CIWEM Chartered Institution of Water and Environmental Management

Flood and Coast 2020 session 1: Audience Q&A – post event follow-up

The audience Q&A from the first session of Flood & Coast 2020: Creating climate resilient places, raised a large number of questions that unfortunately there just wasn't the time for the panel to consider during the event. We have themed these questions and the team have looked to provide answers or information from existing published documents, including the FCERM Strategy for England.

Questions around the Innovative Resilience Fund

Sample questions

- When will the innovative Resilience Fund bids go live?
- Is it part of the Capital programme?
- Are we encouraging LLFAs and Coast Protection Authorities to work together for Innovative Resilience Fund bids to tackle the big challenges on the coast?
- Is there a role for community crowdfunding – could this be used to support the bid?
- No mention of the charity sector e.g. Rivers Trusts. Can they be included?
- You mentioned inviting EOIs for £200m innovation funding later this year. What will be mechanism for inviting EOIs - will this be coordinated locally, regionally, published as national call etc?

Information in response

The aims of the Innovative Flood and Coastal Resilience programme are:

- To support the households, communities and businesses in 25 areas affected by flooding or coastal change now, and in the future, to adapt to a changing climate by improving their resilience to flooding and/or response to coastal change.
- To work with local partners to trial and evaluate the costs and benefits of different actions and explore how they can work individually and together in a place to improve resilience and adaptation of households, communities and businesses to flooding and/or coastal change.
- To inform the development of future flood and coastal erosion policy and funding programmes (post 2027).
- The programme will run for 6 years from 1 April 2021 and end on 31 March 2027. Applications for this new Innovative Flood and Coastal Resilience Programme will open in autumn 2020. The programme is being jointly developed by Defra and the Environment Agency. The programme will be managed and administered by the Environment Agency.

- The application process will start with a simple and short expression of interest form. The LLFAs and CPAs will have 8 weeks to work together with partners to develop their expressions of interest.
- Once assessed, the short-listed projects will be invited to a proposal interview. The Environment Agency will provide each of the 25 selected projects with some funding to develop their proposals with more detail during spring 2021, before the projects formally start in summer 2021.
- The Innovative Flood and Coastal Resilience Flood and Coastal programme sits alongside the capital programme. It is designed to support and complement delivery of the programme by providing funds to undertake activities which may not be funded through the capital programme. The funding for delivery of the resilience activities between 2021/22 and 2026/27 will be capital funding. However, because this is an innovation programme there is more scope to use this funding to pilot, test and trial innovative solutions that may not usually attract capital funding. This funding can be used to support project teams to work on this programme, develop new guidance, tools methods and data. The Environment Agency will give examples of types of resilience activities that will attract funding by this programme in the prospectus (to be published autumn 2020).
- Projects within the Innovative Resilience Flood and Coastal programme must be led by a single LLFA or CPA. Although a single LLFA or CPA will need to lead the project, successful projects will represent a consortium of other local partners. This could include other Risk Management Authorities (including the Environment Agency), neighbouring LLFAs/CPAs, Regional Flood and Coastal Committees, emergency responders, non-governmental organisations, local influencers, partners and of course, the people who live and work in the communities who are likely to be interested in or affected by the work.
- Other risk management authorities (i.e. water and sewerage companies, highways authorities which are not LLFAs, district councils and internal drainage boards) who wish to participate should approach the relevant LLFA or CPA and ask to collaborate with them on an expression of interest.
- Funding can be used to help develop approaches to enable adaptation on the coast. It cannot however be used to compensate owners.
- Although sources of funding that enable a project to deliver more and/or a wider range of outcomes will be welcomed.

Questions around nature-based solutions

Sample questions

- ELMS discussions currently seem to be giving more focus on land-based solutions with less debate on flood and water resource management. What is being done to increase the use of ELMS in sustainable water management?
- The new strategy majors on the role of nature-based solutions. Given the fundamental differences in delivery to "traditional" schemes, how will this be realised?

Changing the partnership funding calculator may help but isn't enough. Is a different model needed?

- Tony raises a good point on soils. Are investing enough in soils and land management science and education and could this be a step change action across flooding, water resources, environment and agricultural production and much more?
- Why can't we remove the "wall" that prevents ELMs being rolled out in the uplands where we can hold water and get working on it instead of talking? There is a receptive group of land managers watching this discussion.

Information in response

Our farmers produce world class British food which is enjoyed here and around the globe. They are also vital stewards of our natural environment – from managing our beautiful landscapes, and supporting our supply of clean water, to protecting us from natural hazards, such as flooding.

The environmental challenges we face are far reaching: ranging from biodiversity loss and decline in our air and water quality, to climate change and its wide-ranging impacts.

The public goods ELM will pay for include:

- clean and plentiful water
- protection from and mitigation of environmental hazards
- mitigation of and adaptation to climate change
- thriving plants and wildlife

Given the market does not adequately reward the delivery of environmental public goods, ELM will be an effective way for government to intervene and utilise public funding to deliver them.

This represents a move to a significantly different system to the existing common agricultural policy (CAP)-based approach. It is important to ensure:

- There are high levels of uptake of ELM
- Objectives are clear for land managers
- Land managers have access to effective advisors services
- Positive action and outcomes are recognized
- There is a need to balance delivering improvement with rewarding existing good practice
- There is a layer of local prioritisation within ELM
- ELM is not overly prescriptive
- Compliance requirements and approach to enforcement within ELM are proportionate, and
- Applicants have confidence in the delivery process.

Further information on ELMs, it's delivery and its role in delivering integrated water management outcomes including natural flood management is presented in CIWEM's webinar series from summer 2020, 'Nature-based solutions & the Environmental Land Management Scheme' which is available to view at www.ciwem.org/events/nature-based-solutions-webinar

Questions around community engagement

Sample questions

- Does the panel think talking more in terms of flood-affected communities rather than "properties at risk" is a helpful way forward? Many more people are affected (to varying degrees) by flooding beyond those with water in their properties.
- What new tools / mechanisms do communities require to help them engage with the Environment Agency and share the important local data and evidence referred to today so that this can be used to inform and improve our strategic assessments.
- How can we better engage with those vulnerable communities where the impacts of climate change and flooding are often more felt? Those that may not be able to help themselves and where communities are more deprived and transient.

Information in response

We need to build a nation who understand their risk to flooding and coastal change, and know their responsibilities and how to take action. To do this, we need to educate and inspire people to take action before flooding or coastal change happens. Preparing and responding to incidents is an essential component of greater flood and coastal resilience. We already have a world class flood forecasting and warning service. We need to continue to develop digital services that better communicate flooding and coastal change and increase awareness of the risks people face.

Progress is already being made, flooding and coastal change is recognised as a key impact of climate change. There are many individuals and organisations providing leadership and helping to champion better communication and management of the risks from flooding and coastal change.

People want to have a voice in shaping how resilience to flooding and coastal change is achieved in the places in which they live and work. Risk management authorities need to ensure that people and places are at the heart of local decision making. They also need to invest in the engagement skills needed to take a more inclusive approach to the future challenges flooding and coastal change present.

England has a world-class flood forecasting and warning service. It provides people, businesses and the emergency services with the information to help them prepare for a flood. Approximately 1.4 million properties are signed up to receive free flood warnings. The Environment Agency has been continually improving its warning service to enable people to take timely and appropriate action. Greater use of digital services has the potential to also transform the way we communicate flood and coastal risk management information to people so they can make better local choices.

There are many organisations that play a role in managing what happens to people and the environment during and after flooding and coastal erosion. This Strategy seeks to continue to better join up the organisations involved in providing incident response and recovery to provide a consistent and coordinated service. This includes risk management authorities, local responders and the insurance sector but it also needs to more actively involve third-sector partners.

Risk management authorities will work with partners to:

- support communities to better prepare and respond to flooding and coastal change, including transforming how people receive flood warnings
- ensure people and businesses receive the support they need from all those involved in recovery so they can get back to normal quicker after flooding
- help support communities with managing the long-term mental health impacts from flooding and coastal change
- develop the skills and capabilities needed to better support communities to adapt to future flooding and coastal change
- become a world leader in the research and innovation of flood and coastal risk management to better protect current and future generations

To help achieve this, risk management authorities need to communicate the risks and consequences of flooding and coastal change more effectively and, crucially, to reach a much wider audience than is currently the case. Much can be achieved through more effective use and dissemination of the information risk management authorities already hold and by conveying it in a way that people can most easily understand. In recent years technological advances, such as virtual reality, have helped risk management authorities find new and innovative ways of engaging with communities on flooding and coastal change projects. Community groups also have a key role in communicating risk and helping risk management authorities promote shared ownership of the actions local people need to take.

Digital tools and services provide a powerful way of engaging with large numbers of people to communicate the risks from flooding and coastal change. They can also help to tailor information to meet the needs of end users. For example, individuals may want specific information about the impact of flooding on where they live and work while businesses may want information to inform their flood insurance or investments in property flood resilience.

It is estimated that 1-in-10 of the adult population of England now use our digital services. Three-quarters of the 8 million visits a year to Environment Agency's GOV.UK web pages are flood related and this is continuing to increase. In 2019 more than 80% of the 500 million hits on Environment Agency open data related to flooding and coastal change information (Environment Agency, 2020d).

Ensuring public participation in a fair and inclusive way is not always easy. Currently, not everyone is able, or willing, to give their time. Risk management authorities also need to strike a balance between the things they can do and the decisions they make, as well as legal, financial or practical constraints. Nevertheless, listening to peoples' views and experiences leads to better solutions. It also facilitates more inclusive approaches embracing the views of different cultures in society. It is essential that risk management authorities invest in the

engagement skills and capabilities to enable them to better support communities on adaptation to future flooding and coastal change.

The Environment Agency has undertaken research to explore how communities and risk management authorities can better work together to plan and adapt to flooding and coastal change. It identifies 5 challenges that risk management authorities need to overcome when working with communities:

Readiness: many communities and risk management authorities are not yet prepared to engage in planning and adapting to future flooding and coastal change especially where climate change is a contributory factor. Engagement methods need to recognise and manage peoples' emotional responses to change, as well as their capacity to engage in deliberations over complex future choices for their places.

Framing information: the way information is presented tends to reflect the interests and assumptions of those producing it. Specific words may mean different things to different people, creating the potential for misunderstanding. The technical terminology used by risk management authorities to talk about flooding and coastal change can sometimes affect community understanding and limit engagement.

Climate change, emotions and mental health: fears and anxieties about climate change can shape peoples' engagement with adaptation planning, and generate complacency and a sense of helplessness. Collaboration in decision making has the potential to positively affect mental health, build community resilience and reassure people that they have a voice.

Place attachment, culture and identity: peoples' emotional connections to the places where they live and work can shape their willingness to take part in adaptation planning. Engagement methods need to be sensitive to the meanings and emotions associated with particular places.

Power and politics: some adaptation discussions and decisions about managing future flooding and coastal change will be inherently political and contentious. Careful attention needs to be paid to developing engagement methods that consider both representation (of community groups and interests) and the representativeness (the extent to which participants represent the wider community). Source: Environment Agency (2019l) 'Working together to adapt to a changing climate: flood and coast'.

Working with education providers to develop future flood and coastal change management skills

In 2018, the Environment Agency worked with the Geographical Association to produce materials for geography teachers, which supported the existing national curriculum for GCSE and A level exams. Topics covered include the causes, effects and responses to flooding and coastal change.

Since 2002, the Environment Agency has supported the Flood and Coastal Engineering Higher Education programme. In this time, over 460 people have graduated with either a Foundation Degree, BSc or Masters in River/Flood and Coastal Engineering. The programme

is currently offered through Brunel University, London in partnership with HR Wallingford. The courses provide students with a mix of academic study and work-based placements.

Questions around Net Zero

Sample questions

- What are you doing to facilitate the Net Zero Carbon targets?
- It would be great to have some explicit messages from the EA around Net Zero?

Information in response

- The government has enshrined in law a commitment to reach net zero carbon emissions by 2050. It is important all those involved in managing flooding and coastal change show leadership in achieving this ambitious target.
- The Environment Agency (2019) has set itself a goal to become a net zero organisation by 2030. To achieve this FCERM will need to play its part.
- There are two main ways we can tackle the impacts of climate change, which includes flooding and coastal change. These are: mitigation (reducing or limiting the effects of greenhouse gases that bring about climate change) and; adaptation (changing our lifestyles, economy, infrastructure and local places to make us more resilient and adaptable to future consequences).

Questions around relocation of communities

Sample questions

- What are the panel's views on facilitating relocation for coastal communities at risk of erosion and sea level rise? Resilience doesn't have to be in situ. Relocation could be more cost beneficial to the nation.
- We can have adaptive, resilient communities on the coast, as per the excellent work being done by CPE. How do we get resilient individuals, when they need to relocate – no building back better on an eroding or regularly inundated coast?
- With long term climate change, relocation away from areas at high flood risk near rivers and estuaries will be needed in a similar way to approaches on the coast described by Karen Thomas. How will this be addressed through the strategy?

Information in response

- The Environment Agency recognises that in some cases the need for communities to transition and adapt to flooding and coastal change will be difficult and, in some places, controversial.
- We will not be imposing abandonment or relocation on people, instead those best placed to support will work with those impacted. This will take time, in many places a long time, so we need to start having these conversations now. Not only will this help people come to terms with transitioning and adapting, but it will help those supporting organisations to put in place everything they can to help.

- As with ‘building back better’, we need to ensure that everywhere, people are at the heart of decisions about the place where they live.