



Open Report on behalf of Andy Gutherson, Executive Director - Place

Report to:	Flood and Water Management Scrutiny Committee
Date:	22 February 2021
Subject:	Flood and Coastal Resilience Innovation Programme

Summary:

This report provides a progress update on the development and submission on behalf of a Greater Lincolnshire partnership of an Expression of Interest in the Defra Flood and Coastal Resilience Innovation Programme.

Actions Required:

The Committee is requested to:

1. note the report and the progress made on the development and submission of the Expression of Interest; and
2. in the event of a successful Expression of Interest, support the further development of the resilience innovation programme for Greater Lincolnshire.

1. Background

In the 2020 Budget, the Government announced a £200 million fund for a flood and coastal resilience innovation programme to help deliver the Government's policy statement on flooding and coastal erosion and the Environment Agency's National Flood and Coastal Erosion Risk Management Strategy for England.

The programme will allocate £150 million of the £200 million to 25 local areas, which could be a county, city, town or village. It could also mean a river catchment, a tidal estuary or part of the coast. On average, each area that makes a successful bid will receive £6 million between 1 April 2021 and 31 March 2027.

Aims

The aims of the programme are to:

- encourage local authorities, businesses and communities to test and demonstrate innovative practical resilience actions in their areas.

- improve the resilience of 25 local areas, reducing the costs of future damage and disruption from flooding and coastal erosion.
- improve evidence on the costs and benefits of the innovative resilience actions and demonstrate how different actions work together across geographical areas.
- use the evidence and learning developed to inform future approaches to, and investments in, flood and coastal erosion risk management.

The remaining funding will be used for other flooding and coastal resilience activities at national level, including long term planning for climate adaptation in the Thames and Humber estuaries, the Severn Valley and Yorkshire.

Programme Criteria

The actions eligible for support from the programme are clearly identified, and are listed for convenience in Appendix A. In addition, any proposed actions must meet all the following five principles.

- Achieve practical changes which increase resilience within the project area by reducing the likelihood or consequences of flooding or coastal erosion.
- Provide public benefits.
- Be consistent with existing flood and coastal erosion plans.
- Demonstrate added value, for example going beyond other local resilience work programmes and other funding mechanisms, or work with actions funded by other routes.
- Demonstrate innovation, building on (but not duplicating) existing evidence and previous work.

Defra has additionally defined what 'innovation' means in the context of this programme:

- Combinations of actions that maximise overall resilience
Different resilience actions working together to improve resilience to flooding and coastal change, demonstrating how actions complement one another, and add more value compared to individual actions
- Broadening the range of resilience actions
Projects that fill gaps in evidence on the costs and benefits of particular types of resilience actions, that roll out actions that have only been trialled in a limited number of places or circumstances, and trialling new flood and coastal resilience or adaptation activities
- Increasing uptake and achieving resilience actions
Includes new approaches to achieve resilience, for example using new partnerships, different ways of working or funding projects to achieve the outcomes, or actions that overcome existing blockers or barriers

Developing an Expression of Interest

The Resilience Innovation Programme was announced in October 2020, and the closing date for the submission of Expressions of Interest was 29 January 2021.

Lincolnshire County Council led on the development of a collaborative expression of interest through the flood and water management partnership, and based on the Greater Lincolnshire geography. This includes North Lincolnshire Council, North East Lincolnshire Council, North Kesteven and East Lindsey District Councils, Internal Drainage Boards, the Environment Agency and Water Companies. Within the Council a range of internal services are engaged, including Highways, Emergency Planning and Business Continuity, and Countryside Services.

The emphasis was on developing a single joint expression of interest to be submitted for Greater Lincolnshire.

The partnership outlined a number of potential high-level actions which meet Defra's programme principles and criteria for innovation through joining up a range of activities and applying them in new and more effective ways.

These potential actions included:

- Catchment-wide flood risk modelling which joins up currently separate datasets to improve predicting flood risk especially when more than one source of flooding is involved.
- Minimising groundwater flood risk and utilising it as a resource, for example to avoid drought. At present groundwater is not widely understood, and very few, if any Lead Local Flood Authorities (LLFAs) have developed a methodology for managing it effectively.
- Sustainable pumping operations – 40% of Lincolnshire's area depends upon pumped land drainage systems, and the use of solar power and on-site battery storage to reduce the carbon emissions of pumping stations offers a new means of contributing to countywide emission reduction.
- Local Parish Flood Stores, enabling flood wardens to assist residents with immediate flooding issues, and supporting the broader emergency response effort. Although trialled in a number of locations by emergency planning, this would involve a wider roll-out of previous initiatives and support communities in developing stronger local resilience.
- Working with the agricultural sector to minimise flood risk and enhance climate change resilience, for instance via natural flood risk management, maintenance of assets and plant genome engineering.
- Building upon work previously undertaken by the East Coast Tidal Surge Planning Committee to enhance the resilience of coastal communities to tidal surges.

The Committee will be aware of the challenges currently being faced as a result of elevated groundwater levels, which in some areas are exceptionally high. Developing an effective approach to managing groundwater flood risk offers the greatest opportunity to meet Defra's innovation criteria, but it also offers a means of linking up a wide range of approaches across many of the areas identified above, including linking into wider issues of environmental management and community resilience.

Timescales

- Develop expression of interest to be submitted by Lead Local Flood Authorities and Coastal Protection Authorities by 29 January 2021.
- Assessment by Defra during February 2021.
- Selection of 25 Expressions of Interest for further development by March 2021.
- Development of projects, with funding available for development work through the Environment Agency – by June 2021.
- Project implementation, June 2021-April 2027. The 25 selected local areas will receive financial approval to develop an outline business case and supporting activities, including engagement and modelling.

Funding

Funding will vary depending on the detail of the 25 successful submissions. The Environment Agency has been tasked with allocating funding across the 25 areas, although advice is to assume an average of £6m available per proposal over the six year period.

2. Conclusion

The Innovation Programme is an opportunity to contribute to a national research project to improve community resilience to future flood risk. By working on a source of flooding that is little understood, in collaboration with adjacent authorities as well as Lincolnshire flood risk partners, we submitted a strong expression of interest in January. If successful, this will then be further developed as a programme of measures to join up existing work and provide greater future resilience for local communities.

3. Consultation

a) Risks and Impact Analysis

N/A

4. Appendices

These are listed below and attached at the back of the report	
Appendix A	List of eligible innovative resilience actions

5. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Paul Brookes, who can be contacted on 07787836877 or paul.brookes@lincolnshire.gov.uk.

APPENDIX A - LIST OF ELIGIBLE RESILIENCE ACTIONS

Reproduced from the Environment Agency's guidance "How to submit an expression of an interest to become part of innovative action on flooding and coastal change" published 9 November 2020.

Integrated water management solutions

Trial integrated water management solutions which increase resilience to flooding and coastal change whilst also providing other benefits such as:

- managing water levels
- improving water quality
- reducing drought risks
- helping nature recovery
- mitigating the impacts of climate change

This might involve:

- retrofitting sustainable drainage systems (SuDS)
- dual use water storage for flood attenuation and water resources, or rainwater harvesting
- gathering cost-benefit information on these actions, particularly on the non-flood and coast related costs and benefits

Nature based solutions

Implement nature based solutions which increase the resilience to flooding and coastal change. These actions will also provide secondary benefits such as:

- managing water levels
- improving water quality
- reducing drought risks
- helping nature recovery
- mitigating the impacts of climate change

Nature based solutions must provide new cost-benefit information and evidence of its performance over their lifetime. There is particular interest in trialling nature based solutions which:

- include mid-catchment and lowland approaches (including water storage)
- improve the resilience to both coastal flooding and coastal erosion
- trial new ways of working with land managers and farmers, for example working with existing catchment sensitive farming officers

Property flood resilience

Proactively engage with local communities to encourage them to fit property flood resilience (PFR) measures in homes and small to medium businesses. Grants of up to £5,000 to fit PFR measures are available.

Examples of innovative proactive engagement include engaging with property owners seeking building regulation approval, or refurbishing or renovating properties. The actions should target those at high flood risk or who have flooded within the last 3 years. Property owners will need to adapt their design, or use of materials, so they can recover and restore their premises quickly after a flood.

Community infrastructure resilience

Undertake activities which improve the resilience of existing public or community owned infrastructure to flooding and coastal change. Examples of these include local roads, community centres, libraries and sports halls. This could be achieved by:

- implementing sustainable drainage
- installing property flood resilience measures
- adapting roads to convey floodwater away from properties or / infrastructure
- providing temporary or secondary defences

Please note this is for modifying existing infrastructure. It is not for new infrastructure, which should be designed to be resilient, or privately owned infrastructure. Major infrastructure operators and private operators are responsible for the resilience of their own infrastructure. Nor is this for local authority business as usual responsibilities for example, clearing drains. Schools can access resilience funding from the Department for Education.

Monitoring and management of local assets

Create new monitoring infrastructure or asset management systems, or both, for existing locally owned (non-Environment Agency) flood risk management assets for example:

- bridges
- dams
- walls
- natural flood management
- sustainable drainage systems

Please note that this should enable improved monitoring and management of local assets. This will help to understand how they work in combination to improve resilience to flooding and coastal change, alongside Environment Agency assets.

Minimise damages and disruption to small and medium sized businesses

Work with small and medium sized businesses to identify resilience actions which could minimise disruption and damage to businesses from flooding and coastal change. The businesses must be in the local area. The project could include minimising disruption and damages to assets, supply chains and operations.

Please note that this is also about developing new learning, advice, approaches and guidance to support other businesses.

Businesses will be responsible for implementing and funding the resilience actions they choose to progress.

Community and voluntary sector action to be better prepared and recover more quickly

Test innovative ways to better involve communities and the voluntary sector in collaborative decision making about how to manage the risk of flooding and coastal change their area. Some examples are to:

- help communities become better prepared to manage their own risk
- build community and voluntary sector capacity and skills to recover from flood events

Please note this should build on existing evidence and approaches, and develop new learning, advice and guidance to support work with the community and voluntary sector.

Local emergency response equipment

Provide local emergency response equipment for the community to use when there is a flood, for example:

- flood sacks
- temporary barriers
- safety equipment
- pumps

Please note that this should include training to ensure the users have the appropriate skills to use, locate and store the new equipment. This action should encourage new behaviours in community resilience and communities to respond to the risks of flooding and coastal change.

Enhanced flood warning systems

Develop and test enhanced or new localised flood warning systems.

Please note that these must add to, and fit in with, existing national arrangements.

Investigate policy challenge areas

Investigate and conduct a thorough local assessment of selected policy challenge areas. The assessment should set out ways to overcome one of the following 3 challenges, and then implement some of the resilience actions identified.

The challenges are:

- balancing agricultural, flood and environmental priorities in low-lying agricultural land
- meeting the need for major new developments in areas with flood risks
- retrofitting drainage and water management arrangements in urban areas

Please see information about policy challenges for more details on this action. The Environment Agency will select one local area to take forward each challenge. Each area will need to submit a report to Defra and Environment Agency within the first 2 years. The reports will provide a basis for local action, inform wider decision-making and the operational implementation of resilience actions.

Some of the approaches and actions identified will be implemented within your local area.

If the resilience action you want to do is not on this list, please add it to your combination of resilience actions and make a case for it. However, it must meet the criteria specified in the types of innovation.

Resilience actions that are not eligible

Construction of new community flood and sea defences

This includes formal engineered structures such as:

- walls
- dams
- artificial channels
- water control and pumping installations,
- breakwaters
- groynes
- artificial foreshores

Recovery actions following a flood event

This applies during the lifetime of this programme, including compensation for households or property owners impacted by flooding and coastal change.

Business as usual actions

This includes actions normally expected of risk management authorities (RMAs) or required by statute.

Contribution to funding under certain other programmes

This programme funding cannot be used as a contribution to FCERM partnership funding or for an action which has been funded under other programmes.

We encourage projects to use other funding mechanisms, for example, Environmental Land Management schemes and the Nature for Climate Fund. Projects may seek to integrate with actions funded through other funding or similar routes, but there must be no duplication.

Programme funding

Funding will vary depending on the resilience actions that the projects from the 25 local areas provide. The Environment Agency will decide how much funding to allocate when they assess the expressions of interest (EOI). Each local area should prepare an EOI assuming there will be an average of around £6 million in total. The Environment Agency will make this funding available to projects from the 25 local areas over the 6 year period.

Each local area will need to provide detailed assessments of the benefits and costs as the proposals develop. The Environment Agency has designed the expression of interest so the viability and benefits of each proposal can be easily demonstrated. This will allow a high level value for money check to be completed during the assessment process. The selected areas will need to develop a full business case and submit it for assurance.