



To Whom it May Concern

Barriers and perceived barriers to Natural Flood Management implementation

You have asked us to summarise and outline those matters which have been identified as barriers or perceived barriers to natural flood management (“NFM”), and the implementation of NFM initiatives.

This summary is based on the research that you have done, together with stakeholder engagement initiatives, our research, information supplied to us by the Environment Agency and lead local flood authorities and other information we have obtained on the subject.

It is sometimes difficult to differentiate between actual and perceived barriers, especially where they discourage stakeholders from considering NFM initiatives, so all have been listed below.

1. Legal Background

- 1.1. Land law concerns the acquisition of interests in land, and the rights and obligations which derive from those interests. In England and Wales land law is derived from a mixture of common law, equity and statute. Land law is concerned with such matters as competing interests in land, rights to enter land, and ownership of structures and buildings that are on or in the land.
- 1.2. Common law riparian rights and responsibilities apply to land bordering a watercourse. Riparian landowners have rights and obligations relating to the flow of water through their property.

- 1.3. Flood risk management can involve the use of one parcel of land for the benefit of other parcels of land. Upstream land or land bordering a watercourse is often used to construct flood defences which reduce the risk of flooding to other properties.
- 1.4. Statutory powers such as those found in the Land Drainage Act 1991 and the Water Resources Act 1991 will override the interests of landowners and occupiers to allow the relevant authority to implement flood attenuation schemes, take steps to manage flood risk and carry out necessary maintenance. Where such statutory powers do not exist, the consent of those with an interest in the land will have to be obtained.

2. Background to Natural Flood Risk Management

- 2.1. Most of the natural flood management (“NFM”) measures that are currently being considered do not have relevant statutory provisions. This means the landowner will need to give consent to any works or structures on, or access to their land. Some of these works will require consents from local authorities, internal drainage boards or the Environment Agency.
- 2.2. Landowners’ permission is required for third parties to enter their land, carry out any works, allow structures or NFM assets to remain on the land and allow water to be stored on the land as part of natural flood management. This gives rise to a number of legal issues, including for example:
 - 2.2.1. Who owns the structures on the land?
 - 2.2.2. How long are those structures allowed to remain on the land?
 - 2.2.3. Who is liable to maintain those structures, and how will they access them?
 - 2.2.4. Who is liable for any loss or damage caused by those structures or the flood water which is affected by the structure?
 - 2.2.5. Can an owner change their mind and require any NFM structures to be removed?
- 2.3. Legal complexities and a lack of clarity around issues such as ownership, maintenance, liability and consents have been highlighted consistently in the research as posing barriers to the delivery of NFM.
- 2.4. The majority of these issues are inextricably linked to land law.

- 2.5. The issues raised in the research interviews were sometimes specific *'it is not clear who will replace the barrier if it gets washed away'* and sometimes generalised *'it is not clear exactly who is liable for what'*. This becomes even more critical in the context of climate change and the projections of more rainfall and more extreme rainfall events. The issues associated with performance, damage and losses of NFM mechanisms, and legal responsibility for these issues will become more of an issue in future.
- 2.6. Anecdotal evidence gathered from discussions with an Environment Agency (EA) lawyer dealing with NFM issues confirmed that some of the perceived barriers to NFM had been identified by the EA as relevant to the success of NFM implementation and were being considered internally. Additionally, an internal report by the EA also stated that project teams were concerned about who will be responsible for features in terms of maintenance, inspection and unexpected challenges, for example failure of a structure.
- 2.7. "Assessing the Risk" written collaboratively by the Environment Agency, Forestry Commission, Forest Research (published May 2019 by ADEPT) identifies specific hazards and liabilities arising from installation of leaky wood structures. These include; property or infrastructure downstream being at risk from inadvertent flooding, backing up effects or deflected water extending beyond landowner's boundary and injury to the public. The guidance provides advice on mitigating these but does not deal with liability issues.
- 2.8. It is considered that most of the perceived barriers are not answered by the existing regulatory frameworks or rules around land law but can be dealt with in an agreement between landowners and stakeholders. The complexity of such agreements, however, is itself a significant perceived barrier to NFM.
- 2.9. If liability is not defined by agreement it is likely to be based on ownership of the asset or liability to maintain the watercourse upon which the asset is constructed.

3. Public perception and availability of information leading to a reluctance to enter into NFM agreements

- 3.1. Landowners are often unfamiliar with NFM options and funding arrangements. Some perceive the risks and liabilities arising from NFM works as being more significant than may be the case, and this leads to a reluctance to enter into NFM agreements.
- 3.2. Misinformation and misunderstanding of NFM, and a fear of the unknown, together with a lack of guidance or accessible information are all significant barriers to NFM.

3.3. Landowners and local authorities do not have easy access to funding for NFM initiatives, and the application of the usual formulas for demonstrating the benefits of flood defence initiatives may not produce the justification for committing public funds to NFM schemes.

4. Complexity of legal agreements and current funding arrangements

- 4.1. Most of the uncertainty around NFM, can be addressed through written agreements which set out the parties' rights and responsibilities around ownership, maintenance obligations, rights of access, exclusion of liability, duration of use of land, funding, compensation, testing and monitoring of NFM assets, and other issues which are perceived as barriers to NFM uptake.
- 4.2. Funding and NFM agreements prepared by flood risk management authorities tend to be complex and detailed due to the issues that are associated with the works, and the need for certainty. These agreements often deal with a wide range of issues, set quality standards and are drafted by lawyers using technical language.
- 4.3. Many landowners do not want to enter into complex legal agreements or engage in complicated funding processes. Stakeholder feedback suggests that they prefer straightforward short agreements that are set out in clear terms with a straightforward and uncomplicated application process.
- 4.4. The complexity of existing NFM agreements and some of the current funding schemes, for example the Countryside Stewardship Scheme, are disincentives or barriers to landowners who do not want complex or lengthy documents surrounding implementation of NFM measures on their holdings.
- 4.5. Short or informal agreements may not clearly set out all of the responsibilities and liabilities of the parties for NFM schemes, and this may itself be a barrier to landowners and funders getting involved in such initiatives. Short agreements which do not cover all eventualities are also likely to be perceived as a barrier to NFM by funders, authorities and those who must demonstrate an adequate return on public funds.

5. Consents

- 5.1. The cost and complexity surrounding the acquisition of consents for works on watercourses is a barrier to NFM works. A consent is required for in channel works and works within prescribed distances of the watercourse.

- 5.2. The consenting process is not well suited to some NFM works. If the proposed NFM works change after consent is obtained, a further consent may be required, at further cost.
- 5.3. Consents can authorise more than one NFM development on a watercourse and may also include future maintenance of the assets, but this needs to be included in the consent application. A lack of knowledge about the consenting process for NFM is likely to be a barrier to engagement.

6. Ownership of assets and features

- 6.1. Property or assets which are attached to or embedded in land normally become a fixture of that land under existing land law principles. Ownership of land normally includes all fixtures on or within that land. Riparian ownership of watercourses normally includes assets in or over watercourses, unless there is a contrary agreement in place.
- 6.2. NFM features which are installed on the land, for example bunds and pipework, would become fixtures of the land unless an agreement reserved ownership to another party.
- 6.3. The legal position in relation to less permanent NFM features is unclear. Where NFM assets rest on the land they could be chattels which are owned by the party who installed them, or by tenants and third parties.
- 6.4. Ownership of features will be relevant to maintenance obligations and wider liabilities. Written FRM agreements should set out ownership provisions.
- 6.5. Where there is a landowner and a tenant or occupier on the same piece of land, there are further complications surrounding ownership of assets or features. Rural and commercial leases will assign responsibility to one of the parties for maintaining a feature on or in the land during the term of the lease and if necessary, removing it at the end of the lease. NFM measures on leased land will have to factor in the parties' obligations under such contractual documents.
- 6.6. Internal Drainage Boards and Local Authorities deal with disputed ownership of culverting and pipework which has historically been installed by the public body; the asset appears to be a fixture, but the terms of any agreement between the body and the landowner is relevant. Landowners often have an expectation that where an asset is installed on their land, the party installing it will maintain it.
- 6.7. In some cases, water management agencies and public bodies do not wish to retain ownership or maintenance obligations.

6.8. Uncertainty surrounding ownership of NFM features is a barrier to NFM implementation. Many landowners do not want the liability that comes with ownership but wish to retain a degree of control over what happens on their land.

6.9. Agreements with landowners do not normally bind future landowners unless it is in a form that is registered on the title of the property. NFM agreements may lack the essential ingredients of an easement, for example a dominant tenement, and hence may not be enforceable against future owners.

7. Maintenance

7.1. Uncertainty surrounding maintenance liabilities is one of the biggest barriers to NFM implementation.

7.2. Some NFM features may require periodic maintenance dependent on their location. For example, an earth bund used for temporary storage of flood water is likely to require less maintenance than an in-stream structure (e.g. a leaky barrier).

7.3. Major maintenance that is not carried out by the regulator is likely to require consents and permits.

7.4. Concerns about maintenance are summarised in the following paragraphs;

7.5. Landowners:

7.5.1. do not want to assume maintenance obligations or be liable for repairs unless funding has been agreed and is available.

7.5.2. already have responsibilities as riparian owners which can be enforced by the regulator, and fear NFM features will increase maintenance obligations.

7.5.3. are concerned about the procedural costs and efforts required to obtain consent to carry out works in or near a watercourse.

7.5.4. do not know at the time of agreeing to NFM what their maintenance obligations will be.

7.5.5. do not want to be liable for claims arising from the failure of NFM features due to a lack of maintenance or defects.

7.5.6. want to retain control of their land, even where third parties are responsible for maintenance.

7.5.7. would often be liable to maintain as riparian owners where a third party has maintenance obligations that they do not fulfil.

7.6. Funders/contributors

7.6.1. want to ensure good value for money and may need to demonstrate that NFM features are serving their intended purpose over time.

7.6.2. may not have a statutory right of access to the land to check, maintain and repair assets and features.

7.6.3. run the risk that informal arrangements can be revoked or ended early, for example by a change of ownership of the land.

7.6.4. may need NFM assets to be maintained in good working condition to ensure they provide the intended levels of protection.

7.7. Lead Local Flood Authorities

7.7.1. have an obligation under the Flood and Water Management Act 2010 and the Land Drainage Act 1991/Water Resources Act 1991 in respect of flood risk management that may require them to undertake works at their cost.

7.7.2. may have maintenance obligations in situations of urgency or high risk, or where the relevant person cannot be located.

7.7.3. May have to demonstrate that maintenance is justified on a cost benefit analysis.

7.7.4. cannot predict the availability of future funds for maintenance or keep existing funding ring-fenced.

7.7.5. are concerned about protecting and maintaining assets which they have funded.

7.7.6. would need to reach an agreement with future landowners and occupiers.

8. Other liabilities

8.1. Concerns about other liabilities which are barriers to NFM schemes include:

8.1.1. Uncertainty about liability for defects and failures in NFM assets.

- 8.1.2. Liability for flooding caused as a result of an NFM asset or flooding not prevented by the asset.
- 8.1.3. Liability for unforeseen impacts for example to fish passage, wildlife, siltation and liabilities under other environmental legislation.
- 8.1.4. Occupiers Liability Acts 1957 and 1984 impose a duty of care on an occupier for injury suffered by third parties who are exposed to dangers while on land. This liability, and the measures that are required to discharge the occupier's duties are a barrier to some aspects of NFM, where storage of water on land or other NFM features introduce additional risks. The occupier may have to erect fences or signage or take other steps to discharge their duty.
- 8.1.5. Uncertainty about the rights of downstream beneficiaries of NFM schemes to require a feature to be maintained, for example creating a legitimate expectation of maintenance, or by introducing a duty of care.
- 8.1.6. A change in the law that affects or alters the status of NFM features. An example of this is the definition of reservoir in the Reservoirs Act 1975 by reference to its storage capacity (above pre-development land surface level). Any future reduction of that capacity could bring smaller water storage facilities within that definition and subjects them to increased maintenance obligations.

9. Duration of NFM scheme

- 9.1. A barrier to funding of NFM is uncertainty around the duration of any scheme and the level of flood protection that it will provide in the future. Where funding is conditional on establishing the value of a scheme or asset, that may not be possible without knowing how long it will remain in situ.
- 9.2. In the absence of an agreement an asset in or under the land, for example a pipe or culvert or raised mound, is likely to become part of the land and vest in the landowner.
- 9.3. An agreement between the stakeholders may prescribe the duration of a scheme, ownership of an asset and the length of time that an NFM asset will remain on the land. Where no such agreement exists, the law is unlikely to provide any protection to stakeholders where a landowner removes an NFM feature from their land or fails to maintain it.
- 9.4. Non-signatories to an agreement may not be able to enforce the terms of an NFM agreement, and this is likely to be a barrier to community funding of NFM.

9.5. There is a concern that the longer a NFM feature remains in place, the greater the chance that a landowner will owe a duty to downstream landowners to maintain it in good operational order. Obligations to third parties is a perceived barrier to NFM by some landowners who want to limit their liability to other landowners.

10. Rights of access

10.1. Internal drainage boards and local authorities have statutory rights of access under the Land Drainage Act 1991 for ordinary watercourses. The Environment Agency has a similar right under the Environment Act 1995 and the Water Resources Act 1991. Other organisations will not be entitled to enter land without the consent of the landowner.

10.2. Access may be a barrier to NFM, especially where funding is conditional upon monitoring and assessment of performance of NFM features.

10.3. Agreements allowing access may be revoked by a landowner, leaving assets inaccessible to those with maintenance obligations.

11. Future designation

11.1. A NFM asset or feature could be designated by the lead flood risk authority once in place, under the Flood and Water Management Act 2010.

11.2. Landowners perceive a risk that an informal agreement is subsequently formalised by designation of the feature or by its incorporation in a wider flood management scheme. This is as a barrier to NFM implementation because it impacts on a landowner's ability to deal with their land and represents a change of the arrangement between the parties.

12. Summary

12.1. There are a number of perceived barriers to NFM for landowners and occupiers, including liability for maintenance, damage to land, third party loss or damage, complexity of written agreements and a loss of control of their land. Perceived barriers to funders include uncertainty surrounding the duration of a scheme, maintenance obligations, availability of future funding, demonstrating value and the effectiveness of NFM assets installed by third parties.

12.2. Land law does not provide any degree of certainty to NFM stakeholders and funders. Certainty can be achieved by using written agreements which prescribe the rights and responsibilities of all parties. It is likely that these agreements will need to address many issues and will be reasonably lengthy.

12.3. Lengthy or complex agreements are themselves perceived as a barrier to NFM.

12.4. Most perceived barriers can be addressed by detailed written agreements. Because complex agreements are themselves perceived by some as a barrier, a balance should be struck between certainty and ease of use. One option is to prepare a standard form agreement written in plain English which is freely available for use on NFM projects. Another option is to provide guidance on the relevant aspects of NFM land law with suggestions on how to deal with each aspect in any NFM project.

Please contact us if you would like to discuss the matter further.

Yours faithfully

Schofield Sweeney