

**Written evidence submitted by Ali Morse, Acting Chair of Blueprint for Water**

**House of Commons, Environment, Food and Rural Affairs Committee**

**Inquiry into Flooding**

Thank you for the opportunity to submit written evidence to the inquiry into flooding. Unfortunately, due to lack of capacity within the Blueprint for Water membership, we have been unable to go through our usual detailed sign on process. Please, therefore, take this submission as a note from the Acting Chair of Blueprint for Water, Ali Morse.

In the absence of other colleagues, I am submitting this evidence drawing largely upon the experiences and recommendations of Wildlife Trusts across the country, who are actively involved in delivering a number of natural flood management schemes, and undertaking conservation land management which also delivers flood risk and other benefits.

Our key recommendation is that decision makers must take a more integrated approach to land and water management, ensuring greater cost-effectiveness and the delivery of multiple benefit outcomes. The Nature Recovery Network, being established under the Environment Bill, will provide a key means of identifying opportunities to deliver schemes which work with natural processes to reduce flood risk, and also provide biodiversity and other public benefits. As we recognise that flood risk management can usefully be implemented not solely along river corridors but across a whole catchment, the forthcoming Environmental Land Management (ELM) scheme will be a significant potential source of funding that can support land management (e.g. soil health) and specific interventions (e.g. Natural Flood Management techniques, NFM) that work with natural processes. Any barriers to the pooling of funding to support such techniques need to be resolved.

**1. Are the current national and local governance and co-ordination arrangements for flood and coastal risk management in England effective?**

The national strategic overview and advisory role of the Environment Agency (EA) will remain important in achieving the integrated approach to land and water management that will be required to deliver reduced flood risk in the face of increasing pressures including climate change. Working alongside other Risk Management Authorities and wider partners, EA's experience in working with natural processes will be important in ensuring that natural flood management techniques are deployed to maximum affect, and are considered as an integral component of Flood Risk Management (FRM) approaches (in line with the welcome direction outlined in the draft National FCERM Strategy for England, consulted on last year) rather than as a bolt-on.

The Nature Recovery Network, which will be established under the Environment Bill, will play a key role in helping to ensure that interventions and land management approaches for FRM are delivered in locations any ways which means that biodiversity also benefits.

**2. What lessons can be learned from the recent floods about the way Government and local authorities respond to flooding events?**

Recent flood events have highlighted that more could be done by Government and others to ensure that landowners are incentivised to make positive changes to land use and land management in critical locations, including in upper catchments and floodplains. The ELM Scheme should incentivise both specific interventions such as

Natural Flood Management installations, and broader management measures that enable the landscape to hold more water; in particular by encouraging a focus on soil health.

The restoration of functioning rivers and floodplains can also help to temper the impacts of both excess and insufficient rainfall, slowing, storing and filtering rainfall helping to reduce or delay peak river flows, and in times of sparse precipitation supporting the recharge of aquifers and the maintenance of river base flows. These benefits are in addition to the ecological improvements achieved by restoring ecological status in line with Water Framework Directive objectives.

Support will be necessary to enable all Risk Management Authorities to engage with opportunities to implement such nature-based solutions; some currently lack sufficient technical understanding of natural function and the interdependencies within catchments. Here, the Nature Recovery Network could help to identify opportunities to deliver nature-based solutions to flood risk which also provide biodiversity benefit, and will ensure that flood risk management interventions are not conceived and undertaken in isolation, but are planned in the context of wider catchment management.

### **3. Given the challenge posed by climate change, what should be the Government's aims and priorities in national flood risk policy, and what level of investment will be required in future in order to achieve this?**

We welcome the vision set out in the Environment Agency's draft FCERM Strategy for England which acknowledged that it is not possible to protect or defend against flooding and coastal erosion in all places and in all situations, and that resilience, achieved through an adaptive approach, is the means by which society can best deal with the issues of flooding and coastal change. To achieve resilience will require taking action to develop resilience within communities, infrastructure and the environment, the three being interlinked and not possible to separate out.

To this end, changes already made to the partnership funding calculator (e.g. to risk bands and Outcome Measures for the environment) will make it easier to secure funding for schemes that deliver multiple benefits, and to identify partnership contributions for those which do not qualify for full Grant in Aid funding alone. This is a positive step.

As the next 6 year programme is delivered in England, further beneficial changes to the calculator may be identified which could further facilitate the use of natural flood management techniques within flood schemes – such changes should be implemented as a priority since research has increasingly demonstrated that NFM measures are typically extremely cost-effective no-regrets interventions that provide multiple benefits to society including biodiversity enhancements, carbon storage, water quality protection, and opportunities for access and public engagement. Again, the Nature Recovery Network will aid in the identification of locations in which the greatest biodiversity benefits can be delivered by NFM interventions.

Looking ahead it will also be necessary to ensure that future varied funding sources can be effectively pooled to support the level of investment in FCERM that the country requires (both the “£1bn a year for the next 50 years” that Environment

Agency chief executive Sir James Bevan recently outlined would be needed for the building and maintenance of traditional defences, plus funding beyond that to invest in resilience). Resilient infrastructure and measures such as natural flood management are those where there is the greatest potential to secure support via a variety of funding mechanisms; as well as existing sources, future opportunities include developer contributions to secure Biodiversity Net Gain (already a requirement under the National Planning Policy Framework but specified at 10% under the Environment Bill), Environmental Land Management payments, and corporate and potential future national commitments towards Environmental Net Gain. The partnership funding mechanism must be updated if any barriers to the pooling of these funding sources are identified.

#### **4. How can communities most effectively be involved, and supported, in the policies and decisions that affect them?**

Community involvement in policies and decisions can be achieved through consultation, and through close working with landowners and other local stakeholders in the context of the Catchment Based Approach.

Learning from the Defra NFM pilots has found that sufficient time must be built into project programmes to allow for local-level engagement and that often scheme details are enhanced as a result.

There is often high community support for schemes that work with natural processes once initial engagement has taken place; as an emerging area of work with a growing evidence base, time needs to be taken to engage with the communities that could benefit from such techniques to explain their use and benefits, but once engaged, communities can often align behind the concept and use local knowledge to identify additional opportunities for interventions. One of the major values of such nature-based solutions is that typically they are low-cost compared to traditional flood infrastructure, meaning that communities at risk of flooding may benefit from schemes based on NFM techniques where traditional FCERM measures are not cost beneficial.

#### **5. With increasing focus on natural flood management measures, how should future agricultural and environmental policies be focussed and integrated with the Government's wider approach to flood risk?**

Funding & consenting regimes must not discourage action: Future agricultural and environmental policies need to work together to ensure that land managers are supported (rather than penalised) for implementing NFM measures.

There are some forms of land management that would be beneficial to flood risk management but that are not actively encouraged through environmental land management schemes currently. Taking action to enhance soil organic matter is one such example.

Worse though, there are aspects of land management that can help to reduce flood risk which are actively discouraged by the current land management funding regime: the deliberate and planned flooding of agricultural land to create new watercourses and permanent wetlands is not considered to be a temporary flooding event as the land is not being maintained in a state suitable for grazing or cultivation, and

therefore impacts landowners' BPS claims. This is a significant disincentive to the naturalising of catchments and deliberate creation of wetlands.

Similarly whilst woodland creation through planting is incentivised, there is no funding for woodland creation through natural regeneration, which again discourages landowners from allowing the natural formation of wooded areas; such areas may not only be cheaper to 'create' but may also provide greater biodiversity benefits than planted areas, and would benefit from a reshaping of funding rules.

Delivering schemes which incorporate or rely upon the restoration of natural processes can be difficult to achieve under the current outcome-driven consenting and funding regimes. As we become more confident that these techniques are effective, we must ensure that the funding approaches and outcome frameworks become less prescriptive and more able to value natural ecosystem function, based on natural environmental processes. Often such schemes will deliver multiple benefits, such as flood prevention and biodiversity enhancement for example; in this case we must ensure that neither funding regime / outcome framework acts as a barrier to implementation, and that co-funding is facilitated for all funding sources that originate from Government.

Within the land management sector, ELM could be the delivery mechanism for converting land from solely 'agricultural' activity to land used for the purpose of protecting water quantity and quality, in line with the commitment of using public money to fund public goods.

River Basin Management Plans or Catchment Plans should be used to highlight key sub catchments where NFM work could be most beneficial, with EA opportunity mapping used to aid the targeting of features such as cross slope hedgerows/woodland creation and other NFM measures.

Whilst many land managers are willing and even keen to allow the construction of NFM features on their land, a sticking point for some remains the question of future liability. Some are concerned about financial liabilities if a structure or series of structures fail, and others worry about maintenance responsibilities. Designing out risk can go a long way towards tackling these concerns and the sharing of best practice amongst practitioners must continue. Landowner representative bodies may play an important role in reassuring landowners about the scale of risk actually involved, and the means available to them to mitigate any residual risk; for example developing appropriate risk assessment processes. However, for those who require greater certainty, maintenance funding via ELM, and the availability of bespoke insurance or the confirmation that existing policies will provide protection, may be the only means of providing the confidence needed to enable projects to progress. The involvement of the insurance industry will be beneficial if the latter concern is revealed to be a wide-held one.

At the opposite end of the spectrum, a greater focus on abstraction could also be used to bring about flood management benefits. For example, tighter regulation on abstraction – perhaps with ELM payments being conditional upon compliance - could encourage greater water storage by land managers through on-farm rainwater harvesting. If managed appropriately this could also have the benefit of capturing heavy rains, reducing on-farm and downstream flood risk as well as resultant diffuse pollution from farmyards, tracks and fields.

**6. How can housing and other development be made more resilient to flooding, and what role can be played by measures such as insurance, sustainable drainage and planning policy?**

All development could be made more resilient to flooding by expanding the NPPF policies surrounding SuDS so that they are applicable to minor developments, and by requiring developers to consider runoff coming into the site, not just that generated onsite (i.e. seeking betterment).

In practice even currently-required sustainable drainage is often not delivered, with developers opting out on the grounds of price or practicality (CIWEM report). In order for all development to contribute to place-based resilience the barriers to effective SuDS implementation need to be tackled, including in particular the issues around adoption and future management.

With a predicted doubling of the number of properties expected to be built in the floodplain over the next 50 years, it is critical that these properties are sited away from areas that are predicted to most frequently and most severely flood, and are protected by development- and property-level flood resilience features.

With increasingly extreme weather and the predicted increase in the extent and frequency of flooding due to climate change, more needs to be done to facilitate the retrofitting of SuDS; it is not simply new developments that need to be protected. Whilst a betterment requirement may help to protect communities near to new developments from existing or future flood risk, this will not be sufficient to tackle flooding in all areas that may be at risk. Community funding should facilitate the retrofitting of SuDS, through S106/CIL, and the scope to use SuDS to protect areas vulnerable to flooding (both river flooding, the likely extent of which is relatively well-understood, and other forms of flooding, where understanding may need to be developed via an increase in mapping and modelling) should consider not just direct flood risk to the properties themselves, but also the risk of flood impact due to floods elsewhere (such as those which affect transport routes, and utilities supplies).

The development by the water industry of Drainage and Wastewater Management Plans provides an opportunity to ensure that synergies are identified; for example, SuDS features which could be sited to protect homes or infrastructure, and at the same time prevent water ingress to sewerage systems that may lead to the operation of polluting CSOs, would be beneficial on several fronts.

Considering the beneficiaries of potential schemes may also point to appropriate blended funding; combining WFD, water industry and developer contributions, for example.

Insurance companies could do more to encourage the uptake of property-level flood resilience measures by offering reduced premiums or excesses for homeowners that undertake property level protection, and by funding flood resilience measures when paying out for the repair of properties that have been flooded (i.e. 'building back better'), including both measures which enhance resistance to flooding (water exclusion) and recovery from flooding (e.g. use of water resistant materials). A code of practice advising on property-level flood resilience (PFR) that has been developed

by a Task Group led by the Insurance Industry and looks at, for example, Industry Standards and training for the installation of PFR measures, now needs to be promoted and adopted.