

National Flood and Coastal Erosion Risk Management Strategy for England

Frequently asked questions - for external use

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Introduction

This frequently asked questions (FAQs) document has been prepared to help our partners answer questions from their customers and the public about the FCERM Strategy and Roadmap. The document offers further information about why the Strategy is important to them and to understand why the Roadmap supports progress towards the 2100 vision.

You can read the FCERM Strategy on [gov.uk](https://www.gov.uk) and if you have any queries, or require further information, please contact <mailto:FCERMstrategy@environment-agency.gov.uk>

A - High-level Strategy questions

1. Why is a Flood and Coastal Erosion Risk Management (FCERM) Strategy needed?

A comprehensive FCERM Strategy is needed because climate change and the resulting impacts are already happening and will continue to rapidly increase. Climate change is already causing more frequent, intense flooding and sea level rise. We all need to take urgent action to prepare for a range of future scenarios including a 4°C rise in global temperature whilst accounting for other factors such as population growth.

2. What is the legal requirement for the Environment Agency to produce a FCERM Strategy?

Under The Flood and Water Management Act 2010, section 7, the Environment Agency is required to prepare a Strategy for Flood and Coastal Erosion Risk management in England. The Strategy must set out:

- the objectives for managing flood and coastal erosion risk,
- the measures to achieve those objectives,
- how and when the measures are to be implemented,
- the costs and benefits of those measures, and how they are to be paid for.

The Strategy is informed by an assessment of flood and coastal erosion, and it explains how and when the Strategy is to be reviewed. Importantly, the Strategy includes the current and predicted impact of climate change on flood and coastal erosion risk management and specifies how it contributes towards achieving wider environmental objectives.

3. When was the first FCERM Strategy published and how does it relate to the current one?

The Environment Agency published the first national FCERM Strategy in 2011.

Following extensive engagement and public consultation the current FCERM Strategy was laid before Parliament on 14 July 2020 and was formally adopted and published on the 25 September 2020.

These documents can be viewed at [gov.uk](https://www.gov.uk)

The drivers affecting flood and coastal erosion risk management have become more apparent since the first strategy was published in 2011. For example, the evidence on climate change has increased and new techniques have become more readily available. These drivers are reflected in the 2020 Strategy.

4. Where does the FCERM Strategy apply too?

The Strategy sets a national ambition for England, but one that can work for different places. It recognises that every place is different – made up of different people with different skills, needs and infrastructure, and often in different environments.

We worked with the Welsh and Scottish governments to ensure that any cross-border issues were considered when we developed the Strategy. We continue to liaise with them to ensure join up on cross border issues.

The Strategy considers the current and future risks of flooding and coastal change. This includes all sources of flood risk (flooding from rivers, sea, reservoirs, surface water, groundwater and ordinary water courses), and also coastal change.

5. What is the vision of the Strategy?

The Strategy sets a vision for **a nation ready for, and resilient to, flooding and coastal change – today, tomorrow and to the year 2100.**

The Strategy helps the nation to understand, plan and deliver a broad range of resilience actions including better protection from flooding and coastal change.

The vision can work for every place. But we recognise that every place is different and there is no one size fits all solution to flood and coastal resilience. The only way of doing this is to put people at the heart of decision making.

6. What are the ambitions of the Strategy?

The Strategy has 3 long-term ambitions:

- 1. Climate resilient places** - working with partners to bolster resilience to flooding and coastal change across the nation, both now and in the face of climate change.
- 2. Today's growth and infrastructure resilient in tomorrow's climate** - making the right investment and planning decisions to secure sustainable growth and environmental improvements, as well as infrastructure resilient to flooding and coastal change.
- 3. A nation ready to respond and adapt to flooding and coastal change** - ensuring local people understand their risk to flooding and coastal change, know their responsibilities and how to take action.

7. Why is the Strategy so focussed on creating a nation ready to respond and adapt to flooding and coastal change?

In order to achieve the first two ambitions, we need the third ambition, which is about mobilising and empowering people so that they understand the impacts of flooding and coastal change, are responsible for managing the impacts and know how to take action.

We also want to inspire the younger generation to become more involved in the flood and coastal sector and enable a wider shift in people's thoughts from the concept of protection to that of resilience, through education.

8. How does the current FCERM Strategy affect me?

Everyone has the potential to be impacted by flooding or coastal change. You may be directly affected if your home floods, or you live in an area at risk from coastal erosion, or you may be indirectly affected. For example, your workplace may be impacted, or roads, rail, or utilities such as water and electricity may be disrupted.

The aims and ambitions of the Strategy apply to every community, workplace, place, including the infrastructure and services we all rely on.

9. What evidence have you used to support the Strategy?

The Strategy has been informed by a wide range of evidence and publications, from the UK Climate Impacts Programme 2018 covering climate impacts, to the Environment Agency's Long Term Investment Scenarios study.

The Strategy has also been shaped based on the stakeholder engagement that took place before the draft Strategy consultation, and then from the feedback received during that consultation.

10. Who is responsible for implementing the FCERM Strategy?

The current Strategy describes what needs to be done by all risk management authorities involved in flood and coastal erosion risk management (FCERM) to reduce the risk of flooding and coastal erosion, and to manage its consequences. However, the Strategy is not being delivered by risk management authorities alone.

We need individuals, communities, the third sector, businesses, farmers, land managers and infrastructure providers to contribute to planning and adapting to future flooding and coastal change.

11. How does the Strategy relate to Defra's Flood and Coastal Erosion Risk Management Flood Policy Statement?

The Flood and Coastal Erosion Risk Management Policy was published by DEFRA in July 2020. The FCERM Strategy and its ambitions align well with this policy statement.

The Strategy provides a framework for guiding the operational activities and decision making of practitioners supporting the direction set by government policy. The direction set by both documents, the Policy Statement and the Strategy, will ensure that our country is more resilient to flooding and coastal erosion in the long term.

12. Does the Strategy recommend policy/legislative changes?

The Strategy does not set policy but focusses on implementation of policy. We have worked closely with Defra in the development of the Strategy, and to ensure that the Strategy is aligned with the government's new Flood and Coastal Erosion Risk Management Policy Statement.

13. How far does the Strategy look out into the future?

Looking as far as the year 2100, the Strategy aims to blend long-term ambitions with shorter-term practical steps.

The Strategy's strategic objectives identify outcomes needed over the next 10 to 30 years to help support the longer-term ambitions for change needed by 2100. It also sets out shorter term measures for helping to achieve the Strategy's objectives.

14. Will the Strategy lead to 'abandonment'?

Within the Strategy it is recognised 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. Those best placed to support will work with those who are affected by coastal change.

This will take time, in many places a long time, which is why 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.

We need to ensure that everywhere, people are at the heart of decisions about the place where they live.

15. How much does the Strategy cost to implement?

The majority of the Strategy's measures are either statutory requirements or modifications to the existing ways of working of risk management authorities and other emergency responders. Such measures do not lead to cost increases for risk management authorities.

16. What will be the benefits of implementing the Strategy?

There are strong economic, social and environmental cases for investing in resilience to adapt to the impacts of future flooding and coastal change. Our Long-Term Investment Scenarios study estimate that as a nation we need an average annual investment of at least £1billion in flooding and coastal change infrastructure over the next 50 years. The study estimated that investing in flood and coastal change will have a benefit cost ratio of 5:1.

All of the measures will also realise a range of wider benefits, namely: stronger links with people and places; better ways of working; and more shared information across risk management authorities, infrastructure providers, spatial planners and emergency responders. This will all help to ensure people, places and infrastructure are more resilient to flooding and coastal change.

B - Roadmap

17. What is the relationship between the Strategy and the Roadmap?

The Roadmap is a document developed with our partners and stakeholders that sets out practical actions that will move us towards the Strategy vision over the next 4 years. By completing the Roadmap we will have made the necessary progress required towards the achievement of the FCERM strategy objectives by 2025/26.

The Roadmap contains no new government policies – it is purely a tool to help ensure progress is made in the right direction and at the right pace against the measures in the FCERM Strategy.

18. What is the difference between the action plan developed in 2021 and the Roadmap published in June 2022?

The Action Plan, published in May 2021, identified practical actions for the Environment Agency and partners for 2021/22. However, a longer-term view of the actions needed to successfully achieve the Strategy was required.

We have now developed a Roadmap document with our partners that shows what we want to achieve by the end of the current Strategy period in 2025/26, and how we will get there. The Roadmap is supported by a suite of new practical actions that the Environment Agency and other partners are working on from now until 2025/26.

19. How will the Environment Agency report progress against the Roadmap and the actions it contains?

Under section 18 of the Floods and Water Management Act 2010, the Environment Agency must produce Flood and Coastal Erosion Risk Management Reports' (the 'section 18' reports). These reports must include information about the application of the National Flood and Coastal Erosion Risk Management Strategy.

The Environment Agency will report annually to ministers on the progress that risk management authorities are making with the Strategy's objectives and measures (Flood and Coastal Erosion Risk Management Reports – 'Section 18' reports, under the Flood and Water Management Act 2010).

All those involved in implementing the Strategy also have a role to promote successes externally when they happen. This proactive approach to reporting will help to keep the Strategy alive and in the front of decision makers minds.

20. Who the roadmap is for and how do we expect it to be used?

The Roadmap is for all advocates of the FCERM Strategy. The Roadmap should be used as tool with customers to promote the benefits the actions will bring to them and to the environment.

C – Links to other plans and strategies

21. How does the Strategy relate to the 25 Years Environment Plan?

The 25 Year Environment Plan sets out the government’s ambition to leave our environment in a better state than we found it. Specifically, this Strategy supports the 25 Year Environment Plan objectives to protect threatened species and provide richer wildlife habitats; reduce the risk from natural hazards; and adapt to and mitigate climate change.

22. How does the Strategy relate to Flood Risk Management Plans and River Basin Management Plans?

Flood Risk Management Plans (FRMPs) help implement the ambitions in the Strategy at a local level. For example, more nature-based solutions, and longer term adaptive approaches for taking action at the right time to improve resilience to flooding and coastal change.

The objectives in the FRMPs have been aligned to the FCERM Strategy ambitions. The guidance for measures (actions) in the FRMPs included examples of FCERM Strategy themes such as; Nature based solutions; improving the natural, built and historic environment; Local nature recovery strategies; better land management; ELMS; Biodiversity gain; and Environmental net gain.

The FCERM Strategy has a specific measure related to RBMPs – “From 2021 investments in flood and coastal projects by RMAs will help to achieve objectives in river basin management plans and contribute to the government’s aim for 75% of waters to be close to their natural state as soon as practicable”.

23. How does the Strategy relate to local flood risk management strategies?

Local flood risk management strategies must be consistent with the national Strategy. Lead local flood authorities have been provided with guidance on how to update their local flood risk management strategies to ensure they are fit for purpose.

D – Key themes included within the Strategy and Roadmap

Climate change

24. Why is climate change core to the Strategy?

The most recent climate change projections confirm we will experience wetter winters and drier summers, with an increased likelihood of more intense rainfall leading to flooding. We need to take urgent action to prepare for a range of future scenarios including a 4°C rise in global temperature.

The Strategy helps the nation to understand, plan and deliver a broad range of resilience actions including better protection from flooding and coastal change.

25. How does the Strategy help tackle the increased flood and coastal change risk caused by climate change?

The Strategy focusses on what can be done now to respond to climate change, as well as on how to plan and adapt for decades to come.

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).

We are already taking account of climate science in the design of flood defences and wider resilient activities to ensure people and places can adapt to future risk of flooding and coastal change. For example, between 2021 and 2027 we are investing £5.2bn to better protect many hundreds of thousands of properties from flooding and coastal erosion over the next six years.

26. How does the Strategy promote net zero?

In response to the climate emergency, the government has legally committed to reach net zero carbon emissions by 2050. It is crucial 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 support this commitment.

The Strategy has a number of measures that will help this happen, such as using more nature-based solutions for managing flood and coastal change and making sure our flood risk management operations have a reduced carbon footprint.

27. Why is the Strategy preparing for a 4°C rise in global temperature when the world is aiming for 1.5°C?

The government's latest UK Climate Projections cover a range of future scenarios including a potential 4°C rise. It makes sense to prepare for all scenarios. Therefore the Strategy seeks to better prepare us for 2°C warming in global temperatures as well as planning for higher scenarios, such as a 4°C rise in global temperatures.

Resilience and adaptive approaches

28. Why is the Strategy aiming to increase the nation's resilience to flooding and coastal erosion?

We are unable to prevent all flooding and coastal change. We must therefore improve our resilience so that when the worst happens we can recover quickly.

We must continue to do what we have been doing: building and maintaining strong defences to reduce the risk of places being flooded. But we also need to ensure communities are prepared in advance of flooding or coastal change happening so they can continue to grow and thrive even when flooding or coastal change occurs. We will need to do this by using a variety of 'resilience actions' which enable us to prepare for, protect against, respond to and recover from flooding and coastal change. This ensures that when flooding and coastal change does happen, it causes much less harm to people, does much less damage, and ensures life can get back to normal much more quickly.

29. What is the Strategy's definition of resilience?

The Strategy defines resilience as “the capacity of people and places to plan for, better protect against, respond to, and recover from flooding and coastal change”.

30. How can we all turn resilience into a reality?

There are many actions that people and places can take to improve their resilience to flooding and coastal change. Every place is different and so the exact combination of resilience actions will be tailored to a particular place, reflecting local aspirations, opportunities, economic and environmental needs. They could include signing up to flood warnings and have a flood plan, participating in a community flood group, embracing nature based solutions, installing property flood resilience measures and of course traditional flood defence schemes. There cannot be a ‘one size fits all’ approach.

31. What is the £200m [innovative resilience programme](#)?

In the 2020 Budget, the government provided £200 million between 2021 and 2027 as part of a Flood and Coastal Resilience Innovation Fund. The fund enables local places to test, develop and implement innovative actions to help communities adapt and be resilient to flooding and coastal change. The fund comprises three programmes:

- The Flood and Coastal Resilience Innovation Programme which will enable local authorities, businesses and communities in 25 places to test and demonstrate innovative practical resilience actions.
- The Adaptive Pathways Programme which will develop long term investment plans for managing flooding and coastal change to 2100 and beyond in strategic locations around England including the Thames Estuary, Humber Estuary, River Severn and Yorkshire.
- The Coastal Accelerators Transition Programme which will support communities in areas at significant risk of coastal erosion to transition and adapt to a changing climate.

These innovation programmes will improve our evidence on the costs and benefits of the innovative resilience actions as well as help inform future approaches to, and investments in, flood and coastal risk management.

32. What does taking an adaptive approach mean and why is the Strategy focussing on them?

Taking an adaptive approach simply means making the right decision at the right time and being flexible to review and amend this where needed in the future. It enables flood and coastal erosion risk management to be carried out in a way that is agile to the latest climate science, growth projections and other changes to the local environment.

Looking out to 2100, adaptive approaches or ‘adaptive pathways’ will give local places ‘decision points’ to help navigate through an uncertain future in collaboration with local partners and communities.

33. Does the Strategy support communities along the coast? Will some have to move?

The Strategy is a flood and coastal change strategy. It applies to coastal communities as well as those inland.

We recognise that in some cases the need for communities to transition and adapt to flooding and coastal change will be difficult. The scale of the threat may be so significant that decisions may be needed in the longer term to ensure the safety of those communities. If this means moving out of harm's way, we need to ensure that people and communities are at the heart of those decisions.

The environment

34. What are nature-based solutions?

Nature-based solutions are a suite of actions that use natural processes to reduce the risk of flooding or coastal change. For example, by restoring bends in rivers; changing the way land is managed so soil can absorb more water; creating saltmarshes on the coast to absorb wave energy and creating leaky dams to hold water back upstream.

Evidence shows that working with natural processes can reduce risk of flooding and coastal change in smaller catchments for low magnitude, high frequency flood events and can contribute to reducing coastal flooding and coastal change. They can also provide additional benefits including: enhancing biodiversity; water quality improvements; strengthened water resources; mitigation of and adaptation to climate change through, for instance, wetland creation and coastal and fluvial realignment; and providing urban biodiversity and amenity green spaces through sustainable drainage systems.

35. What is net gain?

'Net gain' is an approach to development that aims to leave the natural environment in a measurably better state than it was before, by creating or enhancing habitats. Development will make positive impact on the environment delivering qualitative improvements through habitat creation or enhancement after avoiding or mitigating harm as far as possible.

The Strategy highlights how risk management authorities will work with partners to leave the environment in a better state by contributing to environmental net gain for new development proposals.

Food and farming

36. How does the Strategy consider food, farming and rural land management?

The Strategy encourages all risk management authorities to maximise opportunities to work with farmers and land managers to help them adapt their businesses and practices to be resilient to flooding and coastal change.

The Environment Agency is also working with farmers and other risk management authorities to develop an adaptive plan for managing future flood risk in the Fens. This is essential given the Fen's importance to the nation's food security.

Food security is important consideration, approximately 12% (1.4 million hectares) of agricultural land in England is at flood risk from rivers or the sea, or from both. This includes 57% of the Grade 1 agricultural land.

For this reason, between 2015 and 2021, risk management authorities completed flooding and coastal change projects that better protected over 280,000 hectares of agricultural land,

helping to avoid more than £500 million worth of economic damage to agricultural land production.

37. How is the Strategy going to ensure farmers, landowners and land managers adapt their practices for a changing climate, so that the risk of flooding and coastal change is reduced whilst their livelihoods remain viable?

We need to be able to plan to adapt to a range of climate change scenarios, including higher scenarios such as a 4°C rise in global average temperatures. Risk management authorities need to support individuals, communities, businesses, farmers, land managers and infrastructure providers to better plan and adapt to future flooding and coastal change. We are working together with National Farmers Union, Natural England and Risk Management Authorities to help improve land usage and management and to support farmers, land owners and land managers to become more resilient to climate change impacts.

Insurance and financial sector

38. How are insurance and finance industries included?

The Strategy encourages property owners to 'build back better', with support from the financial sector including mortgage lenders and insurers. These groups have a crucial role to play in helping to stimulate the market in property flood resilience measures and tackling the financial barriers to building back better following flooding.

The Strategy ambition on growth and infrastructure also encourages risk management authorities to work with the finance sector and other partners to ensure that investments in flooding and coastal change enable growth in a sustainable and climate resilient way.

Build back better

39. Why does the Strategy explore the 'build back better' concept?

'Build back better' ensures that repairs to property in such a way that the overall resilience improves for the future. It can include installing property flood resilience measures, raising electrics above flood height and using waterproof plaster.

Along with the protection provided by defences, "build back better" is an important part of the toolkit for creating more climate resilient places.

40. What are Property flood resilience measures (PFR) and what are the different types?

Property flood resilience (PFR) is the term used to describe modifications which can be made to a building to minimise the damage caused by flooding and speed up recovery and reoccupation. PFR includes both resistance measures that aim to reduce the amount of flood water entering a property and recoverability measures which reduce the amount of damage caused if flood water does enter the building. Examples of PFR measures include flood doors and barriers, non-return valves, raising electrics and waterproof plaster.

Wider infrastructure resilience

41. Why is the Strategy encouraging infrastructure providers to become more resilient?

Infrastructure serves both national and local needs and covers everything that supports society and business. This includes transport, electricity, communications, water as well as schools, hospitals, doctors, food distribution, shops, etc.

As a nation, both, the new and existing infrastructure needs to be resilient to flooding and coastal change and the range of, future climate impacts. Over two-thirds of properties in England are served by infrastructure sites and networks located in, or dependent on others located in, areas at risk of flooding. The impacts on properties will vary as some of this infrastructure will already have high levels of protection. The national infrastructure at risk from flooding (Environment Agency, 2019) is:

Road: up to 11%; Rail: up to 77%; Air: up to 44%; Port: up to 78%; Electricity: up to 21%; Waste water: up to 43%; Gas: up to 25%, and; Water supply: up to 51%

42. How does the Strategy ensure the responsible management of public and private flood defences?

The Environment Agency builds and maintains flood defences inland and at the sea. There are however many other defence owners – public and private. This mixture of defence owners creates a complex picture of responsibility for the operation, maintenance and management of flood and coastal defences. For some parts of our coastline, the ownership of defences can appear particularly fragmented, with defences being owned and maintained by, amongst others, the Environment Agency, a coast protection authority or a private landowner. Failure of one piece of defence potentially compromises the effectiveness of neighbouring defences, and, ultimately, the safety of people living and working behind them. It is therefore vital for flood and coastal defence owners to take a joined-up approach to safeguard the protection of people, property, infrastructure and the environment. The Strategy promotes this by encouraging consistent ways of inspecting defences and recording data.

Mental health impacts

43. Why are mental health impacts a feature of the Strategy?

We know that those who experience flooding can suffer serious mental health problems, affecting their ability to work, and further harming businesses. Therefore, the Strategy encourages close working with government, other risk management authorities and public health services to ensure the mental health impacts from flooding are factored into long-term recovery planning.

In turn, this will help individuals and communities to be better prepared for flooding and coastal change and able to recover more quickly from the mental health and wellbeing impacts that often follow.