

# FCERM update paper

# July 2019

## Planning for the future

### Flood and Coast 2019

The Environment Agency convened the fourth Flood and Coast Conference from 18 – 20 June 2019 in collaboration with conference organisers Trio. The Advisory Committee have done an excellent job inviting presentations and papers which have shaped the conference programme.

This year's event supported the development and implementation of the new National FCERM Strategy and build on renewed energy in the public debate around climate change. Each day was focused on one of the themes from the strategy.

Day 1: A climate resilient nation: a shared vision to 2100

Day 2: Today's infrastructure resilient in tomorrow's climate

Day 3: Digital, skills and the work we need to do together to build a nation of climate champions

There were many great presentations, discussions and debates over the 3 days of the conference. Emma Greenwood, Youth MP for Bury, brilliantly illustrated what we need from a nation of climate champions. Emma challenged us all to talk about the decisions and actions we must take, make them real, show that everyone can make a difference and make it now. Her challenge to us to act on behalf of young people was inspirational.

### Draft FCERM Strategy 2100 consultation

On 9 May we launched the start of our consultation on the draft national flood and coastal erosion risk (FCERM) management strategy for England. The draft strategy marks the culmination of engagement with over 90 organisations. In his climate change speech last year, the Secretary of State, Michael Gove, recognised that we need to “explore new philosophies around flood and coast management”.

The draft strategy sets out a national ambition for England. Every place is different and there is no one size fits all solution to flood and coastal resilience. We need to put people and local communities at the heart of decision making. The strategy is a key commitment in the government's [25 Year Environment Plan](https://www.gov.uk/government/publications/25-year-environment-plan) (<https://www.gov.uk/government/publications/25-year-environment-plan>) and sets out how together we can reduce the risk of harm to people, the environment, and the economy from flooding and coastal change.

The draft strategy sets out a vision for “a nation ready for, and resilient to, flooding and coastal change – today, tomorrow and to the year 2100”. It has three ambitions:

- Climate resilient places
- Today's growth and infrastructure to be resilient in tomorrow's climate
- A nation of climate champions, able to adapt to flooding and coastal change through innovation.

On 4 July 2019 the [external public consultation \(https://consult.environment-agency.gov.uk/fcrm/national-strategy-public\)](https://consult.environment-agency.gov.uk/fcrm/national-strategy-public) closed. In early September 2019, we will hold workshops with FCERM strategy working groups to further explore contentious issues emerging from the consultation and to help inform strategy implementation. This will inform an Advisory Group to provide steer and ensure that we are listening to the views raised by stakeholders.

We will be engaging with partners to produce an action plan which will sit alongside the final published strategy. The action plan will seek to capture immediate actions and commitments that deliver the measures set out in the draft strategy.

We plan to submit a final strategy to the Secretary of State for approval as soon as possible after the government’s policy statement. We are working with Defra colleagues to ensure there is a strong relationship in developing both the final strategy and policy statement. We plan to publish the final strategy in 2020.



**Flood and coastal change** affects us all.  
Have your say.

#FCRMStrategy2100

## Long Term Investment Scenarios (LTIS) 2019

LTIS brings together our understanding of long-term investment scenarios for flood and coastal erosion risk management (FCERM). It uses new climate change, population and mapping data to set out potential future scenarios, assessing the costs and benefits of long-term investment to meet these challenges.

LTIS is evidence which government and others will use to consider future policy and investment choices. LTIS 2019 has already been used as part of the evidence base for the FCERM 2100 Strategy.

We have published the LTIS 2019 key findings on gov.uk (<https://www.gov.uk/government/publications/flood-and-coastal-risk-management-in-england-long-term-investment/long-term-investment-scenarios-ltis-2019>) . We have also developed an interactive web-based visualization tool (<http://ltis.jacobscloud.com/>) that draws on the 8,000 scenario outputs from some of the national LTIS outputs. The LTIS Visualizer will allow users to see the effects of national investment choices for different FCERM options, and find the mix of national investments that gives the best value for money.



## Spending Review 2019

We are working with all departments across the Environment Agency and the Regional Flood and Coastal Committees (RFCCs) to develop a range of funding scenarios for consideration in Spending Review 2019 (SR19). We are listening to feedback and seeking to make changes to the partnership funding rules and key outcomes of the future investment programme. We are putting more emphasis on the wider benefits that flood and coastal erosion schemes achieve for people, the environment, local economy and other infrastructure such as schools, hospitals, road and rail. We are expecting the settlement to be announced in the Autumn Budget 2019.

## Apprenticeships

We have recently led the development of a new Level 3 Water Environment Worker Apprenticeship Standard. We are also in the process of confirming national training provision and plan to start enrolling apprentices in September 2019.

The Level 3 Water Environment Worker Apprenticeship Standard was created with partners from across the sector. We should see a range of public and private sector employers start to enrol their own apprentices onto this Standard later in the year. The Standard is designed to support the training and development needs of a range of occupations involved in the management of the water environment. The apprentices will focus on creating a safe environment where people can enjoy our water environments and the surrounding land and buildings, whilst protecting the environment, and creating habitats for species to thrive.

In 2020, government are introducing T Levels, which are two-year programmes equivalent to A Levels and to Level 3 Apprenticeships. We are looking at what role we could play in supporting T Levels and how they could attract and develop the next generation of climate change champions.

## Working with others

### The 6 year Capital Investment Programme

We are in to the final 2 years of our 6 year capital investment programme and we remain on track to deliver our target of 300,000 homes better protected from flooding and coastal erosion by March 2021. Over the first 4 years of the programme, the Environment Agency and other Risk Management Authorities have better protected over 193,000 homes, against a target of 185,000 at this point in the programme. This is a significant achievement by all those involved.

We have also secured a total of £486m partnership funding contributions to date within the current 6 year programme. We are confident we will secure the remaining partnership funding contributions required, and meet our settlement condition of 10% capital efficiencies over the life of the programme. We remain confident we will reach our target of better protecting 300,000 homes by 2021. However, we will continue to work together with our partners across the country to manage capital programme delivery and put in place interventions to ensure a successful outcome.

Earlier this year, we published our updated capital investment programme on [gov.uk](https://www.gov.uk/government/publications/programme-of-flood-and-coastal-erosion-risk-management-schemes) (<https://www.gov.uk/government/publications/programme-of-flood-and-coastal-erosion-risk-management-schemes>) setting out the planned programme of works for the final 2 years. This is a live programme and is updated each year. We are about to commence our final refresh of this current 6 year programme.

## Natural Flood Management update

Natural Flood Management (NFM) provides the opportunity to manage flood and coastal erosion risk by protecting, restoring and emulating the natural processes of catchments, rivers, floodplains and coasts. In the 2016 Autumn Statement the government allocated £15m to 60 projects across England, creating the NFM programme, in order to learn more about these interventions.

As of May 2019, 50 projects have started work on the ground: 22 Catchment Projects and 28 Community Projects. Three of these have completed their works and are in their monitoring phase.

The photos below are of the “Upper Dane Slow the Flow Project”, a Community Project led by Cheshire Wildlife Trust. They show the site before and after the installation of the leaky structures. The measures have already been put to the test following heavy rain in Oakenclough, where they slowed water flow and the scrape filled up.



We recently published the monitoring guide summary. This will support project teams to select the appropriate monitoring to be able to evaluate the effectiveness of the NFM measures. The guide will be supplemented with a series of workshops around the country and a webinar to help project teams get the best from it.

## Asset Management Open Data

Asset Management is now sharing its inventory, capital and maintenance programmes as open Linked Data via [data.gov](https://environment.data.gov.uk/asset-management/index.html) (<https://environment.data.gov.uk/asset-management/index.html>). This service allows members of the public to view the work we do in an open and transparent way and check what we are doing in their local area. Customers can also access the data in the correct format to integrate the data seamlessly into their data services. The site has been popular, with over 41,000 data requests in a single week. This has reduced the requirement for our staff to supply the data manually, and making us a more digitally-enabled organisation.

## HS2 update

We are supporting Lead Local Flood Authorities with their regulatory function with work relating to High Speed Rail. This stems from Schedule 33 of the High Speed Rail (London to West Midlands) Act 2017 where we have inherited an enhanced strategic overview role.

Schedule 33, Part 5 sets out that the Local Drainage Authority must have regard to conditions issued by the Environment Agency or must consult the Environment Agency in respect of their own conditions. Full wording can be found [here](https://www.legislation.gov.uk/ukpga/2017/7/schedule/33/enacted) (<https://www.legislation.gov.uk/ukpga/2017/7/schedule/33/enacted>).

The practicalities of how we work are still being established, but we are planning workshops with a selection of Lead Local Flood Authorities to agree standards to which HS2 Contractors will



adhere. This will cover their role in respect of ordinary watercourse consenting but also surface water drainage.

## **Property Flood Resilience (PFR) Pathfinder - Boosting action to make homes and buildings more resilient to floods**

We are encouraging collaborative working with Lead Local Flood Authorities (LLFAs) on PFR through the Invitation for the Expression of Interest to secure funding.

Grant funding of up to £700,000 will be available to each of the three PFR Pathfinder projects nationally, starting this year and running to April 2021. The LLFAs will be required to establish a self-financing professional Hub for the longer-term which will lead on local innovation to help enhance the future take-up of flood resilience techniques in properties. The funding will be provided to LLFAs in three selected locations to support the creation of the Hubs and the delivery of measurable behaviour change, demonstrator property, and enduring technical and professional resources.

The Invitation for the Expression of Interest ran from 20 May - 28 June for LLFAs to bid for. The project will fund three individual Pathfinder Projects, which must be led by LLFAs. We are encouraging bids from a consortia of LLFAs located within the same Regional Flood and Coastal Committee (RFCC) area. Ideally the services the Hubs provide should cover the entire geographical RFCC area in which they are located or a clearly identified sub-region of that RFCC area.



Assessments will be made nationally and the three successful project locations will be announced by Therese Coffey MP in July 2019. It is expected that work will begin immediately following this announcement.

## **Coastal Practitioners Conference 2019**

This year, Lincolnshire and Northamptonshire Area hosted the 2019 coastal practitioners' conference. Coastal group Chairs and coastal experts from the Environment Agency met in Skegness to hear from partners about flood risk and coastal change, emergency planning and beach management along the Lincolnshire coast, enabling growth in seaside towns and work on the Wrangle Wash Banks. We also launched the new FCERM strategy with a video message from Emma Howard Boyd. The programme included visits to Gibraltar Point Nature Reserve, sea defences at Ingoldmells and the Boston Barrier. This annual event is a great opportunity to share knowledge and good practice and celebrate the work we do together for communities in iconic coastal locations.

## **Next Generation Supplier Arrangements**

Our new Collaborative Delivery Framework, and specialist Marine and Coastal and Modelling and Forecasting frameworks, have now been awarded and are available for use by Risk Management Authorities. If you have not already received the briefing, please contact your local Environment Agency Area team, or send an email to the NGSA email address [NGSA2019@environment-agency.gov.uk](mailto:NGSA2019@environment-agency.gov.uk)

## **De-maining update**

The Environment Agency wants to strengthen local decision making around flood risk management by ensuring the right bodies are managing the right watercourses. We have been

working with internal drainage boards (IDBs) and lead local flood authorities (LLFAs)/district councils to pilot re-designating sections of watercourse in a number of locations across England, from main river to ordinary watercourse – known as de-maining.

The South Forty Foot Catchment pilot in South Lincolnshire is now complete and the watercourses and assets have been successfully transferred to the Black Sluice IDB. This was the first pilot to complete the main river variation process.

We have decided to de-main the watercourses in Stour Marshes, Kent and the Isle of Axholme, North Lincolnshire. Assuming we don't receive any appeals in the next few weeks, we hope to have transferred the watercourses and associated assets to the relevant IDBs by the end of July.

As de-maining represents a change in who does what, it is important we work with local partners to ensure that the right arrangements are in place to manage watercourses in the right way. We have agreed with local partners to pause de-maining in Norfolk and Suffolk so that more time can be spent reviewing these arrangements. We will revisit this decision later in the year.

We have undertaken lessons learned workshops and writing a report evaluating the pilots. As de-maining is only part of an overall landscape of options for management of low risk watercourses including decommissioning, PSCAs and withdrawing from maintenance, we will now review the role of de-maining in the context of our overall Flood and Coastal Risk Management Strategy.

## Research and publications

### Reservoir Safety

We recently published our Biennial Report on Reservoir Safety 2017-18, which can be found here: <https://www.gov.uk/government/publications/reservoir-safety-biennial-report>

In summary:

- The Reservoirs Act 1975 is used to minimise the risk of uncontrolled releases of water that could result in loss of life.
- The Environment Agency is the Enforcement Authority in England.
- Over the last two years we have seen improvements in the level of compliance with the Reservoirs Act 1975.
- Non-compliance in 2017 and 2018 has been maintained at its lowest ever recorded levels across England due to a mixture of advisory and regulatory action taken by the Environment Agency.
- All Environment Agency reservoirs were compliant during 2017 and 2018.
- Our regulatory effort continues to be focused on those sites posing the highest risk to life.
- We have issued more formal notices when compared to the last biennial report.
- In two non-compliant cases we used our emergency powers to make those reservoirs safe.
- There were 23 reported incidents during 2017 and 2018. It was one of these incidents that required us to intervene to empty the reservoir. However, most incidents are limited in scale, are well managed by the reservoir owners and do not result in a complete failure of the dam or reservoir.

### Research News - Latest edition published

Issue 30 of Research News – the annual newsletter publication from the Joint Research and Development Programme - has recently been published. The newsletter highlights some of our completed and ongoing research projects – as well as guest articles from some of our partners.

This issue includes articles on the future of flood hydrology, implications of climate change, defence failures around transitions, coastal squeeze and compensatory habitat and the mental health consequences of flooding.

Newsletter: [http://evidence.environment-agency.gov.uk/FCERM/Libraries/FCERM\\_Documents/Issue\\_30 - March\\_2019.sflb.ashx](http://evidence.environment-agency.gov.uk/FCERM/Libraries/FCERM_Documents/Issue_30_-_March_2019.sflb.ashx)

You can sign up to receive future editions (as well as our research outputs) via our website (<http://evidence.environment-agency.gov.uk/FCERM/en/Default/FCRM.aspx>).

## **Social inequalities for flooding still exist but progress has been made**

We have recently re-examined the social distribution of the likelihood of flooding. The analysis examines if flood risk exposure is concentrated among more socially deprived communities.

Statistical analysis was used to update a study published by the Environment Agency in 2006 which found evidence in support of the presence of flood risk inequalities in England. We will use the findings to update the evidence base on the social distribution of flood risk and the associated decision-making rules for investment.

In summary:

- There is an inequality in terms of social deprivation and flood risk exposure from all sources of flooding. This means that people from areas that are classed as more deprived disproportionately face more flood risk than those in less deprived areas. This is the case when taking into account nearby flood defences.
- Deprived coastal communities still experience significant inequalities for high and medium likelihood of flooding. These inequalities within coastal communities are more pronounced than those in inland ones.
- The inequalities found within rural areas are greater than those in urban areas.
- The size of the inequality is smaller than the 2006 study. This is primarily because the National Flood Risk Assessment now takes into account the risk reducing capability of nearby flood defences and thousands of schemes have been put in place over the past decade.

The findings from this analysis suggest that recent investment has been relatively successful in addressing social deprivation and flood risk exposure inequality for the 20% most deprived areas in England. There are, however, still significant inequalities in rural and coastal areas in England.