey and Parkin, 2015)

This formed the basis of our identification of relevant contacts. In addition, interviewees recommended other contacts who were contacted for interview.

Stakeholders were identified in 7 broad categories (Table 1).

Table 1. Number of interviewees within each of the broad categories.

Category	Number of interviewees
Government/Policy/Regulation	16
Landowners and estates	7
NGO	18
Funders	4
Flood Action groups	6
Farm-scale land manager	2
Land agents and rep organisations	5
Total	58

A purposive sampling approach was taken to ensure that the sample was sufficiently diverse to account for the highly contextual nature of NFM. JBA Consulting engaged widely with stakeholders across a variety of geographical locations, different sized schemes (both physically and financially), and organisations.

Prior to completing any interviews, an interview guide was developed for each key stakeholder group, which outlined the key questions and topics to cover with each participant. The interviews were semi-structured. This approach allowed interviews to be flexible and adaptable to each individual participant and the conversations steered depending on each participant's experience and expertise in NFM. 58 interviews were completed. The majority were completed over the phone and 2 were organised face to face.

Verbal consent was obtained at the start of each interview, and the participants were informed that their response would remain anonymous. Notes were taken by the interviewer throughout the interview and sent through to the interviewee for approval.

After all the interviews were completed, the key findings were pulled together into a report. A qualitative analysis of the interview notes identified six key themes:

- Landowners, agriculture and agri-environment
- Local communities
- Partnership working
- Funding
- Policy and Regulation
- The availability of evidence and best practice guidance

These themes were used to structure the information in the report and pull out key evidence from the interviews. Direct quotes were extracted from some interviews to evidence key arguments and findings.

Farmers, agriculture and agri-environment schemes

Farmland covers 72% of the total land area of the United Kingdom (Defra, 2017). As a result, it's more likely than not that NFM projects will require farmers involvement. NFM can be in a farmers' interest through the provision of incentives and compensation for allowing water to be stored on their land or for constructing NFM measures, e.g. leaky barriers. For some, implementing NFM may be in the interest of neighbouring communities and farmers can volunteer help to reduce these flood risks as civic duty. They may also feel pressured from communities and more widely to deliver more public goods. The relationships between farm land and its management and NFM are myriad and complex. The following draws out recurring issues.

Barriers

Countryside Stewardship

Agri-environment schemes such as Countryside Stewardship (CS) grants are a common means by which farmers can and do become involved with implementing NFM-related measures, e.g. soil management and woodland planting. These grants should and can be considered to facilitate implementing NFM through working with farmers and - the basic principles of the schemes, the idea of payment for a public good, are attractive to farmers and land managers and where they work, are considered to be *“effective for both them and the natural environment”* (CLA, 2018). Unfortunately, complications with the CS administration process have been highlighted by interviewees as a barrier to potential wider application to NFM being implemented on farmland. These barriers were highlighted by both those from a farming background, and from NGO's and charities who work closely with farmers. Launched in 2015, CS schemes have developed a *“poor reputation in the rural sector caused by ongoing poor performance related to payments, inspections and setting up agreements”* together with *“excess evidence requirements and unattractive payment rates”* (CLA, 2018). CS schemes were criticised by many, including participants from NGOs who work with farmers and landowners, for being inflexible and limited due to the strict timescale constraints and conditions. One of the participants spoken to from Natural England identified that schemes last for 5 years and once an agreement has been confirmed, there is little flexibility to make any changes, e.g. additional woodland planting. There are often missed opportunities to implement NFM measures which may be omitted

“There is an inherent inflexibility within the system to allow nature to do its best”

during the early application stages as NFM is “*still in its infancy*” as one interviewee put it. Similarly, one interviewee highlighted that there aren’t many stewardship options that are focused on NFM other than SW12: Making Space for Water, which has limitations on account of the eligibility requirements (the pros and cons of different NFM funding such as SW12 is explored in further detail later in the case study factsheets). The capital works are required to be implemented in the first 2 years of the agreement; however interviewees and a report by the Country Land and Business Association (CLA) have reported that there is frequently delays to confirmation of project agreements. For example in 2018, many agreements that were due to start on 1 January were not officially confirmed until June. Farmers are therefore losing out on a large proportion of the initial 2-year timeframe to complete capital works which can have knock-on effects for the rest of the business, e.g. cash flow issues. This combined

“It’s very easy to miss the moment of interest and opportunity from the farmer due to the lag in getting agreements sorted. It feels as though the powers that be are more obsessed with the process rather than what it’s ultimately trying to deliver, which is completely at odds with how the farming community feel – they want to get going and deliver something on the ground.”

with the complicated and “*onerous*” application process which requires a “*vast amount of paperwork*” and the common issue of late payments leads to farmers being put off the process altogether. One interviewee pointed out that even farmers who work part time as land agents or surveyors can struggle with the complicated application process. Many interviewees have argued that these burdens are often deemed by farmers to outweigh any potential benefits and “*aren’t worth the effort*”. It’s felt that funding processes for farmers needs to be a much more dynamic process. Circumstances on farms can change rapidly on account of the multitude other issues that must be juggled, therefore readily available funding is key to avoid the risk of “*missing the moment*”.

In some cases, agri-environment schemes result in taking farmland out of production leading to a reduction in the farmer’s basic payments. Interviewees have argued that “*some of the payment levels in the schemes aren’t sufficient to justify change because they are lower than the agricultural value of the land for the period in question*”.

Property rights

Instances of agri-environment schemes being considered as a financial burden appear to be experienced disproportionately by tenant farmers. Examples were given by multiple interviewees of landowners taking advantage of the payments and grants on offer but leaving their tenant farmers to bear the burden of implementing the scheme, potentially losing out on productive land, basic payments and eventually, profits. In some cases, where rent agreements are a fixed sum and are not based on a percentage of profits, tenants are at risk of being left worse off. This issue was touched upon by Julia Aglionby, Executive Director of the Foundation for Common Land and Chair of the Upland Alliance, when speaking at the Oxford Farming Conference in 2018,

“We need to consider tenant farmers [...] in the uplands there is a high proportion of tenanted land than in the lowlands and future policies and schemes need to reflect how we motivate people who are tenants as well as people who are owners, where the property rights [are] critical to what people are interested in delivering.”

Interviewees felt that property rights and the financial and/or contractual relationships between landowners and tenants must be considered by those administering existing schemes and those responsible for developing future schemes. Similarly, landowners must be willing to take any “hit” to profits as well as their tenants if they wish to put NFM measures on the land. One of the interview participants who works closely with farmers also agreed that any measures discussed would need to “*be in the interest of both the landowner and tenant*”.

Maintenance, liability and longevity

At present, CS grants and most other types of NFM funding are focused on the development and initial capital works, which leaves any future maintenance costs arising from the measures to be covered by the farmer or landowner. Also funding availability is often short term, linked to an initiative or programme, and not matched with the lifecycle of the NFM measure.

One interviewee who helps facilitate farmer involvement with agri-environment schemes explained that often it is only as the funding window is running out that he feels he has begun to get momentum and engagement with the farmer.

Farmers are at different stages in their careers and in their business maturity, therefore a longevity of funding would support these differing farm life circumstances, something currently not a feature of current NFM funding. Related to this, some interviewees also had concerns over the lack of funding or facilitation for maintenance which could result in measures being scrapped later, reversing any environmental or flood benefits gained. The issue of maintenance and liability for NFM structures and measures was brought up on a number of occasions. Views on the matter tended to be dependent on the scale of the NFM taking place and the location. Those working with farmers and large structures such as bunds or more ‘engineered’ leaky dams (e.g. staked/pinned) felt that maintenance and liability could pose a barrier to implementation, whereas those working on smaller-scale schemes (e.g. smaller Rivers Trusts’ work), felt that the issue and potential risks could often be overplayed and exaggerated. For farmers, however, it appears to be a main concern and the lack of clear guidance or legislation leaves farmers and landowners cautious about implementing measures on their land.

There is an air of uncertainty surrounding the level of maintenance that is required for different types and size of NFM measures, as well as their wider impacts should they ‘fail’. It is broadly understood that schemes with physically bigger measures and or measures implemented at catchment scales will require more maintenance than that of smaller projects, equally these are likely to be the projects that present the most risk in the event

of failure. There are still no accepted costs or common specified requirements relating to maintenance. Risk and liability together with maintenance are increasingly being considered at the outset of a project where multiple stakeholders are involved, however liability was still identified as a barrier to some stakeholders becoming involved on account of uncertainty surrounding who would ultimately be made responsible for failure and repair. Attempts at organisations trying to ‘pass the buck’ to landowners was identified as a barrier.

Interviewees who are involved with working with farmers have emphasised that future financial delivery systems for NFM measures need to go beyond compensating farmers for the initial capital works and consider the loss of productive land and basic payments as well as the longevity of a scheme, avoiding the expectation of “*charitable contributions*” from farmers.

The issues identified with maintenance and liability were further explored in a short analysis by a legal expert. This information can be found in Appendix E: Legal analysis report.

The ‘farmer mindset’

The cultural traditions of farmers for example a generational attachment to practices that prevented rivers flooding across land and which promoted drainage were highlighted as barriers when approaching farmers to implement measures that involve holding water on the land (e.g. floodplain reconnection or temporary storage bunds) because “*it’s ultimately counter intuitive to farmers and it’s a big hurdle to get over*”. Education and engagement carried out with care and an appreciation for the individual contexts and backgrounds of each farm is key to overcoming this barrier.

“It takes time and trust to build relationships to change landscapes - many farmers are working for sub minimum wage pay rates producing food - it is hard to be green when you are in the red”

Evidence from on the ground farming networks points to the Environment Agency sometimes having a difficult relationships with farmers on account of the other sensitive issues they are required to engage with them on (e.g. enforcement) and can often be seen by farmers as a “*gamekeeper who can bring sanctions on them*”, and therefore were considered not always best-placed to approach a farmer.

Farmers and landowners become “*fed up*” with being approached frequently by different organisations for different types of schemes and the issue of “*too many cooks*”, in some cases leading to a breakdown in relationships and a reduction in farmers’ willingness to be involved. Organisations including the Farmers Network and River Trusts, however, have consistently been named as key organisations who have taken responsibility for engaging empathetically (and successfully) with farmers to encourage uptake of NFM by using a more joined-up approach.

Other key issues relating to landownership and agriculture including the Commons and landowner maintenance requirements have been explored further in specific case studies, appended to this report.

Enablers

Farmer engagement

With 70% of total land area in the UK being farmed, farmer engagement with NFM is crucial, particularly in delivery of catchment scale schemes. The literature review documented few enablers other than the need for a financial incentive to encourage land managers to take up NFM. However, it became clear during the research interviews that an attractive incentive alone will not lead to farmer uptake.

Without the correct approach to engaging with individual farmers in the first place a scheme is unlikely to progress. The manner in which farmers are approached and engaged was highlighted as being critical to farmers' eventual buy-in and implementation of NFM on their land. Interviewees (which included those who work with farmers to implement NFM and farmers themselves) emphasised that a farmer's engagement with a scheme is dependent on a myriad of factors including the individual, location, the business operation, family and their history. Seeking an understanding these from the outset supports successful projects.

Farmers also tend to be a part of close-knit community who support and trust one another, therefore successful engagement with one farmer can pave the way for future success with his or her neighbour. A number of examples were given by a variety of organisations whereby widespread buy-in from the farming community had been facilitated by an individual farmer who was a real proponent for NFM and was able to help persuade others to join in.

Successful NFM project teams demonstrate an awareness of how farmers want to engage. At least six interview participants indicated that farmers want and prefer NFM guidance that is tailored to the specific context of their farm, ideally on a face-to-face basis, with an adviser who understands and is familiar with the local landscape and with the practice and business of farming, as well as the complicated funding application process. Farming and Wildlife Advisory Groups, Rivers Trusts, The Farmer Network and Facilitation Fund farmers' groups have all been identified as fulfilling this role, working closely with individual farmers in a catchment to educate and inform them on how they can use nature on their land to slow the flow of water and assisting them in applying for funding. This empathetic, tailored and proactive approach has allowed a number of the barriers mentioned in the previous

“The farmer network is critical to NFM. If a farmer has a successful scheme, they'll tell everyone about it. That recommendation of trust is the currency and the social capital – it's key to the development of that network”

section to be overcome or mitigated, including the issue of onerous application processes and the ‘farmer mindset’.

“a ladder of engagement that allows farmers to take little steps to begin with and slowly learn more and become more radical - if you start with extreme solutions don’t expect farmers to join in, they have to go on a journey of learning like everyone else”

Similarly, working demonstration sites have been crucial to gaining buy-in from farmers and in many cases the early engagement and uptake of one farmer in a catchment has allowed for highly effective engagement with other farmers later in the process who are able to see for themselves how NFM would conceivably look and work on their land. Interviewees have suggested “*starting small*” first with small scale features that farmers are more familiar with and will benefit from, such as regenerative agriculture techniques for healthy soils. The money-saving and making benefits of such measures can be sold to farmers, much more easily than more ‘drastic’ measures. By getting them farmers on board through this modest, staged process, it is easier to then work towards implementing bigger features later down the

line. One farmer explained that the farmers in his catchment were starting a partnership to do NFM in the valley bottom after 10-15 years of engagement and education with the local Rivers Trust and Natural England which has paved the way for change. He said,

“We were won over by the empathetic Rivers Trust approach which seduced us in to taking some modest first steps - and their staff were from local farming families and respected our position - as we learnt to enjoy doing NFM work they have enabled us to become more radical and scale things up.”

From the interviews it was clear that where NFM has successfully been implemented on farmland, it was likely that there had been some degree of one-to-one consultation between farmers and a local adviser who becomes a part of ‘their community’ by building relationships and trust, as well as providing individual farm plans. One Rivers Trust programme manager who works with farmers on a day to day basis explained,

“Farmers want someone they can ring when they have a question, someone who knows the local area and who will go in with an open attitude, understanding their priorities and business”.

Financial incentive

Additions to CS grants and new, alternative approaches to providing incentives for farmer involvement with NFM is increasing as the practice becomes more popular and accepted as both a means of flood mitigation and providing multiple benefits (to both farmers and the natural environment as a public good). The SW12: Making Space for Water CS grant

was described by one interviewee as a “*game changer*” on account of its longer “*20-year commitment and decent payment per hectare*”. The use of auctions is also being used to allow farmers to select for themselves different NFM activities and pick out the parcels of land where they believe measures will produce the best results. As well as giving farmers more autonomy over the implementation and payment for measures on their land, the “*auction style strikes a chord*” with them, “*it’s an appropriate language they understand*”. These new approaches to funding and incentivisation are explored in further detail in the case study factsheets.

“It only took me a few minutes to place my bid online and there wasn’t any paperwork. I’m really pleased with what I’ve been able to achieve with the grant money” Anthony Gothard, Farm from Stoke St Gregory speaking to FarmingUK

Local communities

Community action through Flood action groups (FAGs) or similar, set up by local communities themselves, are becoming increasingly common and seek to allow members of the public to influence and encourage local flood risk management, in some cases enabling them to occupy a key role in decision-making, working in partnership with agencies and authorities. Recent, significant flood events such as Storm Desmond have led to an increased interest in alternative approaches to FRM as it becomes increasingly clear that more than traditional, engineered defences alone are needed. Many FAGs have begun to push their local flood risk management authorities to pursue these new and different methods as they begin to realise that more could be done to address the flooding in their community.

Barriers

A key group of stakeholders for almost all NFM projects, local communities can be both a facilitator and a barrier, as identified in the literature review. It is clear from participants who have been involved in engaging with community groups, that sometimes community groups can be difficult to work with if they don’t fully understand the processes that make NFM work for FRM. It can often be difficult to manage expectations of local community groups and communicate to them that NFM is not necessarily a solution to fix the flooding issues completely nor is it a ‘one size fits all’ style of approach. Often, they see what is happening and working in other catchments and want that exact approach in their catchment, not understanding that it does not always work in the same way and each area needs an individual,

“Storm Desmond has complicated things – people are preoccupied with the threat of similar storm events and aren’t considering that natural flood management interventions will help to mitigate the smaller floods like those in 2005 or 2009”

tailored approach. Significant storm events such as Storm Desmond peak local communities' interest in alternative flood risk management measures such as NFM, but often with this interest comes an expectation that it will provide all of the answers. These extreme events can result in communities focussing less on more frequent, smaller, nuisance floods which NFM may be able to better mitigate. As a result, whilst local communities and FAGs can often be the driving force behind an NFM scheme, there is a risk that they can also bring difficulties and pressure to project teams responsible for a scheme, particularly those who are not as familiar with the hydrological processes and theory behind a project. Here, it is important that engagement and education takes place and project teams communicate carefully what NFM can feasibly achieve, not underselling the benefits to smaller-scale flood events but equally, not over-exaggerating its benefits in extreme events.

Flood action groups equally face problems in implementing NFM when garnering support from local communities, particularly where there are new people moving into towns or villages who are not aware of or engaged with the flooding issues (yet!). As above, support tends to coincide with the fallout from a significant flood event, leaving FAGs frustrated who are keen to be proactive and make a difference prior to these events. Fear of issues with obtaining home and contents insurance was also raised as a reason why some members of local communities may not wish to engage with 'official' flood action groups.

Enablers

In spite of the difficulties that can be encountered when working with local communities on NFM, it is widely accepted that local communities often play an important role in facilitating projects and pushing for NFM features to be physically implemented. Building on the findings of the literature review which gave examples of where community involvement can be complementary to a scheme, interview participants have suggested that a bottom-up approach where motivations for an NFM scheme have come from a community is generally a successful approach. Interviewees have suggested that a scheme is more likely to be implemented if there is an interested community behind it and pushing it forward, rather than authorities or larger organisations 'inflicting' it on a community. One interviewee noted that where there is buy-in 'on the ground', there are less likely to be difficulties in getting local landowners involved. In accordance with the findings of the literature review, interviewees have emphasised that a collaborative approach and relationship between communities and local authorities is more likely to be successful than a 'contractual' approach. Where an NFM scheme is likely to involve a combination of grassroots and 'top-down', it has proven useful to have an intermediary who is able to bring everyone together and facilitate conversations between stakeholders.

Local communities which have been previously engaged with or have awareness of wider environmental concerns, e.g. water quality or biodiversity and already have local groups formed are much more likely to engage positively and fully with NFM when approached.

Local community groups highlighted the value of particular individuals or groups of people who had relevant skills or backgrounds who were able to upskill the rest of the team as well as communicate with the 'powers that be' effectively. They felt that this allowed them to get NFM schemes in place or in progress much more easily. The backgrounds and motivations of individual community members is relevant to the progress of schemes.

A similar point was made that suggests the engagement process itself is something which can influence the success of a project. One Rivers Trust found that by mirroring an 'official' stakeholder engagement process in a more relaxed manner, they were able to work together to develop a project on which everyone could agree and support.

Partnership working

The literature review identifies a widely accepted view that NFM projects necessitate a partnership approach based on requirement to work cooperatively across whole river catchments and the need for different skills and experiences (SEPA, 2015; Waylen et al., 2017). This was explored further across all the interviews.

Barriers

This report has already highlighted the importance of a collaborative approach to facilitating the uptake and implementation of NFM. Where collaboration is lacking between partner organisations, difficulties begin to arise, as highlighted by several interviewees.

The sharing of information between organisations can become complicated as the number of partners increase together with the different levels within organisations. Whilst this isn't necessarily a barrier, more of an added difficulty, it is perceived as a barrier if information fails to reach the necessary stakeholders or leaves local community organisations unsure as to who or where they should be going to for information.

Literature identifies the complexities of partnership working. Issues highlighted by interviewees included the issue of changing mindsets and winning round those who are more familiar with engineered FRM solutions, as well as the problem of 'too many cooks'. Interviewees spoke of long, drawn out and complicated processes to develop a plan that sought to balance numerous motivations and opinions. One FAG member suggested that there was currently a gap for an organisation who can bring together all of the necessary skills and groups for the primary focus of flooding. Similarly, one Rivers Trust noted they hadn't seen any organisation who had the necessary tools to pull everything together, e.g. funding and partnerships and it was a gap they were trying to fill by having 3 departments for 1) communities 2) farmers 3) delivery & monitoring. They considered that it was a feasible to offer this as a complete service in smaller catchments. This is a role that a number of Rivers Trusts appear to fulfil across the country in both upland and lowland regions.

Enablers

A joined-up approach between organisations is key to facilitating NFM. Numerous interviewees from a variety of organisations emphasised the importance of having the right people involved at the right time, be it local farmers and community members or larger landowner organisations such as the Forestry Commission.

Regular, face-to-face meet ups were said to be key to sharing ideas, build relationships and ultimately get NFM features on the ground. Local 'NFM' champions and willing individuals from local communities were highlighted as being important in many cases on account of their strong relationships with local landowners, business and communities, fostering greater levels of engagement and involvement with NFM and easing the progression of a scheme.

Bringing together partner organisations to focus resources, skills and knowledge has been a successful means of achieving targets. One authority worked together with two separate community groups in a catchment (one focused on biodiversity and water quality, the other flood risk mitigation) to point out the benefits and opportunities of targeted funding by applying together and bring efficiencies removing the issue of double funding. The groups were combined to focus efforts and resources together to achieve both of their desired targets thanks to the multiple benefits of NFM measures. It was highlighted that there are still issues round governance, as each side of the new amalgamated group still seeks to push and talk about their own specific priorities. This was and still is being overcome through an ongoing learning process which pushes the win-wins on both conservation and flood risk, highlighting that by embracing one another's projects and aims, there is maximum impact with the resources available. The interviewee emphasised the importance of carefully articulating the right messages to please both groups.

Funding

Funding mechanisms for NFM have been numerous. NFM can be funded through a number of different means such as (but not limited to):

- Flood Defence Grant in Aid
- Local Levy (Regional flood and coastal committee (RFCC))
- Lead local flood authority (LLFA)
- Private funding, e.g. water and utility companies
- Heritage Lottery Fund
- Countryside stewardship
- Regional Economic Growth funding
- Community Infrastructure Levy
- Peatland Restoration Fund
- Water Framework Directive implementation related funding

- Community raised funds

Whilst the availability of funding is key to enabling a scheme to go ahead and is therefore a facilitator, 'funding' is commonly raised and referred to as a barrier even when it is 'available'. Funding mechanisms are considered in more detail in a series of case studies that have been developed as part of this project. Each of the 6 case studies is focused on a different type of funding, and discusses in more depth, the associated barriers and Enablers with each. More information can be found in Appendix F: Case Studies.

Barriers

The topic of funding was a common theme in almost all the interviews. Application processes, for example as highlighted in Section 2 with regard to CS funding, were often criticised for the extensive time, effort and resources required to complete them. This is particularly an issue for smaller organisations or community groups who may not have the time or expertise to complete them. The issue of FDGiA funding and its business case's evidence requirements, such as the number of houses protected, is a long-standing issue when attempting to secure funds for NFM schemes. This was raised by several different stakeholders. Where any funding pot requires modelling inputs, the cost, time and resources required increase significantly, potentially leaving smaller organisations in a predicament.

Short timeframes for submitting demanding applications for funding pots were raised as an issue by a variety of organisations who felt that this was disproportionate to the lengthy timeframe in which the successful applicants then receive the funds. One interviewee explained that even if the projects would be able to deliver to the requirements of the funding (e.g. baselining and monitoring), in the face of "*loads of cuts*" to their organisation, they do not have the resources to pull something together in the "*very short funding window*".

NFM projects take place in dynamic landscapes and the work is often seasonal, therefore the availability of funding is crucial to making sure windows of opportunity can be pursued and made the most of. The "*use it or lose it*" approach that can accompany funding with short timescales poses a risk for project teams leading to putting in features that may not necessarily be best suited to the land or location in which they are working. In the worst-case scenario, this could lead to features failing on account of a lack of planning and preparation.

Post-implementation monitoring is also often a requirement of funding as the NFM community seeks to increase its evidence base. One interviewee explained that large funding pots can often lead to "*raised expectations*" of what the money could achieve, especially when there are a "*lots of caveats about demonstrating change, baselining and monitoring*". The interviewee explained that many of the projects that his organization had

created, ready for funding availability “*wouldn't actually be able to meet the requirements based on the need for evidence*”.

Other funding eligibility criteria that were highlighted included those of the Countryside Stewardship Facilitation Fund which seeks to support “*people and organisations that bring farmers, foresters, and other land managers together to improve the local natural environment at a landscape scale*” (Natural England, 2017). Section 2.2.1 outlined the preferred means of engagement with farmers to encourage uptake of NFM, including one-to-one advice and individual farm plans. The Facilitation Fund Manual, however, states that any provision of one-to-one advice to a CS facilitation group members, or completion of CS applications their behalf are considered an ineligible cost. Interviewees who work with the fund felt that these criteria were preventing them from being able to engage with farmers effectively, in a manner that they know to work, namely, individually. The costs and efforts for applying for a CS grant cannot be recovered by a farmer, and some interviewees felt that the facilitation fund could be an opportunity to overcome this problem and increase uptake of NFM-specific grants by allowing enablers to assist.

“NFM is primarily for the community. Why do [farmers] have the burden of costs and effort for applying for CS – this is a key flaw of the facilitation fund for NFM, by not allowing this process to happen”

Funding was highlighted as a particular issue in Wales, where there appears to be limited access to large funding pots. It was reported that much of the NFM being implemented in Wales is being done so through alternative funding streams such as biodiversity or peat restoration funding, which whilst primarily focused on achieving their own specific targets, are also contributing to FRM through the multiple benefits of some measures.

Enablers

Increasingly, as NFM uptake increases, there are new and innovative approaches to accessing funding for schemes, such as auctions, payment per outcomes and new CS funding. These new approaches coupled with Defra and EU funding have helped reduced reliance upon mainstream flood risk related funding pots such as FDGiA. There were a couple of examples of private businesses, charities and other NGOs matching funding, showing that whilst existing pots may not cover the entire cost, they can open up opportunities for extra ‘complementary’ funding. Case study factsheets later outline and appraise the application of different types of funding.

Policy and Regulation

NFM measures do not sit comfortably with traditional flood risk reduction responsibilities however they are acknowledged widely, from government down to local communities, as a valuable component part of flood risk management strategies. The policy context is

generally supportive however the existing regulatory frameworks for flood risk management are not well suited and much of NFM work is being undertaken outside 'traditional' flood risk project requirements.

Barriers

The literature review found that a lack of specific policy and regulation around NFM can result in traditional, engineered flood management solutions being favoured over natural solutions on account of the perceived guaranteed flood risk benefits. This was verified by numerous interviewees.

Interviewees expressed difficulties in obtaining drainage and ordinary watercourse consents and the lengthy timescales can lead to significant delays in implementing an NFM scheme. For smaller NGOs and volunteer groups, this has in some cases resulted in the scheme being abandoned or changed significantly as resources could not cover the requirements for the process. There is also an associated issue with the costs of obtaining these licences and consents and in particular, the variation between different local authorities. With some charging per individual features, and some charging one fee for a whole project, there was suggested that *“one of these approaches is acting as a facilitator and encouraging the process, and at the other end of the scale it is acting as a barrier and in some places preventing progress”*.

Similarly, the stakeholder engagement required to obtain consents can end up being a vast process where there are multiple organisations and individuals who need to be consulted.

As with the issues associated with funding, systems that have been designed for and are better suited to traditional, engineered flood schemes can act as barriers to NFM going ahead.

Interviewees identified a need for adapted policies and processes to facilitate this new approach to addressing flood risk. One interviewee who works to facilitate NFM with farmers highlighted the frustrations many farmers felt with the consents and permissions required for NFM. He spoke of the irritation amongst farmers who had bought in to the idea of the NFM and were keen to deliver it but were constantly getting pushback to deliver measures that are overwhelmingly positive. He felt that farmers were receiving a negative message, namely that in spite of the benefits they were seeking to deliver, they are required to go through the same processes as someone seeking to deliver something that could potentially harm the environment.

Other areas of policy that were noted to have caused problems for some schemes were health and safety and also landscape/nature designations. Increasingly, volunteers are being used as a means of delivering NFM measures in a low-cost and quick manner, however *“red tape”* can slow down this process as organisations are required to complete

paperwork and “*jump through bureaucratic hoops*”. Landscape designations such as Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC) were said not to be as much a barrier as expected on account of NFM in many cases being in line with the aims of the designations by providing benefits to biodiversity. The recent World Heritage Site designation in the Lake District National Park has been highlighted as a potential issue for future NFM schemes, which may require heritage impact assessments depending on the scale and nature of the measures being proposed. Traditional hill farming, agriculture and the Commons were a key element of the Lake District’s designation and are all also key to any NFM in the uplands of the Lake District.

Another issue related to policy and regulation that was found to have been a problem in the Lake District was that of planning permission and the use of permitted development rights to gain permission for an NFM measure or scheme. 3 interviewees described problems with the Lake District National Park Authority, the local planning authority, who they felt were interpreting permitted development rights inconsistently and seemingly illogically. They gave examples of valley wide NFM measures being delivered under permitted development rights, whilst much smaller, “*lower risk*”, single field-scale measures were being “*threatened*” with full planning permission. In one example, the implications of a full planning permission process could have been losing the window of works and having funding withdrawn. The decision was eventually taken to allow the small (~250m of river) project to go ahead under permitted development rights, however, an interviewee explained that this had required “*senior management*” in both the EA and the LDNPA to look into the decision. Interviewees suggested that there needed to be clearer guidance on where NFM measures and project sat within the planning process, in particular where they are or are not eligible under permitted development.

Enablers

There was limited discussion around enablers linked to policy and regulation, however it seems that streamlining the processes and making them more applicable and specific to NFM is the key to ensuring NFM schemes can be implemented on the ground. One such example of this is the introduction of new legislation in Wales such as the Environment Act (2016) and the Well-being of Future Generations (Wales) Act (2015), whilst still in their early stages, have the potential to facilitate NFM by encouraging authorities and organisations to consider how the environment in Wales is considered and managed. Interviewees were hopeful that the legislative changes would help bring about change to the Welsh Rural Development Programme’s funding mechanisms and encourage a system that sets an expected standard of farmers who are incentivised to “*go above and beyond*”.

The availability of evidence and best practice guidance

The published Working with Natural Processes (WwNP) evidence base identified the areas where there was and wasn't evidence on the efficacy of NFM measures. Funding has been made available for research purposes by funding the monitoring of implemented measures to understand the effectiveness of the measures during flood flows. These projects are now on going. The majority of NFM measures that can be seen across the country have been implemented fairly recently, they are in diverse landscapes and the numbers are not huge. As such there is not yet an established 'best practice guidance' on how to plan, design and implement projects. The research here sought to determine how the current evidence and lack of a clear 'best practice guide' was affecting the implementation of NFM.

Barriers

Interviewees raised the issue of the NFM evidence base and the questions that still remain around the benefits of NFM. It was felt that there are lots of claims made about the promise of multiple benefits, despite the uncertainty around the extent and nature of those benefits for different types of measures.

Similarly, conflicting views on best practice approaches and the lack of specific design standards can further contribute to uncertainties on the level of benefits that will be achieved and complicate matters when seeking to gain the buy-in of landowners. One interviewee spoke of the mixed messages some land managers and farmers receive from different authorities regarding NFM measures and where they will work best in the landscape.

Interviewees felt that there is an obvious need for more definitive guidance on how NFM should be implemented, looking at both where and how it should be done. Clearer advice on whole life costs for NFM schemes and measures was also emphasised and links back to the uncertainties of long-term maintenance resource requirements, which has been shown to cause problems in particular with landowners and farmers when seeking buy-in and appropriate funding.

Some participants had concerns with mapping and were sceptical of the level of certainty that is achieved when identifying opportunities and that it was important to consider a variety of key factors alongside modelling results such as landowners, farming businesses and the value of the land.

It was made clear that in the wider flood risk community, there are two different types of groups: at one extreme there are the 'believers' who believe NFM is the panacea and who run the risk of overstating the potential benefits; and at the other the 'non-believers' who

believe engineered solutions are the only sensible solutions to flooding. There is a need to manage the expectations of NFM and how it is promoted to and by both the practitioner community and the local communities who may benefit from NFM – in doing so, it is hoped a balance can be found between the two groups of ‘believers’ and ‘non-believers’.

Enablers

Where best practice guidance documents have been produced aimed at specific stakeholders such as farmers and land managers these have been well received. The first practical NFM guide for farmers was produced in 2017 at the request of farmers and land managers of the Yorkshire Dales and compiled by the Yorkshire Dales National Park Authority, Yorkshire Dales Rivers Trust and North Yorkshire County Council. This document has since been used as the basis for similar guidance documents produced for other areas of the UK such as the North West, put together by a group of organisations within the Cumbria Strategic Flood Partnership and Catchment Based Approach Partnerships. The documents were praised for providing, clear, concise, simple and highly relevant advice that presents useful information including funding sources, required consents and permissions, and agricultural benefits.

Conclusion

This report has sought to provide a narrative of the enablers and barriers to the delivery of NFM derived from the stakeholder interviews undertaken for this research. The opinions and experiences of a wide variety of stakeholders were sought, spanning across organisations and roles such as landowners, farmers, NGOs, government and regulatory authorities, local communities, local government, funders and representative organisations. The NFM community (i.e. those seeking to enable, deliver and implement NFM) are overwhelmingly resilient and eager in spite of the barriers. There is an overall sentiment of positivity on account of the multiple benefits NFM can bring and whilst some projects face barriers and are delayed, ultimately there are a little to no examples of an NFM project being stopped entirely. NFM practitioners are finding means and ways and means of circumnavigating and overcoming barriers to ensure that their projects can be delivered. Policy, funding, regulation and guidance are beginning to ‘catch up’ with the rapid increasing interest in NFM as a means of flood risk management, however there is still progress to be made in these areas and elsewhere to reduce the barriers identified in this research. Suggestions of such improvements identified during stakeholder dialogue have been collated in the Final Report of this research project.

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Appendices

Organisations interviewed

- 1 Arup
- 2 Bidford upon Avon Flood Action Group
- 3 Brockenhurst Flood Action Group
- 4 Carter Jonas
- 5 Cumbria Farm Environment Partnership
- 6 Cumbria Wildlife Trust
- 7 Dorset County Council
- 8 Eden Rivers Trust
- 9 EnTrade
- 10 Environment Agency
- 11 Forestry Commission
- 12 HR Wallingford
- 13 Isle of Wight AONB
- 14 Kent County Council
- 15 Keswick Flood Action Group
- 16 Lake District National Park Authority
- 17 National Trust
- 18 Natural England
- 19 Natural Resources Wales
- 20 NFU
- 21 Northumberland County Council
- 22 RSPB
- 23 Shipton Flood Action Group
- 24 Soberton Flood Action Group
- 25 South West Farming Wildlife Advisory Group
- 26 Spains Hall Estate
- 27 The Farmer Network
- 28 Trent Rivers Trust
- 29 United Utilities
- 30 West Country Rivers Trust
- 31 West Cumbria Rivers Trust
- 32 West Wittering Flood Action Group
- 33 Woodland Trust
- 34 Wyre Rivers Trust
- 35 Yorkshire Dales Rivers Trust
- 36 Yorkshire Water
- 37 Yorkshire Wildlife Trust

Interview Guide

The questions below are to be used as a guide for the interviews and should not be adhered to/followed strictly. The interviews should be semi-structured, and the interviewer should encourage an open conversation/discussion and use the questions as prompts. Dependent on the interviewee, some questions may not be relevant.

1. Role in organisation? Role of the organisation? How did it start? How big is the group? How active is the group?
2. Why did the group form? How long ago was it formed? Was there input from wider organisations (e.g. local authority)?
3. Who is involved with the group? Just local residents? Wider stakeholders (e.g. the EA?)
4. What are the flood risks in the area? Recent flooding? Major flooding?
5. Where/how did you hear about NFM?
6. Why did you think NFM might be useful in your area?
7. How have you been involved in it? Have you implemented any NFM in your area? If not, why not?
 - If yes, what kind of NFM? Which measures?
 - Who was involved with the delivery of the scheme?
 - How long did delivery of the scheme take?
 - How was the project funded?
8. What were the barriers/enablers when getting the scheme on the ground?
9. Have you found it difficult to engage with any stakeholders in particular?
10. Have you applied for funding? Are you involved in any partnerships? If so, who is involved?
11. What would you say are the barriers to implementing NFM? Have you come across any barriers? How did you get around them? Top 3?
12. What has helped you enable the implementation of NFM/progressed the ideas? Top 3?
13. Do you feel your group has the skill set necessary to implement an NFM scheme?
14. Are you aware of any guidance documents available? Who would you go to/did you go to for advice on NFM? Did you use any tools incl. NFM toolkits or potential maps?
15. Any experience with the media? If so, has that helped facilitate NFM for you or caused a barrier?
16. What needs to change to increase uptake of NFM?
17. Do you think land designations, such as the SSSI's have an impact on NFM? Could they prevent people from implementing a scheme?