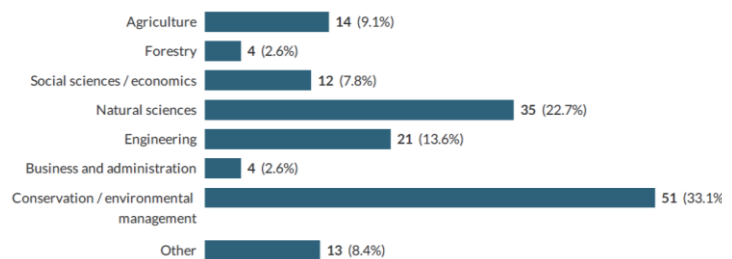


Natural Flood Management: Results from a survey

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This **briefing note** presents a summary of the results of a survey that was conducted during the spring of 2017. A total 118 respondents across the UK with a broad interest in flood risk, water, land or environmental management answered the survey. The survey's aim was to increase our understanding of the respondents' views & opinions – negative or positive – on **Natural Flood Management (NFM)** & how NFM might be implemented. We expect the results of this survey to be of interest to policy makers, academics, consultants, land managers, farmers & environmental professionals working on catchment management & flood mitigation.

Who took part in this survey? The respondents were diverse working in the public sector, agency, local & national government (42%), private sector (25%), third sector (14%), farmers (8%), & academics (11%). Their professional training is shown on the right.



How familiar is the concept of NFM?

Two-thirds of respondents considered themselves familiar with the concept of NFM, however, only 8 strongly considered themselves experts. A little over half have been connected to, or participated in, one or more NFM projects in the UK. Respondents listed 27 riverine & 3 coastal NFM projects.

What is understood by NFM?

We were interested to find out what the respondents understand by NFM. Therefore, we did not provide a definition of NFM at the beginning of the survey & we asked respondents to provide us with their own definitions. From the responses, we could identify the following key themes:

- **What defines NFM?** Respondents referred to terms such as 'working with', 'mimicking' & 'imitating' natural processes. They also referred to 'manipulating' & 'restoring' the environment. Often the terms 'soft' & 'slow the flow' were used. Specific measures were listed, for example, peatland restoration, reconnecting rivers to floodplains, creating wetlands, woody debris dams, sustainable drainage systems. There was some uncertainty about whether certain measures, such as land & soil management practices, including overland sediment traps & floodplain storage, were NFM measures.
- **How is NFM different?** Views varied from those who see NFM as complementary to, & those who see it as 'instead of', engineered or 'hard' approaches. NFM was also referred to as an approach that is 'targeted' & has 'co-benefits'.
- **Why implement NFM?** The most frequent response given was to reduce flood risk / flood peaks.

What are the barriers to NFM?

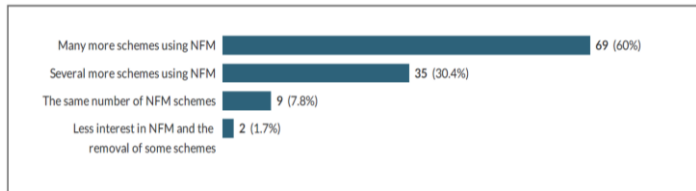
When considering barriers to further the implementation of NFM, four main topics emerged:

- **Coordination:** All respondents believe NFM needs to be coordinated at the catchment scale.
- **Tenure:** Almost all respondents believe that there will be additional challenges installing NFM in areas with tenant farmers & multiple landowners.

- **Evidence:** Respondents beliefs were mixed about the sufficiency of current evidence on the effectiveness of NFM. This was particularly with respect to the effectiveness of NFM schemes during high flows & its cost-effectiveness.
- **Risks:** Respondents beliefs were mixed about the unintended consequences of NFM, maintenance requirements & its impacts on the visual landscape.

A series of questions followed asking respondents their **views on implementing NFM**. 76% believed NFM should be implemented more widely in the UK, 60% thought there would be more schemes in the future & 85% that changes such as more research & evidence is needed.

Thinking 10 years ahead, in comparison to now, what do you foresee in the UK?

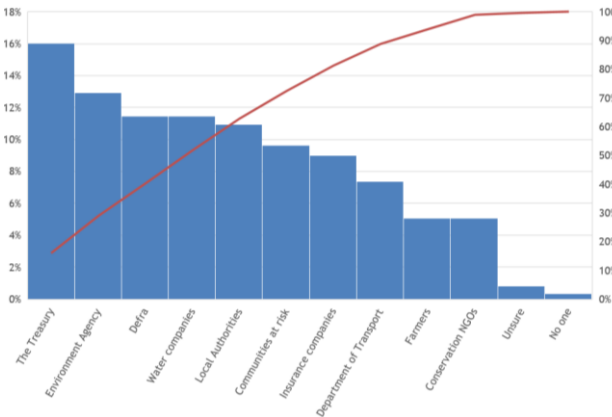


Follow on questions asked if NFM were more widely implemented:

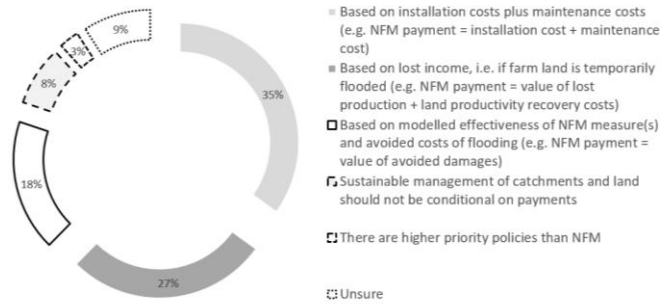
(1) Who should be involved?

- In terms of **enabling NFM**: over half of all respondents believe this is a shared responsibility between all stakeholders, from statutory agencies through academics, insurance companies, at risk communities to farmers.
- In terms of **implementing NFM**: the results were starkly different to those above. Land managers were listed frequently, with farmers taking the top spot, estate managers the third spot & local authorities joint fourth with water companies. There was a second grouping around those with practical NFM & partnership experience, i.e. conservation groups, catchment partnerships & at-risk communities.

(2) Who should pay?



(3) How should payments be calculated?



In summary, many respondents support NFM but think more needs to be done including gathering more evidence. Furthermore, future implementation of NFM may require the support or involvement of groups that currently do not yet play a big role in flood risk management or in NFM. Involvement of these groups maybe motivated by the co-benefits they might receive.

Do you want to know more? A more detailed version of these results will be presented in an academic publication. In the meanwhile, if you would like to know more about this survey or related research by the authors, please contact us: Rosalind Bark (r.bark@uea.ac.uk)



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