

Circulation: Diane Mitchell, NFU Environment Team, Regional Environment Advisers, Environment Forum, Legal Affairs Team, Andrea Graham, Rajinder Pooni

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Contact: Mhari Barnes

Tel: 02476 858 645

Email: Mhari.Barnes@nfu.org.uk

Environment Agency's Draft National Flood and Coastal Erosion Risk Management Strategy

Draft Consultation Response

The Environment Agency (EA) has launched the draft national strategy which aims to tackle flood and coastal erosion risk issues by 2100. With over 5 million people in England at risk of flooding, the strategy sets out 3 main ambitions:

1. Climate resilient places
2. Today's growth and infrastructure – resilient to tomorrow's climate
3. A nation of climate champions, able to adapt to flooding and coastal change through innovation.

The EA states that the strategy will help them to prepare for a 4°C rise in global temperature and will develop new standards of flood resilience for communities and infrastructure by 2050.

The latest Long-Term Investment Scenarios (LTIS 2019) stated that £1 billion per year is needed for traditional flood and coastal defences – the EA's strategy looks to build resilient people and places rather than rely upon engineered defences.

There is a need to produce a climate change ready nation, particularly with the EA stating that the number of properties built on floodplains will double over the next 50 years.

Overview of NFU's Response

With regards to the strategy and the agricultural sector the following points outline our key areas of interest:

- The main overarching point that the NFU would like to make in response to the EA's strategy is that we are interested in how the aims of this Strategy will be achieved. We understand that this will be set out in the Action Plan, rather than this high level Strategy. Clarity is needed from the EA as to how it intends to work with others in developing the Action Plan. Early engagement on this would be welcomed by the NFU.
- The NFU has ambitions to meet Net Zero by 2040. This Strategy and our Roadmap can complement each other e.g. improved soil management and increased soil organic matter content could help with our ambition to meet Net Zero but could also contribute to the EA's Flood Strategy. Net Zero will be a key focal point for much of our work over the next few years this is a positive area where we can contribute to the Strategy and help achieve our own goals.

- It is clear that the Strategy lacks innovation and ambition. The Strategy frequently mentions the need for innovation but the NFU would have liked it to have gone further in its thinking. After a recent visit to the Netherlands the Dutch have exemplified ambition and drive when it comes to flood and coastal erosion risk management. For example, the Ooijen-Wanssum¹ 'Room for Rivers' project where agricultural land has literally been raised to protect it from flooding, yet this strategy lacks such ambition and instead focuses more on education rather than utilising the wealth of engineering and scientific skills this country has to offer to overcome flooding and coastal change issues.
- The NFU believes that rural communities and **agricultural land** can be protected from flooding and coastal erosion if the strategy clearly promotes collaboration, transparency, early engagement and support.
- We do feel there is still a need for **protection**, and the consideration of the EA that resilience is key and protection is just a 'tool' within the 'resilience toolbox' does not provide any reassurance to farmers and members of rural communities.
- 'Building back better' and 'in better places'
 - Whilst that strategy considers communities and homeowners there remains a distinct lack of acknowledgement as to the impact this measure would have on farmers and growers.
- **Natural Flood Management (NFM)**
 - We acknowledge that farming does have a role and is keen to play its part when it comes to NFM but there remains a lack of clarity and support to landowners and farmers who agree to the implementation of natural flood management (NFM) features/schemes after either the short-term funding for the scheme ends or interest fades.
 - Whilst the NFU recognises that there are benefits to NFM, it must also be recognised that it cannot be considered singularly the solution to flood risk or flood storage within a 'place' and catchment context must remain at the forefront of the agency's mind when considering potential flood management options.
- **Future ELMs**
 - The NFU acknowledges that farming does have a role and is keen to play its part but further evidence and guidance is required as to how a new ELM scheme will contribute to farmers and landowners who are at risk from flooding and coastal erosion
- **Future Fens**
 - The NFU was delighted to see reference to our 'Why farming matters in the Fens report' because it acknowledges the importance of agricultural land. We would like to draw the Environment Agency's attention to the revised report '[Delivering for Britain: Food and Farming in the Fens](#)'.
- **Withdrawal of Maintenance**
 - The NFU would like to encourage the EA to follow their own protocol 'Protocol for the maintenance of flood and coastal risk management assets²' when it comes to the withdrawal, or in some cases, abandonment of flood defence assets. It is essential that early and open discussions are held with those that may be affected and that the EA is clear from the outset of their intentions.
- **Sustainable Drainage Systems**

¹ <https://www.ooijen-wanssum.nl/>

² <http://eastdonylandpc.co.uk/wp-content/uploads/2016/07/EA-Maintenance-protocol.pdf>

- The NFU understands the need to manage flood events and that SuDS can help to manage surface water flooding. However, adequate funding and clear guidance associated with the maintenance and liability of a scheme are required. Transparent discussions with farmers and landowners who will be impacted are essential prior to a decision being made.

The strategy comes across as an 'EA Strategy' rather than the national strategy that others could support and as such, it is difficult for the NFU as an organisation to support or sign up to what the EA has drafted so far. There may be individual actions that we could support in the Action Plan. However, the EA haven't started to draft this yet and we have expressed our interest to be included in the development of the framework.

Draft flood and coastal erosion risk management strategy questions

The online consultation response requires an initial answer to the question using the following statements:

- No agreement
- Some limited agreement (I can agree in part, but not entirely)
- Basic agreement (I can live with it)
- Strong agreement (I can support it)
- Complete agreement (I can support it wholeheartedly)
- I don't know
- Not applicable

Then there is the opportunity to explain the selected answer further. The questions to the strategy are listed below along with the NFU's draft response.

Question 1: To what extent do you agree with the vision: a nation ready for, and resilient to, flooding and coastal change – today, tomorrow and to the year 2100?

Basic Agreement

The NFU agrees with the EA's vision of 'a nation ready for, and resilient to, flooding and coastal change – today, tomorrow and to the year 2100. As a member organisation that supports 55,000 farmer and growers across England and Wales we recognise the importance of resilience especially with regards to flooding and coastal erosion. We accept the consultation documents' statement that flooding is 'horrendous'; after the Winter storms of 2015-16 it was reported that there was an estimated £20 million worth of damage to agricultural land in England³ however, this figure fails to capture the numerous impacts to farming family homes and business units.

However, we do feel there is still a need for protection, and the consideration of the EA that resilience is key and protection is just a 'tool' within the 'resilience toolbox' does not provide any reassurance to farmers and members of rural communities who are forced to live with the fact that either their land is falling into the sea (in some areas up to 4 m per annum), those who are susceptible to fluvial, ground water or surface water flooding or in some cases both of these issues. Not only are lives, livelihoods and hundreds of years' worth of local knowledge and heritage at risk but to simply put a case forward that suggests walking away from land is nonsensical as a nation that has a wealth of potential engineering ambition. It seems unjust, unfair and would not even be considered in other countries where the importance of agricultural land and food production has been adequately recognised e.g. The Netherlands.

³ <https://www.nfuonline.com/flooding-manifesto-jan-17-final-online/>

The EA Strategy frequently mentions the need for innovation but the NFU would have liked it to have gone further in its thinking. After a recent visit to the Netherlands the Dutch have exemplified ambition and drive when it comes to flood and coastal erosion risk management. For example, the Ooijen-Wanssum 'Room for Rivers' project where agricultural land has literally been raised to protect it from flooding, yet this strategy lacks such ambition and instead focuses more on education rather than utilising the wealth of engineering and scientific skills this country has to offer to overcome flooding and coastal change issues⁴.

Within the draft strategy document the objectives and measures are made clear however, the 'action plan' should have been released simultaneously with this document as the strategy explains the ambition but there is a clear lack of how these ambitions will be achieved. Therefore, it is very difficult to support a strategy that doesn't clearly state how it will achieve its goals. It is through the detail of the action plan that NFU members could be greatly affected or support future initiatives. The NFU would very much like to work with the EA to ensure that our member's interests are considered at every stage.

Question 2: To what extent do you agree with the Environment Agency's proposed strategic overview role as set out in the chapter 'setting the context for the draft strategy'?

No agreement / Some limited agreement (I can agree in part, but not entirely)

The NFU believes that rural communities and agricultural land can be protected from flooding and coastal erosion if there is a clear strategy that promotes collaboration, transparency and support. We agree that the EA's strategic overview should continue to endeavour in:

- providing national data, information and tools on flooding and coastal change, to be shared publicly, appropriate for the decisions that risk management authorities need to make in helping everyone understand the risks
- lead effective partnerships that enable place-shaping, to manage flooding and coastal change
- provide timely and effective information and warnings
- exercise a general supervision of flooding and coastal change in England.

The NFU also agrees that in order for the objectives of the draft strategy to be achieved it is important to also include the following in the agency's strategic overview:

- leading flooding and coastal change as part of broader climate resilience contributing to integrated solutions to the environmental and societal challenges the nation faces
- overseeing the collaboration, **transparent** sharing and monitoring between flooding and coastal infrastructure ownership
- reporting the progress of the final strategy's objectives and measures.

Furthermore, with regards to the strategy's 'contribution to wider environmental objectives' the NFU recognises the importance of balancing the requirement to manage flood risk and coastal change but 'natural, historic and built environment' should be extended to further include 'agricultural environment/land' that produces food for the nation and contributes £122 bn⁵ to the country's economy.

The draft strategy states that it is in support of the government's 25 Year Environment Plan and the environmental objectives therein however, the NFU has a general concern about the adoption of the 25 Year Environment Plan as the first Environmental Improvement Plan because not only does it set out a number of ambitious, and in some cases aspirational targets, but it was also not subject to consultation by stakeholders. So, we question whether various targets or the level of 'environmental improvement' set out within the Plan will be achievable. Which begs the questions as to what extent this strategy will strive to deliver unachievable goals?

⁴ <https://www.ooijen-wanssum.nl/>

⁵ <https://www.nfuonline.com/news/latest-news/agri-food-sector-worth-pound:122-billion-to-uk-economy-new-figures-reveal/>

Within this chapter, the draft strategy also mentions 'working with natural processes'. The NFU recognises the EU's Sustainable Development Goals (SDGs) which state that 'nature-based solutions' should be utilised to address flood risk problems. However, there remains a lack of clarity and support to landowners and farmers who agree to the implementation of natural flood management features/schemes after either the short-term funding for the scheme ends or interest fades. In some cases this leaves a single individual with the sole liability and responsibility of the feature/scheme which can lead to a plethora of issues to that individual, both financially and personally (for example stress/anxiety caused by potential feature failure). Should NFM become a public good, costs and risk should be covered by the beneficiaries/society. Whilst the NFU recognises that there are benefits and that we are part of the solution and have a role to play when it comes to FCERM especially with regards to NFM, but it must also be recognised that it cannot be considered singularly the solution to flood risk within a 'place' and catchment context must remain at the forefront of the agency's mind when considering potential flood management options.

Also within this chapter, it is stated that there are potential environmental benefits of wetland creation, however we would like to take the opportunity to remind the EA that in some areas of England where there are calls to create wetland also exists the UK's most productive and highly valued agricultural land, which has been carefully managed over centuries and has evolved to create habitats to a variety of flora and fauna. It should also be noted that wetlands still require management, both of the land and through water level management. Simply leaving areas under water can be detrimental for all parties.

Question 3a: To what extent do you agree with strategic objective 1.1: Between now and 2050 the nation will be resilient to future flood and coastal risks. Over the next year the Environment Agency will work with partners to explore and develop the concept of standards for flood and coastal resilience?

Some limited agreement (I can agree in part, but not entirely)

The NFU agrees with the strategic objective 1.1 as we would also like to see a resilient farming community both now and in the future. In particular, the NFU strongly agrees with the statement "a vital tool for future resilience in many places will remain building and maintaining our flood and coastal change infrastructure". Flood and coastal defence assets in at-risk areas across the UK are essential to safeguard agricultural land, rural businesses, homes and communities. Over recent years there has been a distinct increase in the number of flood and coastal erosion defence assets that the EA have 'withdrawn from maintaining'. This has led to our members feeling abandoned by the EA and in some cases responsible for considerable flood defence assets (e.g. Lyth Valley Pumping Station).

Appendix 1 of the EA's protocol for asset maintenance outlines its procedure for withdrawing from river maintenance. The Flood and Water Management Act 2010 states the procedure which should be followed for decision-making with regards to withdrawal of maintenance. This includes presenting and discussing the asset where the maintenance will be withdrawn at Regional Flood and Coast Committees.

The EA does not have to inform landowners or farmers in every circumstance of their decision to withdraw, but if they do they should follow the following three stages:

- Stage One: A consultation period lasting at least three months. The EA will seek views from people, including landowners and tenants, who may be affected by the withdrawal. Discussions include reasons for withdrawal and length of notice period.
- Stage Two: A written notice letter will be sent to affected stakeholders. This will state when maintenance will cease and contain details of a contact at your local EA office. The EA anticipate that most notice periods will be between six months and two years.

- Stage Three: EA stops maintaining at the date specified within stage two, unless there are subsequent agreements to delay withdrawal.

NFU members have raised concern that the EA procedure is not always being adhered to. In some cases they have expressed a distinct lack of transparency associated with the EA's withdrawal of maintenance of flood defence assets. There have also been inconsistencies with terminology used (e.g. instead of 'withdrawal of maintenance' it is being referred to as 'effectiveness initiatives' or 'decommissioning') which has led to confusion across the board at both regional and local levels.

The NFU recognises that the total amount of funding available for flood risk management has increased, with budgets confirmed until 2021. Between 2016 and 2019 there was an increase of more than £100m in the annual funding available for the installation of new flood defences. However, the importance of maintaining existing defences must stay at the forefront of the Government's flood risk management strategy.

Community confidence will be strengthened if the procedure is adhered to in full and the reason for the withdrawal of maintenance is clearly conveyed. The protocol will only be successful if the EA informs and works with landowners/farmers from the outset. Consistent and open discussions about the potential withdrawal of maintenance will help to instil confidence in farmers, landowners and members of the public and help to create a resilient 'place'.

The NFU believes that in order to create a nation of climate resilient people and places, flooding must be by design and not a default position of which our members are subjected.

Within the Strategy the EA recognises that taller flood walls are not always the solution to the risk of extreme flood events and makes suggestion to the requirement for 'more space for flood water'. Whilst the NFU accepts that agricultural land forms a large proportion of our natural environment there needs to be a balance struck between the "war on water", the environment and food production. The NFU agrees that in some cases extensive hard engineered defences may not be ideal and are often costly however, if the 'space' required for floodwater is expected to be agricultural land there needs to be a mechanism in place that clearly identifies these areas. Notification to farmers and landowners must be made immediately so that time and money is not invested into producing high value crops which may be destroyed if intentionally flooded. Adequate compensation must be agreed (this may be based on an 'as and when' policy) and an action plan needs to be in place to evacuate the floodwater after an event where cropped land is flooded and within a reasonable timeframe to mitigate crop loss. Within the NFU's Flooding Manifesto, that the EA supported, we made clear that it is imperative that agricultural land is no longer considered 'sacrificial'. Nor should there be an expectation that farmers or landowners should give up land for temporary floodwater storage as an act of charity. Farming is a business that can be equalled to any other, the only difference between farmland compared to a factory is that fields do not have ceilings.

The mention of the challenges associated with flooding and coastal erosion not being specific only to England are fair. However, the example given of The Netherlands appears to be used out of context. The Dutch have used innovative engineering techniques to completely redesign and, therefore, construct an ambitious sand dune network that acts as a coastal defence dyke. Arguably, it could be said that a project of this scale and ambition would not be implemented in this country due to a lack of foresight and the fact that the EA prefer the softer smaller scale approach. The EA and the government need to take a more ambitious approach to tackling FCERM issues.

The proposed 'national suite of resilience tools' that includes 'accepting that some areas will flood and erode' is little comfort to anyone who would potentially lose their home, land or business from a potential lack of investment in efficient flood or coastal change defences.

Question 3b: Please provide comments on the measures described under strategic objective 1.1, and tell us about any additional measures you think there should be, and who could implement them.

“Measure 1.1.1: By 2021 the Environment Agency will enhance the appraisal guidance for flooding and coastal change projects, so that investment decisions better reflect a range of climate change scenarios.”

Measure 1.1.1 is encouraging in that it suggests that investment will be made to address the climate scenarios outlined in the LTIS 2019 report. This is reassuring to NFU members as some would be at severe risk if the extreme climate scenarios were to become a reality. This would not only put lives and livelihoods at risk in the immediate area but would impact the country’s economy, critical infrastructure and food security.

“Measure 1.1.2: By 2022 the Environment Agency will work with partners to explore and develop the concept of standards for flood and coastal resilience, and will consider the pros and cons of all options. This will feed into the government’s flood policy statement in 2019. The Environment Agency will also develop a national suite of tools that be used in combination to deliver flood and coastal resilience in places.”

It is difficult to comment on this measure as the potential impacts that the as yet unknown ‘tools’ may have on our members may be to their detriment, especially if the current prioritisation of people and property continues.

Question 4a: To what extent do you agree with strategic objective 1.2: between now and 2050 risk management authorities will help places plan and adapt to flooding and coastal change across a range of climate futures?

Strongly Agree

The NFU believes that there is a distinct requirement to give adequate weighting to local knowledge and context when considering flood and coastal change management. Risk management authorities (RMA) are well placed to be able to help plan and adapt for future flood and coastal change risks however, they have to receive financial support and guidance from central government.

The NFU is interested to hear that the EA is currently developing a new way of producing a single picture of flood risk from rivers, the sea and surface water, but also need to consider groundwater flooding. The use of existing detailed local information and improved national datasets is welcomed, as long as it avoids bias our outdated local data. We believe our members, who are at the forefront of the issues highlighted within this strategy, are well placed to provide local insight into these issues and therefore, we would encourage the EA and RMA’s to engage in open discussions with our members to aid them with this objective. The NFU understands the benefits of this especially if it aims to improve surface water mapping which can help improve the evidence base for making decisions about spatial planning, prioritising investments in flood and coastal infrastructure.

Question 4b: Please provide comments on the measures described under strategic objective 1.2, and tell us about any additional measures you think there should be, and who could implement them.

Measure 1.2.1: By 2021 the Environment Agency and risk management authorities will identify frontrunner places for developing adaptive approaches for a range of different scales and social contexts, working with local places and partners.

Agree. We welcome the opportunity to take part in discussion and engagement within this work to ensure adaptive approaches can work for multiple and complex rural situations.

Measure 1.2.2: By 2024 the Environment Agency will publish a new picture and evidence of current and future flood risk that will help places better plan and adapt for climate change.

The NFU understands that there is a requirement to assess the current and future flood risk within an area especially when considering the impacts of climate change. However, we also believe that it is important to remember that climate change and flood risk models are purely simulations which have associated margins of error. In some cases errors within these models and scenarios can impact our members by wrongly identifying at risk areas or equally by not including areas that are at risk of flooding and coastal change. This can have serious financial implications to farming businesses in England. Whilst NFU members have welcomed the online Asset Management Data and Information⁶ webpage, concern has been raised around the accuracy of some of the programmed maintenance activity. Furthermore, where maintenance is stopped, the online map could be colour coded to allow easy identification.

Measure 1.2.3: By 2024 the Environment Agency will develop a national framework to help risk management authorities, people, businesses and public bodies identify the steps and decisions needed to take an adaptive approach to planning for flood and coastal resilience in a place.

The NFU would like to be involved in helping the EA develop the national framework outlined in Measure 1.2.3 as we believe that the importance of agriculture to the UK's economy is starting to be taken seriously, especially after the inclusion of agriculture within the NIC's recent report.

Measure 1.2.4: By 2025 the Environment Agency will produce a new set of long term investment scenarios to inform future policy and investment choices for delivering flood and coastal resilience.

The NFU in general is in support of the LTIS reports. However, one main issue in the LTIS 2019 report is that it only considered the value of managing and maintaining existing assets and watercourses as a fixed cost and so assumes that the capacity of watercourses are maintained at current levels. This is a significant assumption, given that current variations in funding for asset maintenance, and potential climate impacts, are likely to increase scour and silt deposition in our watercourses, increasing channel maintenance and costs just to maintain capacity. The NFU would like to urge the EA to consider how and where channel maintenance can be a useful adaptation tool under future scenarios and the investment required.

Measure 1.2.5: By 2026 lead local flood authorities will update their local flood risk strategies to incorporate adaptive approaches to planning for flood and coastal resilience in a place.

The NFU agrees with this measure. However, adequate funding and support needs to be available to lead local flood authorities to aid in carrying out this measure.

Question 5a: To what extent do you agree with strategic objective 1.3: between now and 2030 all those involved in managing water will embrace and embed adaptive approaches to enhance the resilience of our environment to future flooding and drought?

No agreement

In general the NFU supports the statement within the draft strategy that "It is not possible to separate the management of our natural environment and our rivers and coasts from the way we manage and reduce risk of flooding and coastal change. Our natural environment goes through periods of both flood and drought – so we should be looking at adaptive approaches that benefit them both for the benefit of

⁶ <https://www.gov.uk/government/publications/river-and-coastal-maintenance-programme>

people and wildlife.” We agree that a holistic approach needs to be adopted that considers both water related hazards (floods and droughts) whilst safeguarding the environment. To attempt to address some of the water resource issues in the parts of the country which experiences water stress, the NFU is being actively involved with the recently established Water Resources East group⁷.

However, it is also important to consider the impacts on businesses, livelihoods and the nation’s economy when the agri-food sector that contributes over £122 bn to the national GDP is arguably the most vulnerable to these risks – agriculture. Therefore, when considering the impacts of floods and droughts on agriculture it is imperative that the EA work with landowners and farmers and not solely against them when assessing the best possible plan of action. In recent years there appears to have been a stronger coalition between the EA and environmental NGOs; in some cases this has forced our members to change farming practices or even abandon their agricultural heritage as their land has become unfarmable after the EA has walked away from flood management of agricultural land and has instead prioritised people and property. Although we understand that the EA, like all governmental bodies, is under huge financial constraint it is of little condolence to NFU members who feel abandoned. Furthermore, cheaper or local solutions can become unattainable due to imposed regulatory requirements and charges.

Sustainable Drainage

With reference to the strategy’s use of the Stroud rural sustainable drainage project, the NFU understands that sustainable rural drainage systems can have multiple benefits. However, considerations must be made to consider the impact on the farmer/landowner especially with regards to maintenance and liability.

The NFU is supportive of the provisions which have been placed in the NPPF to prevent new developments from increasing flood risk to other land uses up and downstream of the development site. It must be recognised that all developments have the potential to exacerbate flooding in other parts of the country, and this must be fully considered during the planning stage of any development. Farmers have always had to be mindful of the English climate and some of the best and most versatile farm land has always been in floodplains. However, as this strategy suggests the number of properties at risk of flooding is only going to increase as climate change scenarios suggest more intense and extreme weather events, bringing about wider flooding or drought.

The NFU and its members accept that flooding is a natural occurrence, and farming in the floodplain is associated with some risks. However, we are concerned with regards to development up and downstream of farmland exacerbating the effects of this flooding. Where there is a demonstrable impact from new developments on the flow regime of a watercourse, there must be a greater ability for retrospective changes to be made to the SuDS. This means it must be absolutely transparent who is responsible for the long-term maintenance and upkeep of SuDS, and that there are penalties in place in situations where the entity responsible for the drainage system allows this to fall into disrepair. This may include an increase in the maintenance and monitoring of the system to ensure it is functioning correctly, or an increase in the capacity of any attenuation ponds used to store water. Only through this ability to review and amend SuDS are we able to ensure that continued development in the floodplain does not impact upon other pre-existing businesses in the catchment.

Therefore, we would like to take this opportunity to express our interest in partaking in the upcoming review of the Planning Policy Guidance Note, to ensure greater guidance on floods and surface water (especially SuDS), is included in the update that Defra will soon publish.

Natural Flood Management

⁷ <https://www.nfuonline.com/cross-sector/environment/water/irrigation-and-water-resources/nfu-welcomes-new-stage-for-water-resources-east>

Farmers across the country already play an active role in reducing flood and coastal management. This is through the continued maintenance of thousands of kilometres of river network, and where appropriate, proactive engagement in natural flood management schemes.

“working with natural processes is a key part of our approach and can take many forms. This includes encouraging the most appropriate crops, farming techniques that limit soil erosion, natural flood risk management tools on farmland as well as the creation of inter-tidal or coastal habitat”

The NFU recognises that natural flood management techniques, in the right location, can have a role, but they are not the universal panacea. Instead they should only be used as part of a cohesive and carefully planned package of measures across the catchment such as maintenance and de-silting, looking at upstream attenuation and downstream conveyance to address shorter and longer term flood risk.

Special consideration needs to be given to the following:

- The need to actively and fully consult, engage and seek agreement with land managers, especially farmers, to ensure schemes can work alongside other land uses, including agriculture and food production.
- Natural flood management measures bring their own suite of management and maintenance issues that need to be addressed in any scheme’s development and **long-term** flood risk management resource planning.
- A clear functional remit for all NFM measures should be established, including any measures should the site attract species of designation. As such, an automatic assumption to duplicate the initial NFM measure cannot be guaranteed.
- Where natural flood management techniques are implemented, suitable financial support and incentives should exist.
- Agri-environment schemes may not be suitable, particularly for bespoke, longer-term schemes or areas of lowland water storage; funding mechanisms need to truly value the flood mitigation services provided and help farmers continue to produce food.
- Any natural flood management measures must work for both the landowner and tenant(s).
- Natural flood management techniques could be implemented on UK farms and have a role in catchment wide flood risk reduction. But these measures must meet minimum defence resilience thresholds to provide the protection needed. Further research is needed to develop funding and implementation.

As outlined within the NFU’s Flooding Manifesto (2017)⁸, where agricultural land is part of the solution to flooding as part of total catchment management, such as natural flood management or flood water storage, this must be planned, agreed and paid for in advance.

Delivering for Britain Report

The NFU is pleased to see that the draft strategy makes reference to the NFU’s ‘Why Farming Matters in the Fens’⁹ report. However, in May 2019 we published the latest version of this report ‘Delivering for Britain: Food and Farming in the Fens’¹⁰.

⁸ <https://www.nfuonline.com/flooding-manifesto-jan-17-final-online/>

⁹ <https://www.nfuonline.com/assets/23991>

¹⁰ https://www.nfuonline.com/pcs-pdfs/food-farming-in-the-fens_web/

Since the Fens were originally drained over a thousand years ago, protecting the area, including its rich fertile soil, has been a constant battle for farmers and IDBs. The Fens is a strategically managed hydrological system that is controlled through the use of 286 pumping stations. Currently the Fens are well protected however, with increased threats from climate change and predicted sea level rise there is a distinct requirement for a constant review of the coastal defences.

Engineered defences play a crucial role in protecting vulnerable areas from coastal erosion and flooding, therefore they cannot simply be neglected. With increasing financial pressures on the EA there is a distinct increase in the reaches of coastal flood defences which are sub-standard. These features are costly to install and to maintain, but farmers voluntarily help to maintain these defences in a cost effective way e.g. the voluntary sacrifice of 50 acres of agricultural land and soil for the raising of the Wrangle Sea Bank. Regular maintenance is crucial to the coastal flood defences across the country as this will help sustain these structures and increase their lifespan, therefore reducing the costs of complete replacement through neglect and the economic impacts from a flood event. Such work will not be practical, should excessive regulatory and charges be incurred.

Case Study: Wrangle Sea Bank

The Wrangle Sea Bank Project is an excellent example of an adaptive measure which has been taken to overcome the coastal flood risk threat to areas around the Wash in Lincolnshire. The project aimed to raise and improve the existing sea wall after a severe breach in 2013. The project was convened by the Witham Forth IDB and the EA, and stakeholders which included Natural England, Local Enterprise Partnership, landowners and members of the public. The EA and EU funding helped fund the £1.5 million project along with the material for the wall and the land which was given in kind by the landowners. The new bank is now providing increased levels of protection for 3,500 hectares of prime agricultural land and 460 properties. The true partnership nature of the project demonstrated that a scheme can be delivered within the funding constraints imposed by the UK Government and it has established an important precedent for raising the height of other sea banks along the East Coast of England. However, the significant public good provided by the farmers and landowners who sacrificed their land and soil should be sufficiently recognised.

Question 5b: Please provide comments on the measures described under strategic objective 1.3, and tell us about any additional measures you think there should be, and who could implement them.

*Measure 1.3.1: From 2021 the Environment Agency will use the lessons learned from the Defra £15 million **natural flood management** projects and other pilot projects to expand and mainstream working with **natural processes** by all risk management authorities.*

It is important to consider that these projects were only awarded funding 2 years ago¹¹. Therefore, there will only be a very short period of monitoring to assess the potential flood risk attenuation of these projects. Furthermore, catchment context is a hugely important consideration when it comes to NFM as what appeared to be successful in one catchment (or indeed 'place') will not necessarily have the same effect elsewhere due to differing geology, land-use practices, soil type etc. The NFU would urge the EA to consider these aspects within their review of the Defra funded NFM projects.

Natural flood management services offered by farm businesses would, in some cases, make a very considerable saving for the wider economy. However, before decisions are made on the sourcing of funding for natural flood management, it is necessary to clearly identify the range of techniques that could be provided.

¹¹ <https://www.gov.uk/government/news/schemes-across-the-country-to-receive-15-million-of-natural-flood-management-funding>

Within the new Environmental Land Management schemes (ELMs) there is potential for appropriate Natural Flood Management funding for farmers and landowners. However, as the ELMs are still being planned and assessed there needs to be an interim funding approach that looks into providing farmers and landowners with reasonable funding that will not disappear once the initial interest surrounding a research/community project inevitably fades.

The Treasury are yet to provide any clarity around the funding formula or period of funding for ELMs, and as such, funding post ELMs would still need to be found should these interventions be kept. This funding model needs to truly value the services provided by Natural Flood Management and the benefits that it brings to the wider economy and society.

The NFU would like to see a scheme that provides incentives, not just for income forgone, but also in recognition of the flood mitigation service farmers are providing to other communities and businesses in the catchment. The ongoing maintenance costs of these schemes must also be taken into consideration. Government ought to look at funding mechanisms which truly values the flood mitigation or water storage services provided by agriculture – whether in the uplands or in more low-lying areas. The new ELM schemes are probably not the most appropriate mechanism to fund flood storage as they are expected to have a 5 year contract – which would not give farmers enough certainty to provide a flood storage service.

*Measure 1.3.2: From 2021 the Environment Agency will **work with farmers, landowners** and others to identify opportunities for using agricultural practices (through funding, advice and regulation) to manage flooding and coastal change.*

We recognise that farming has a key role to play in flood management. Where farmers provide a service in mitigating flood risk to help protect others this must be a coherent, planned component of total catchment management, for which farmers must be fairly compensated.

Farmers already face a plethora of licences and regulations when it comes to managing flooding and coastal erosion we would therefore request more information as to what additional regulation the EA is proposing as any additional regulation must complete existing rules.

Furthermore, the importance and contribution of our food and farming sectors to the economy must not be overlooked; some of our most productive and highest value agricultural land is in the floodplain or coastal regions that are vulnerable to flooding, and deserves to be protected.

In order to ensure that this plan can be enacted and delivered, actions and measures to address flood risk must be properly funded and the allocation for any funding must be transparent.

The NFU would welcome the opportunity for the EA to work with our farmer and grower members to help identify opportunities for utilising farming practices to manage flooding and coastal change. The discussion will need to take place before a decision is made by the EA, as this will not only allow farmers to provide essential local information but it will also allow farmers to plan and adapt their farming business in advance so the impacts are minimal. Discussions with our members must be open and transparent for this measure to succeed. There is already a plethora of environmental and flood risk activities that our farmer and grower members have to consider and we have worked closely with the EA in the past to ensure that the impacts of these regulations to our members is as minimal as possible.

Measure 1.3.3: From 2020 risk management authorities will seek to better align long term planning for flood and coastal change with water company business planning cycles to identify opportunities for managing both floods and droughts.

The NFU strongly agrees with this measure. The difference in the timescales for one plan to another can be confusing. Therefore, it would be beneficial to long-term planning and to achieving the objectives of this strategy.

Question 6a: To what extent do you agree with strategic objective 1.4: between now and 2030 risk management authorities will enhance the natural, built and historic environments so we leave it in a better state for the next generation?

Basic agreement

Question 6b: Please provide comments on the measures described under strategic objective 1.4, and tell us about any additional measures you think there should be, and who could implement them.

Measure 1.4.1: From 2021 risk management authorities will contribute to improving the natural, built and historic environment through their investments in flood and coastal projects.

The NFU agrees that Risk Management Authorities have a key role to play in making decisions that will help to improve the natural, built and historic environment. Arguably, agricultural land could fit under each of those and we would like to see it given adequate representation. For too long, the government has hugely undervalued the wider public benefit and national strategic importance of protecting high quality agricultural land, both for its ability to produce food for an island nation and for delivering wider environmental benefits. Whilst we recognise that risks to these must be addressed, this undervalues the wider public benefit and national strategic importance of protecting high quality agricultural land. This includes the environmental benefits agricultural land provides alongside the infrastructure it helps to protect.

Arguably, coastal defences are the most expensive of all flood defence schemes but when compared with the cost-benefit - protection to agricultural land, natural capital, communities, businesses, property and national GDP - they are good value for money.

Case Study: Humber Tidal Flood Strategy

One example of adaptation to future coastal flood risk is the Humber Tidal Flood Strategy. The strategy was initially set out by the EA in 2008. However, a recent update highlights that the Humber Estuary makes a substantial contribution to the UK economy, with investment around the estuary supporting thousands of businesses and jobs. In addition, the strategy has also recognised that the natural floodplain (the Humber Head Levels) supports some of the most productive arable land and diverse natural environments in the country. Situated on low-lying land, tidal flood risk is a reality for people living on and around the Humber. There are around 230,000 homes and 50,000 businesses at flood risk but also 120,000 hectares of high grade agricultural land at risk of tidal flooding during an extreme flood. This area of land would produce enough food to feed the City of Hull (population >250,000) for more than 20 days. The effects of flooding can be devastating and with sea levels rising and storms becoming more frequent due to climate change, the Humber is at an increased risk.

Measure 1.4.2: From 2021 risk management authorities will work with partners and others to identify how the nature recovery network, the northern forest and other habitat improvements can help to manage flood risk and coastal change.

The previous Flood and Coastal Erosion Risk Management Outcome Measures prioritise flood defence funding towards the protection of people, property and protected habitats. While we recognise risks to these areas must be addressed, this undervalues the wider public benefits of protecting agricultural land, especially high quality agricultural land, including the environmental benefits that it provides and the infrastructure that it helps protect such as: railways, roads, telecommunications, gas, electricity and

water supplies. For example over 54% of UK power stations are protected from flooding by farmers in IDBs.

With regards to the Northern Forest, provided that the importance of food production is not forgotten, the Northern Forest project offers a new opportunity for farmers to contribute towards creating a rich habitat for wildlife to thrive, and a natural environment for people to enjoy. However, considerations have to be made as to the location of the forest planting as trees cannot be planted in deep peat (peat greater than 40cm in depth).

Measure 1.4.3: From 2021 risk management authorities will help to ensure that 75% of all water bodies are in natural or near-natural condition within 25 years.

The NFU understands that this falls in line with the EU's Water Framework Directive (WFD) 2000, however it is important to consider that land drains have never been natural or 'near-natural' as they have been planned, designed and managed by farmers and IDBs for, in some cases, hundreds of years. Therefore, they should be exempt from this measure. Furthermore, the habitat that exists due to the presence of these drains and pumping would not be present if the drains were not there.

The cost associated with making waterbodies natural must be cost effective. Therefore, the 25-year target may be too ambitious.

Question 7a: To what extent do you agree with strategic objective 1.5: between now and 2030 risk management authorities will use funding and financing from new sources to invest in making the nation resilient to flooding and coastal change?

Some limited agreement (I can agree in part, but not entirely)

The NFU recognises that the Government has pledged to spend £2.6 billion on flood risk management in England up to 2021, but the weighting of the awarding of the funding is heavily granted towards protecting people and property and disregards high-value agricultural land. Furthermore, the EA's Long Term Investment Scenarios (LTIS) 2019¹² states that £1.1 billion of annual investment is required to provide protection and resilience from flooding in England. Therefore, there is not adequate funding available to counter coastal flooding. The £2.6 billion that has been allocated since 2013 needs to be revised immediately.

Agriculture is often at the mercy of extreme and changeable weather. Whilst current funding prioritises concentrations of people and property, farmers experience a lack of maintenance of watercourses and coastal channels and reduced maintenance of banks and flood defence assets. The result is more frequent, more extensive and longer duration flooding events.

This is an unsustainable and inequitable outcome, which causes damage to farming businesses and rural communities. Furthermore, it is unreasonable that communities that are afforded little protection from flood funding are the same communities that are asked to implement measures and make significant change to benefit others.

Flooding and water management in river and coastal areas must be properly funded to protect urban and rural businesses, infrastructure and communities. Government spending must be transparent, and the artificial distinction between capital and maintenance expenditure removed. The NFU recognises that the total amount of funding available for flood risk management has increased, with budgets confirmed until 2021. Between 2016 and 2019 there was an increase of more than £100m in the annual funding available for the installation of new flood defences and the importance of maintaining existing defences must stay at the forefront of the Government's flood risk management strategy.

¹² <https://www.nfuonline.com/cross-sector/environment/water/flooding/ea-release-flooding-scenarios-report/>

In order to ensure that this plan can be enacted and delivered, actions and measures to address flood risk must be properly funded and the allocation for any funding must be transparent.

This strategy should prioritise the nation's food security and therefore agricultural land and not just people and property, when it comes to the allocation of flood risk management funding.

Currently, adequate funding is not available and we recognise that money from other sources (private or through levies) may be required. However, the government will need to work with stakeholders to develop this potential flood defence funding plan.

Careful consideration with planning and flood risk modelling would be required if there was a direction to encourage businesses to protect their own assets as this could mean that large businesses who have the capital will be able to afford to build their own flood defence protection, which will then displace that flood water to either a completely different area or, more likely, onto agricultural land. The amount of flood defences that would be required in some areas would not be affordable to the majority of farmers and landowners. Therefore, we fear that adequate strategic planning would need to be in place to assess the potential flood risk exacerbation if increased large business (asset or property level) protection rises and a mechanism to compensate those impacted.

Additionally, public confidence will be strengthened if the procedure is adhered to in full and the reason for the withdrawal of maintenance is clearly conveyed. The protocol, which needs to be published on .GOV, will only be successful if the EA informs and works with landowners/farmers from the outset. Consistent and open discussions about the potential withdrawal of maintenance will help to instil confidence in farmers, landowners and members of the public.

Question 7b: Please provide comments on the measures described under strategic objective 1.5, and tell us about any additional measures you think there should be, and who could implement them.

Measure 1.5.1: By 2021 the Environment Agency will work with the government on its green finance strategy to explore new options for funding and financing flooding and coastal change that deliver more private funding in the future.

We would also urge the EA to work with HM Treasury and key stakeholders to help achieve this measure. There are increasing demands upon private funding from many areas, so any request must demonstrate clear and achievable outcomes. Furthermore, private funding from beneficiaries must be the primary focus.

Measure 1.5.2: By 2025 risk management authorities will test whether it is feasible to use upfront financing to deliver an adaptive approach in a place which will need very significant investment in future.

Risk management authorities are well placed to test this. However, they may need increased resources in order to achieve this aim within the timeframe.

Question 8a: To what extent do you agree with strategic objective 2.1: between now and 2030 all new development will contribute to achieving place based resilience to flooding and coastal change?

Strongly agree.

With the pressures on planners and the EA associated with the government's housing targets we accept that there is a distinct need to ensure that future developmental planning will consider flood and coastal protection for that area. Furthermore, it is important to protect the agricultural land, homes and infrastructure that is required to produce the food that will feed the population.

Question 8b: Please provide comments on the measures described under strategic objective 2.1, and tell us about any additional measures you think there should be, and who could implement them.

Measure 2.1.1: From 2021 risk management authorities will invest in planning skills and capabilities to ensure they can advise planners and developers effectively to enable climate resilient places.

Agree, but this must come with associated funding mechanisms.

Measure 2.1.2: From 2025 the Environment Agency and lead local flood authorities will advise local planning authorities on how adaptive approaches should inform strategic local plans.

Agree, but this must come with associated funding mechanisms..

Question 9a: To what extent do you agree with strategic objective 2.2: between now and 2030 all new development will seek to support environmental net gain in local places?

Some limited agreement (I can agree in part, but not entirely)

The NFU would like further clarification of this objective, any targets and impact. Is this an in-combination effect – would this be additional to any habitat creation requirements? If so, this would add to costs and potential land take. With the current net gain discussion there is also an element of potential double counting.

With regards to net gain delivery, the NFU would need assurances that farmers can enter into arrangements on a voluntary basis i.e. not forced to deliver net gain or have land taken off them, for example through compulsory purchase powers used to acquire the land.

The NFU views net gain as both a threat and an opportunity. It is a threat to farmers undertaking development yet also an opportunity to be the provider of net gain. If farmers can deliver net gain then there are lots of assurances that we would want to see in terms of contract management, payments etc. to protect the interests of our members.

Question 9b: Please provide comments on the measures described under strategic objective 2.2, and tell us about any additional measures you think there should be, and who could implement them.

Measure 2.2.1: From 2021 all risk management authorities will achieve biodiversity net gain in all programmes and projects.

This is very ambitious, and without clear guidance around the net gain structure, targets and methods there may be a risk of double counting by developers.

Also the threat to the potential loss of agricultural land is a concern for our members.

Measure 2.2.2: From 2021 all risk management authorities will seek to work with developers and planners to achieve environmental net gain as part of strategic development proposals.

This would have to be discussed and planned in the initial stages of a product so all concerned are fully aware as to what to expect.

Question 10a: To what extent do you agree with strategic objective 2.3: between now and 2030 all risk management authorities will contribute positively to local economic regeneration and sustainable growth through their investments in flooding and coastal change projects?

Strongly agree.

Question 10b: Please provide comments on the measures described under strategic objective 2.3, and tell us about any additional measures you think there should be, and who could implement them.

Measure 2.3.1: From 2021 the Environment Agency will identify ways in which flood and coastal infrastructure projects can better contribute to local economic regeneration and sustainable growth.

The NFU would encourage the EA to discuss any ambitions with all who would potentially be affected from the outset.

Question 11a: To what extent do you agree with strategic objective 2.4: between now and 2050 places affected by flooding and coastal change will be 'built back better' and in better places?

No agreement

This objective causes us concern. We accept that it is possible for property level protection to be encouraged however, it is impossible for a small family farming business to have the resources or capital to protect hundreds of acres of agricultural land without the help from the EA and RMAs. This may also further impact upon the cost and availability of insurance.

Question 11b: Please provide comments on the measures described under strategic objective 2.4, and tell us about any additional measures you think there should be, and who could implement them.

Measure 2.4.1: By 2025 the Environment Agency will work with government, insurers and financial institutions to review the legal, policy and behavioural changes needed to 'build back better and in better places' and improve the resilience of homes and business.

The strategic objective states that it will aim to 'build back better' and 'in better places'. When over half a million acres of high value agricultural land is at risk of coastal flooding and 60% of floodplains are currently farmed this approach would be impossible when it comes to safeguarding the agricultural sector. Furthermore, the English coastline is under increasing risk from coastal erosion and sea level rise, which could reach 1.15 m by the time the vision for this strategy is achieved. Currently, parts of the East Yorkshire shoreline are eroding at 3 m a year which can exceed 20 m during a storm event or high tide.

This is an ambitious measure as coastal communities that are at risk from coastal flooding may be reluctant to potentially relocate as this measure suggests. Furthermore, the time aspect of this measure may be unachievable as the resilience of that community may take several years to recover, if ever. Will such an ambition include crops and livestock in fields, as insurance for such products are currently unavailable.

Measure 2.4.2: By 2021 coast protection authorities and the Environment Agency will refresh the shoreline management plans and keep them under review.

In general, the NFU agrees with this measure. We would however like to see a greater level of engagement with our members when reviewing Shoreline Management Plans.

The Climate Change Adaptation Sub-Committee's 2017 progress report highlighted that Shoreline Management Plans will have significant implications for some stretches of coastline.

However, affected communities have not been seriously engaged in adaptation planning. Stronger action is needed to help people prepare for coastal change.

Tidal surges raise the unpredictability of coastal flooding which, if there is a breach of a sea defence, can lead to the areas that are impacted spreading much farther than expected.

Engineered defences play a crucial role in protecting vulnerable areas from coastal erosion and flooding, therefore they cannot simply be neglected. With increasing financial pressures on the EA there is a distinct increase in the reaches of coastal flood defences which are sub-standard. These features are costly to install and to maintain, but farmers voluntarily help to maintain these defences in a cost effective way.

Regular maintenance is crucial to the coastal flood defences across the country as this will help sustain these structures and increase their lifespan, therefore reducing the costs of complete replacement through neglect and the economic impacts from a flood event.

Question 12a: To what extent do you agree with strategic objective 2.5: between now and 2030 all flooding and coastal infrastructure owners will understand the responsibilities they have to support flood and coastal resilience in places?

Some limited agreement (I can agree in part, but not entirely)

The NFU is interested to read that the draft strategy states that ‘failure of one piece of flooding and coastal change infrastructure potentially compromises them all, and, ultimately, the safety of people living and working behind them’ when the EA has been actively decommissioning and abandoning flood defence assets across the country leaving the responsibility of maintenance with the landowner or occupier.

Appendix 1 of the EA’s protocol for asset maintenance outlines its procedure for withdrawing from river maintenance. The Flood and Water Management Act 2010 states the procedure which should be followed for decision-making with regards to withdrawal of maintenance. This includes presenting and discussing the asset where the maintenance will be withdrawn at Regional Flood and Coast Committees.

The NFU has been increasingly aware that the EA’s procedure¹³ is not being adhered to. In some cases there has been a distinct lack of transparency associated with the EA’s withdrawal of maintenance of flood defence assets. There have also been inconsistencies with terminology used (e.g. instead of ‘withdrawal of maintenance’ it is being referred to as ‘effectiveness initiatives’) which has led to confusion across the board at both regional and local levels.

The NFU recognises that the total amount of funding available for flood risk management has increased, with budgets confirmed until 2021. Between 2016 and 2019 there was an increase of more than £100m in the annual funding available for the installation of new flood defences and the importance of maintaining existing defences must stay at the forefront of the Government’s flood risk management strategy.

Public confidence will be strengthened if the procedure is adhered to in full and the reason for the withdrawal of maintenance is clearly conveyed. The protocol will only be successful if the EA informs and works with landowners/farmers from the outset. Consistent and open discussions about the potential withdrawal of maintenance will help to instil confidence in farmers, landowners and members of the public.

¹³ <https://www.gov.uk/government/publications/river-and-coastal-maintenance-programme>

Question 12b: Please provide comments on the measures described under strategic objective 2.5, and tell us about any additional measures you think there should be, and who could implement them.

Measure 2.5.1: By 2021 the Environment Agency will work with lead local flood authorities and other expert bodies to develop guidance setting out best practice on local flood infrastructure management and record keeping.

The NFU would recommend that the EA include Internal Drainage Boards as part of their 'expert bodies'. IDBs have the local knowledge and flood risk management expertise required to deal with a flooding issue. Expert bodies must have a practical understanding of the complexities that farmers and growers have to comply and deal with.

Measure 2.5.2: By 2024 the Environment Agency will require risk management authorities to report on the resilience of their flood and coastal change infrastructure in a nationally consistent way.

Agree and such information should be accessible along a similar format to the current [Asset Information and Maintenance Programme](#).

Measure 2.5.3: By 2024 the Environment Agency will work with risk management authorities to develop recommendations for flooding and coastal change infrastructure owners that enable greater collaboration, sharing and monitoring between them.

Agree.

Question 13a: To what extent do you agree with strategic objective 2.6: now and 2050 the Environment Agency and risk management authorities will work with infrastructure providers to ensure all infrastructure investment is resilient to future flooding and coastal change?

Strong Agreement

The consequences linked with flooding and coastal erosion not only impact agri-businesses and rural communities, but are indirectly far reaching, for example to strategic infrastructure e.g. energy (with 54% of UK power stations at risk of flooding), major roads and rail links as well as the nation's food security. Agriculture is part of the UK's largest manufacturing sector, the food & drink sector, which contributes £122 Billion to the nation's economy. It also provides a range of landscape, access and environmental benefits, which a number of us enjoy, boosting local and rural economies through recreation and tourism; 48% of visits to the natural environment in England are to farmland of and it is also the conveyor of important infrastructure like roads, railways and utilities supplies on which adjacent urban communities depend. The threat to infrastructure will have a direct impact to national GDP as some major commuter routes in eastern England are at risk of coastal flooding. Therefore, the disruption will be felt far wider than the immediate at-risk area or rural community. Furthermore, the impact on national food security is currently poorly recognised. With over 500,000 acres of high quality agricultural land at risk of flooding, the consequences this could have to the agri-economy include reduced food security and increased reliance on imports.

Question 13b: Please provide comments on the measures described under strategic objective 2.6, and tell us about any additional measures you think there should be, and who could implement them.

Measure 2.6.1: By 2021 the Environment Agency and risk management authorities will work with infrastructure providers to ensure all infrastructure investment is resilient to future flooding and coastal change.

Agree and measures should be explored to see what funding can be realised.

Measure 2.6.2: By 2021 the Environment Agency will establish a Flood and Coastal Infrastructure Task Force to better align the long term investment planning of publicly funded infrastructure bodies.

Agree, but the Environment Agency must work with other key government departments.

The NFU believes that an agricultural representative would be beneficial to this task force.

Question 14a: To what extent do you agree with strategic objective 3.1: between now and 2030 young people at 16 should understand the impact of flooding and coastal change, but also recognise the potential solutions for their place, and opportunities for career development?

Basic Agreement.

The age aspect to this objective does make it rather restricted and will miss out several generations who are completely unaware of the risk they face with regards to flooding or coastal erosion.

Question 14b: Please provide comments on the measures described under strategic objective 3.1, and tell us about any additional measures you think there should be, and who could implement them.

Measure 3.1.1: By 2021 flooding and coastal change materials will be provided to help teachers deliver existing elements of the national curriculum.

Agree, but such material must include cover all aspects of mitigation measures, including the impact of food production.

Question 15a: To what extent do you agree with strategic objective 3.2: between now and 2030 people will understand the potential impact of flooding and coastal change on them and take action?

Strongly Agree.

Question 15b: Please provide comments on the measures described under strategic objective 3.2, and tell us about any additional measures you think there should be, and who could implement them.

Measure 3.2.1: By 2022 government and risk management authority research programmes will identify how best to help people and businesses understand, accept and take responsibility for their risk to flooding and coastal change. This will help all risk management authorities better shape the way they work with people and businesses.

Agree, as long as the agricultural sector is classified as a business.

Measure 3.2.2: By 2021 all risk management authorities will develop and use digital tools to better communicate flooding and coastal change. This will help achieve greater awareness and responsibility of the risks people face.

Agree. However, there remains areas of England and Wales where there is not sufficient broadband or mobile phone signal to receive flood alerts¹⁴. Furthermore, any such digital tool must be kept updated and accurate.

Question 16a: To what extent do you agree with strategic objective 3.3: between now and 2030 people will receive a consistent and coordinated level of support from all those involved in response and recovery from flooding and coastal change?

Strongly Agree. Measures such as an enhanced Farm Recovery Fund¹⁵ would be welcomed.

Question 16b: Please provide comments on the measures described under strategic objective 3.3, and tell us about any additional measures you think there should be, and who could implement them.

Measure 3.3.1: By 2021 the Environment Agency will work with government and risk management authorities to clarify roles in relation to surface water flooding.

Agree. However, we do feel that groundwater flooding should be included to ensure a holistic flood management approach is adopted.

Measure 3.3.2: By 2022 the Environment Agency will have expanded their flood warning service to all places at a high risk of flooding from rivers and the sea.

Agree. Such a service would also benefit from an education and awareness programme.

Measure 3.3.3: By 2025 the Environment Agency will work with government to better join up the organisations involved in providing incident response and recovery to provide a consistent and coordinated service.

Agree. We welcome a consistent level of service, as a differing level of support for recovery is wrong e.g. after the 2013 tidal surge, the LA provided free skips for residents, but farmers had to pay for theirs as with the excuse being they are a business.

Question 17a: To what extent do you agree with strategic objective 3.4: between now and 2030 the nation will be recognised as world leader in managing flooding and coastal change, as well as developing and attracting talent to create resilient places?

Basic Agreement.

Question 17b: Please provide comments on the measures described under strategic objective 3.4, and tell us about any additional measures you think there should be, and who could implement them.

Measure 3.4.1: By 2022 the Environment Agency will continue to work with standards setting organisations to encourage flood resilience requirements to be incorporated into the building and materials standards for homes and businesses built in places at risk of flooding.

Agree, but such measures must be compatible with listed buildings and other such criteria.

¹⁴ <https://www.nfonline.com/cross-sector/rural-affairs/broadband-and-mobile/broadband-news/survey-reveals-better-rural-coverage-needed/>

¹⁵ <https://www.gov.uk/government/collections/the-farming-recovery-fund>

Measure 3.4.2: By 2025 the flooding and coastal change sector, including risk management authorities, will influence universities and colleges to ensure they develop the capabilities and skills required for both the public and private sectors.

Agree.

Measure 3.4.3: By 2025 all public and private organisations in the flooding and coastal change sector, including risk management authorities, will support development programmes that enable their professionals to continue to develop their flood and coastal risk management knowledge.

Agree.

Question 18: Please provide any other comments

The strategy should prioritise the nation's food security and therefore agricultural land and not just people and property, when it comes to the allocation of flood risk management funding.

There is an urgent requirement to move away from the idea that agricultural land is something that can be sacrificed at the expense of a farmer/landowner for the protection of urban areas without the provision of reasonable compensation or reward. Agricultural land is an irreplaceable national asset, not just for the provision of food but the other public goods it provides. Unlike many industries impacted by flooding, farmland is a finite resource and so limits the ability to offset the loss of food production land elsewhere. The NFU recognises that the flood risk mitigation that can be provided by the temporary storage of flood water on land can protect urban areas from flooding. However, in doing so the landowner/farmer is delivering a public good and this should therefore be adequately recognised in financial terms – in other words providing such temporary storage should be by design not default. Furthermore, if there is a requirement for a Sustainable Drainage System (SuDs) or a natural flood management scheme to be implemented on a farmer's land, provisions should be made to ensure that the farmer/landowner is reimbursed for loss of income for the duration of the lifespan of the flood mitigation feature, and also provided with clear guidance as to who is responsible for the maintenance and liability of the feature, before planning approval is granted.

Strategic environmental assessment (SEA) questions

Do you agree with the conclusions of the environmental assessment?

[Anna...??]

Are there any further significant environmental effects (positive or negative) of the draft strategy you think should be considered?

No.

Are there further mitigations for potential negative effects or opportunities to achieve positive effects that should be considered for the final national FCERM strategy?

No.

