Department
for Environment
Food & Rural Affairs

Local factors in managing flood and coastal erosion risk and property flood resilience

Call for evidence

Date: 1 February 2021

We are the Department for Environment, Food and Rural Affairs. We're responsible for improving and protecting the environment, growing the green economy and supporting our world-class food, farming and fishing industries.

We work closely with our 33 agencies and arm's length bodies on our ambition to make our air purer, our water cleaner, our land greener and our food more sustainable. Our mission is to restore and enhance the environment for the next generation, and to leave the environment in a better state than we found it.

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Foreword

As I saw during my recent visit to Northwich last month, flooding and coastal erosion can have devastating impacts. As well as the potential for loss of life and damage to property, they can impact our businesses and livelihoods, and affect our health and well-being. This is why we continue to invest and take action to better protect and better prepare our communities from flooding and coastal erosion. Our flood defences protected 38,000 properties from the recent flooding impacts of Storm Christoph.

The risks continue to grow. Climate change is leading to rising sea-levels and warmer and wetter winters, we are building more housing and infrastructure. In July 2020, the government set out its long-term ambition for managing these increasing challenges and boosting our resilience through our Policy Statement on Flood and Coastal Erosion Risk Management. This Policy Statement describes five ambitious policies and over 40 actions to better protect and better prepare the country.

We are on track to better protect 300,000 homes by March 2021 through our current £2.6 billion flood and coastal defence investment programme. We want to build on these successes and ensure the investments we make in our next £5.2 billion programme continue to better protect communities and properties across England. As part of this, we are exploring how we can strengthen our assessment of local circumstances in our programme. This will include exploring changes to the funding formula to provide further benefit to frequently flooded communities.

In tandem, we want to ensure we are better prepared. We want to ensure homes, businesses and communities have the information they need to manage and prepare for their flood risk. We need to see an increase in the take-up of Property Flood Resilience, to enable householders and businesses to better manage the impacts of flooding if it occurs.

The evidence you provide in response to this Call for Evidence will help to inform future policies on both better protecting and better preparing communities across England from the risks of flood and coastal erosion.

Rt Hon George Eustice MP

Secretary of State for Environment, Food & Rural Affairs

Executive summary

In July 2020 the government announced its long-term plan to create a nation more resilient to future flood and coastal erosion risk in its Flood and Coastal Erosion Risk Management Policy Statement[1]. This ambitious plan sets out five key commitments – supported by over 40 actions – to accelerate progress to **better protect** and **better prepare** the country for the years to come. This Call for Evidence will help us to take forward some of the policies and actions in the Policy Statement. Alongside the Policy Statement, the Environment Agency published its National Flood and Coastal Erosion Risk Management Strategy for England[2].

In August 2020 the government published its White Paper: Planning for the Future[3] consultation, looking at proposals for reform of the planning system in England to streamline and modernise the planning process, improve outcomes on design and sustainability, reform developer contributions and ensure more land is available for development where it is needed.

In November 2020 the government published its National Infrastructure Strategy[4], highlighting the importance of delivering infrastructure projects and setting out how the government will build back better, faster and greener.

Specifically, this Call for Evidence is seeking information about:

- Additional ways in which specific local circumstances can be taken account of in the government's future flood and coastal defence investment programme. We are therefore exploring through **Part 1 of the Call for Evidence** whether

[1] HM Government (July, 2020). Flood and coastal erosion risk management Policy Statement. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/903705/flood-coastal-erosion-policy-statement.pdf

[2] Environment Agency (July, 2020). National Flood and Coastal Erosion Risk Management Strategy for England. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/920944/023_15482_Environment_agency_digitalAW_Strategy.pdf

[3] HM Government (August 2020) assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/907956/Planning_for_the_Future_web_accessible_version.pdf

[4] HM Treasury (November, 2020). National Infrastructure Strategy. Fairer, Faster, Greener. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938539/NIS_Report_Web_Accessible.pdf

any specific changes should be made to reflect local circumstances – such as communities that have been frequently flooded in the past, communities that are more economically vulnerable, smaller communities, and communities in need of greater property-level measures to resist flood water. We are also exploring how we can ensure timely and wider financial contributions to assist with the pace of developing a flood scheme and how we track progress of the overall programme.

- Ways of accelerating Property Flood Resilience (PFR), which includes measures people can take to help reduce flood damage to their property, and enable faster recovery. In the Policy Statement we committed to ensure buildings, important infrastructure sites and key public services are better prepared to manage flood risk. **Part 2 of this Call for Evidence** will help us identify actions to facilitate this policy and address any barriers to progress.

Flood and coastal erosion risk management is a devolved matter. This Call for Evidence therefore relates to potential future policy and actions in England only.

Response guidance

You are welcome to answer all questions in this Call for Evidence, or to answer questions that are specific to your areas of expertise. We welcome evidence related to flooding and coastal erosion, and from infrastructure delivery sectors beyond flooding and coastal erosion.

For the purposes of this Call for Evidence, we define ‘evidence’ as: case studies, datasets, qualitative and quantitative research (including evaluations), organisational learnings and official documents.

Please provide evidence to support your response, including citations of relevant published sources where appropriate. Please reference the page number of a document if you are drawing attention to a particular statement.

This Call for Evidence document accompanies the questions on Citizen Space. The specific pages in the Call for Evidence document that are referred to in the questions are indicated where appropriate.

Part 1 Strengthening the assessment of local circumstances in the government's flood and coastal defence programme

The government's investment programme for flood and coastal defence infrastructure

Between 2015 and 2021, the government has been investing £2.6 billion in our flood and coastal defence programme. This programme is on time, on budget and on track to meet its target of better protecting 300,000 homes by March 2021. Up to September 2020, the programme had delivered over 700 new infrastructure schemes which have provided better protection for over 250,000 homes across England.

The programme also aims to support wider benefits, such as providing better protection to around 690,000 acres of agricultural land, 279 miles of railway and 5,000 miles of highways. It will also result in 16,000 acres of water-dependent habitat being improved or created, 2,700 acres of intertidal habitat being created and 380 miles of river habitats being improved. Following conclusion of the 2015-2021 programme, Defra will work with the Environment Agency to undertake an assessment of all the benefits achieved. This assessment will be published by the end of 2021.

The government has doubled the amount it invests in the flood and coastal defence programme in England from 2021 to £5.2 billion over six years. This will provide around 2,000 new defence schemes to better protect a further 336,000 properties, including homes and non-residential properties such as schools, hospitals, transport links and utility sites. This aims to reduce national flood risk by up to 11% by 2027 helping to avoid £32 billion of wider economic damages – benefitting every region of the country.

Why are we gathering evidence about how the future flood and coastal defence programme works?

This Call for Evidence sets out questions on some specific issues which we wish to consider. This will inform whether and at what stage any changes should be made to the way in which the next six-year flood and coastal defence investment programme (2021-2027) works. Any potential changes will be balanced with providing certainty for Risk Management Authorities so schemes can be developed against an understood policy framework. It should also be noted that any potential change to the policy framework may affect the allocation of funding to other flood and coastal defence schemes, therefore affecting the pipeline of scheme in the future.

The issues we are considering in this Call for Evidence include:

1. Communities with the following specific local circumstances:
   - Communities that have been frequently flooded in the past.
   - Communities that are more economically vulnerable and smaller communities.
   - Communities that may be in greater need of property-level measures to resist flood water such as flood doors or gates.
2. Encouraging timely, wider financial contributions to assist with the pace of developing a flood and coastal defence scheme; and
3. The data we collect to monitor and report against the improvements we are making.

Some of the specific issues on which we wish to invite evidence reflect a number of different local circumstances that have an impact on the assessment of needs, costs and benefits. We are considering how best these can be addressed. There are a number of ways this could be done. It could mean changes to the Partnership Funding policy or appraisal policy, or changes to the way schemes are prioritised within the programme. Partnership Funding policy itself is therefore only one element.

The government uses the Partnership Funding policy to allocate grant in aid for flood and coastal defence projects. This policy provides a fair and consistent basis for allocating grant in aid and securing wider contributions where others stand to benefit from a defence scheme. It has generated contributions of over £500 million from private and public sources to complement Defra's grant in aid. Our evaluation of the Partnership Funding policy has shown that it has resulted in 421 additional schemes going ahead which have better protected an additional 65,000 properties from flooding and 1,300 properties from coastal erosion[5].

In preparation for the new 2021-2027 programme, the government announced in April 2020 four technical amendments to the Partnership Funding rules (see Figure 1). These amendments include increased payment rates for grant in aid, based on the latest evidence on the impacts of flooding and coastal erosion and the benefits of risk management schemes. We are preparing more detail on the new programme, including on its metrics, indicators and reporting arrangements to ensure we can track its progress effectively. Further details will be published in 2021 in our Investment Programme for 2021-2027.

[5] Risk and Policy Analysts in association with Royal Haskoning DHV (2018). Further evaluation of Partnership Funding. Final Report. Joint Flood and Coastal Erosion Risk Management Research and Development Programme.

Figure 1. The technical amendments made to the Partnership Funding rules, announced in April 2020

1. **Updated payment rates** to account for inflation and impacts of flooding including on mental health and well-being.
2. **Increased payments for environmental benefits** to capture more fully the wider environmental benefits delivered by flood and coastal defence projects and to help support nature-based solutions.
3. **More funding for flood schemes which also better protect properties that will later become at risk of flooding due to climate change**.
4. **Amended flood risk bands for qualifying schemes** to add a new intermediate risk band between high and medium risk. This will mean more schemes that reduce surface water flood risk are likely to receive government funding in the future.

Communities frequently flooded in the past

The issue

Issue summary: Do flood defence scheme proposals for communities that have been frequently flooded in the past, including those that have suffered from multiple sources of flooding, need to be given greater weight in the overall flood and coastal defence investment programme? If so, how do we achieve this?

Flooding and coastal erosion can have devastating impacts; they have the potential for loss of life, damage to property and livelihoods, and can affect people's mental health and well-being.

Grant in aid is already provided for flood defence schemes that better protect communities that have been frequently flooded in the past. Recent examples include:

- In January 2018, a £20.7 million scheme was completed to better protect Sheffield's Lower Don Valley which experienced flooding in 2007, 2009 and 2012. Defra's grant in aid contributed £19.3 million towards the capital cost and local businesses contributed £1.4 million.
- In October 2018, a £4.1 million scheme was opened in Worcestershire, better protecting 272 homes and businesses in Broadway, Childswickham and Murcot that were severely flooded in 2007 and then again in 2012. Over £2 million of grant in aid was secured with the remainder delivered in partnership with Worcestershire County Council, Wychavon District Council, local parishes and the Environment Agency's English Severn and Wye Regional Flood and Coastal Committee (RFCC[6]).

The Partnership Funding policy allocates grant in aid for flood and coastal defence schemes based on economic damages avoided and the number of households and people that will benefit in the future, taking into account their assessed risk of flooding and coastal erosion. Past flooding risks are recognised through the consideration of risk and frequency of future flooding. However, the policy does not provide any additional weighting for past flooding events.

To better understand the extent and distribution of frequent flooding in the past, potentially repeatedly, a comparison has been made of Flood Risk Areas in 2020[7], where there is

[6] The role of RFCCs is summarised in the Annex to this Call for Evidence on background on Partnership Funding.

[7] Flood Risk Areas defined by the Environment Agency (main rivers and the sea) and Lead Local Flood Authorities (surface water).

believed to be a significant flood risk, with flood records from 1960 to 2019 from publicly available flood chronologies[8]. This comparison indicates[9]:

- Of the 163 flood risk areas assessed**, at least 73 areas** have records of flooding more than once since 1960.
- Of these flood risk areas, **at least 70 individual communities** (e.g. village, town or city) have been flooded more than twice since 1960.
- **At least 29 of these communities** have flooded more than five times since 1960.

At a national level, investment in flood and coastal defences has been effective at better protecting properties and reducing the impacts of *future flooding* and coastal erosion on people's lives and livelihoods[10]. This section of the Call for Evidence seeks to better understand whether communities that have experienced *flooding in the past*, potentially repeatedly, are adequately considered in the way the flood and coastal defence programme works.

Addressing the Issue

There are different approaches that could be considered to improve the resilience of communities that have been frequently flooded in the past:

1. Giving extra weight in the Partnership Funding policy to flood schemes that better protect properties that have been flooded a set number of times before in a set period of years.
2. Counting the damages of a previous flood and coastal erosion event as part of the **Partnership Funding calculator**. For example, these damages could be counted as an addition to the damages avoided to households that are better protected today and to households that are better protected from the impacts of climate change. This would give a value to better protecting households that have been subject to flooding in the past.

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[8] Publicly available flood chronologies used include: www.jbatrust.org/how-we-help/publications-resources/rivers-and-coasts/uk-chronology-of-flash-floods-1/, cbhe.hydrology.org.uk/index.php and the Environment Agency Recorded Flood Outlines

[9] It is noted that the figures illustrated are an underestimate - the data sources rely on the floods being reported in the literature and records of the time. It is also not always possible to distinguish sources of flooding from the available records and there is no chronology for flooding from the sea going back over time (other than what is in the recorded flood outlines dataset). Flooding from surface water is often caused by localised rainfall and may affect different parts of communities, especially in larger urban and suburban areas. Finally, the built and natural landscape is constantly changing, therefore only broad brush conclusions can be drawn from the available flood records as to how this informs the risk of flooding in the future.

[10] Environment Agency (2020). National Flood and Coastal Erosion Risk Management Strategy for England. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/920944/023_15482_Environment_agency_digitalAW_Strategy.pdf

3. Alternatively, **evidence could be collected and additional advice developed to support RFCCs** in their local choices to prioritise schemes that better protect communities that have been frequently flooded in the past. This would require data to be collected on previously flooded communities and presented in terms of the number that would be better protected as a result of the proposed intervention. RFCCs would then be able to develop their annual programme of works based on the scale of communities that have experienced frequent flooding in the past alongside other local priorities.

Questions

6. How could we define frequently/repeatedly flooded communities for the purposes of the investment programme?
7. Drawing on evidence, should we consider a community's historic frequent flooding in the funding or prioritisation of schemes?
8. What evidence (other than that referenced in pages 12-13 of the Call for Evidence document) should we draw upon when considering whether a community that has experienced frequent flooding in the past should carry additional weight?
9. In addition to the approaches of (1) giving extra weight in the policy to flood schemes that better protect properties that have been frequently flooded in the past; (2) counting damages to previously flooded properties in the Partnership Funding calculator; and (3) prioritising previously flooded communities through local choices (pages 13-14 of the Call for Evidence document), what other approach(es) could improve the resilience of communities that have been frequently flooded?
10. What are the advantages of these approaches (in addition to other approach(es) you suggested in response to question 9)? Please refer to social, health, economic and environmental impacts, and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to.
11. What are the disadvantages of these approaches (in addition to other approach(es) you suggested in response to question 9)? Please refer to social, health, economic and environmental impacts, and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to.
12. Of the approaches provided, and your own, which do you consider the most suitable, if any, and why?

Economically vulnerable and small communities

The issue

Issue summary: Do economically vulnerable and small communities need to be better protected from flooding and coastal erosion in the way the flood and coastal defence investment programme works? If so, how do we achieve this?

Flood risk varies across England – reflecting the diversity of our landscapes, built environment and communities. Funding for flood and coastal defences targets properties and communities that are at greatest risk – in this way we are investing in interventions that reduce this risk across all regions of the country.

The Government's National Infrastructure Strategy[11] sets out how the government will build back better, faster and greener. Chapter 2 of the Strategy focuses on levelling up the UK – delivering investment across the country and ensuring no citizen, community or business is left behind. In exploring how local circumstances could be taken into account in the government's future flood and coastal defence programme, this section of the Call for Evidence explores the impacts of flooding and coastal erosion on two types of communities:

- Economically vulnerable communities; and
- Small communities, particularly small groups of properties.

Economically vulnerable communities

There is a strong correlation between areas with lower performing local economies and those with higher flood and coastal erosion risk[12]. In turn, flooding and unmanaged coastal change harm local economies. For example, after flooding, there are generally more small business failures and other employers move away[13]. This can lead to a loss of

[11] HM Treasury (November, 2020). National Infrastructure Strategy. Fairer, Faster, Greener. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938539/NIS_Report_Web_Accessible.pdf

[12] Identified using business birth rate, published by the ONS, as a proxy for economic performance and the proportion of properties at risk of flooding from the rivers and the sea, both by local authority (Flood and Coastal Erosion Risk Management Policy Statement, 2020).

[13] Environment Agency, unpublished, 2019 (sourced from data collated for the 6 Year Programme, cited in the Environment Agency's National Flood and Coastal Erosion Risk Management Strategy for England, 2020).

confidence in recovery and, given that impacts may last for several years, can result in local economies falling behind other parts of the country.

Businesses and economic sectors experience floods differently and have differing abilities to recover[14]. Small firms are usually less well equipped to deal with unexpected events and may be more vulnerable than larger companies with a greater coping capacity. The extent of infrastructure damages, such as damage to bridges and other communication networks, may also affect the ability of customers to reach a business or for supply chains to function properly[15].

Small communities

Grant in aid is provided for flood and coastal defence schemes of a variety of sizes, including those that better protect small communities. For example, of all schemes in the current flood and coastal defence investment programme (2015-2021), approximately 70%[16] better protect fewer than 100 homes each. The Environment Agency estimates that approximately 82% of the 2,000 schemes planned for the new investment programme (2021-2027) will better protect less than 100 properties each.

However, anecdotal evidence suggests that small communities, particularly small groups of properties, can struggle to access contributions in order to realise their flood and coastal defence projects. This may be because:

- The overall costs of a scheme outweigh the benefits delivered, given the smaller number of people and properties that would benefit from the intervention;
- There are fewer and smaller local businesses to support the costs;
- Local authorities, who are an important source of local funding, may have smaller capital budgets or a reduced ability to borrow money to finance investments targeted at small numbers of beneficiaries; and
- There may be lower growth potential and therefore less opportunity to attract funding from Local Economic Partnerships or other funders who typically invest in flood and coastal defence projects that support economic expansion.

[14] sciencesearch.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18690

[15] assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/672087/Estimating_the_economic_costs_of_the_winter_floods_2015_to_2016.pdf

[16] 70% by number of schemes.

Through this Call for Evidence we want to strengthen our evidence on how we reflect the economic vulnerability of areas at flood and coastal erosion risks and how we support the resilience of small communities to these risks.

Existing support for economically vulnerable and small communities

The Partnership Funding policy currently support economically vulnerable areas and small communities in several ways:

- **Premiums are applied to projects in deprived areas**. Payment rates for better protecting households are higher in deprived areas so schemes in these areas are more likely to be fully funded by government. Levels of deprivation are assessed using the Index of Multiple Deprivation. In the 2015-2021 flood and coastal defence programme, around 45,000 homes in the 20% most deprived communities in England saw a reduction from their original high level of flood risk as a result of the investment.
- **In specific circumstances, in areas of very high flood risk, grant in aid can fund property-level flood resistance measures such as flood gates or doors**. These can be important for small groups of properties where other defence measures are unlikely to be cost effective or practical, as well as larger community-wide risk management projects. Further information on the use of grant in aid for property flood resilience is provided on pages 21-22.

Facilitating greater local economic growth and productivity

The benefits of flood and coastal defence schemes to the national economy are already taken into account in our Partnership Funding policy and appraisal. This reflects the appropriate use of public money gathered through general taxation for nationwide public benefits.

However, Flood and coastal defence schemes can also have local economic benefits and these provide a strong basis for financial contributions from those that stand to benefit locally. Enabling local economic growth potential and delivering infrastructure projects is important to government and local project partners. The National Infrastructure Strategy focuses in Chapter 1 on how infrastructure can boost short term economic growth and drive the recovery from COVID-19, and highlights the record levels of investment in the

flood defence programme. Taking action to boost resilience to flood and coastal erosion provides businesses and investors with the confidence to invest in a place[17].

Wider government funding also contributes to flood schemes where they meet separate and local objectives for those funds. For example, the growth funds distributed via government to Local Enterprise Partnerships have been a significant source of funding contributions to flood defence projects in addition to Defra's grant in aid.

In 2014 a toolkit was prepared, following research commissioned by Defra, that explored the local economic benefits of flood and coastal defences. The toolkit is intended for use by local bodies who are considering, or encouraging others to consider, contributing partnership or other funding for flood and coastal defence projects, helping them calculate and communicate the local economic benefits of scheme proposals.

HM Treasury has updated the Green Book, the government's guidance on best-practice appraisal, to value the wider benefits of a project and ensure appropriate emphasis on the analysis of place-based impacts. We will therefore consider ways in which local economic benefits can be consistently and appropriately taken account of in the way flood and coastal defence schemes are assessed or prioritised in the future.

Grant in aid for flood and coastal defence projects is only available to better protect properties built before 1 January 2012. The National Planning Policy Framework is clear that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at risk. Where this is not possible development should be made safe for its lifetime without increasing flood risk elsewhere. Developers make contributions through Section 106 obligations[18] and the Community Infrastructure Levy towards flood management projects to the benefit of new developments and the wider community.

Our Policy Statement signalled that we will consider ways to support the effective use of contributions from developers which support flood infrastructure and resilience measures – for example through new guidance – as well as assess whether current protections in the National Planning Policy Framework for buildings in areas at flood risk should be strengthened.

[17] HM Government (July, 2020). Flood and coastal erosion risk management Policy Statement. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/903705/flood-coastal-erosion-policy-statement.pdf

[18] www.legislation.gov.uk/ukpga/1990/8/section/106

Government already contributes to flood risk schemes through other funds which help to unlock the potential for new development to provide the homes the country needs, for example, through the Housing Infrastructure Fund.

Addressing the issue

We would like to explore whether, and if so how, we can further support the resilience of lower performing local economies and small communities to flood and coastal erosion risks. One approach we could consider on local economic circumstances would be to develop a measure for this, which could either inform local choices about the prioritisation of flood and coastal defence proposals in the programme or inform the Partnership Funding policy or appraisal policy. This measure could be an index which could work in a similar way to the existing Index of Multiple Deprivation which is used to provide greater assistance for flood and coastal defence projects in more deprived areas. The index could include a single or multiple indicator(s) to reflect economic vulnerabilities; examples of indicators that could be considered are included in Figure 2.

We could also consider how to support those communities with strong local growth potential but where flood or coastal erosion risk is recognised as a constraining factor. The same or a different measure could be considered to support these communities, which again could inform local choices or the Partnership Funding policy or appraisal policy.

Alternatively, flood schemes which address these circumstances could be identified and prioritised in other ways within the overall flood and coastal defence investment programme.

Figure 2. Indicators that could be considered within an index to reflect economic vulnerabilities and economic growth

- **Business birth rate**, published by the Office for National Statistics (ONS), as a proxy for economic performance.
- **Micro businesses**, also published by the ONS as a proxy for economic performance.
- **Reliance of a local economy on a small number of significant businesses or industrial activities** (to be identified).
- **Growth potential**, based on an objective measure of development demand in the area benefiting from investment (to be identified).

Questions

13. How difficult is it for economically vulnerable and small communities to secure grant in aid for flood and coastal defence schemes? Please detail sources of national and representative data that we should draw upon when assessing the nature and scale of the issue.

14. In addition to developing a measure on local economic circumstances, what other approaches could provide better flood and coastal erosion resilience for economically vulnerable and small communities in the flood and coastal defence programme?
15. What are the advantages of developing a measure on local economic circumstances (in addition to any other approaches you suggested in response to question 14)? Please refer to social, health, economic and environmental impacts, and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to.
16. What are the disadvantages of developing a measure on local economic circumstances (in addition to any other approaches you suggested in response to question 14)? Please refer to social, health, economic and environmental impacts, and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to.
17. What indicators could we use to measure potential economic growth benefits and to inform the prioritisation of flood and coastal erosion schemes for the award of grant in aid?

Resistance measures for properties and communities

The issue

Issue summary: Should we expand the circumstances where the overall flood defence investment programme can be used for installing 'resistance' measures, such as flood doors, to properties? If so, how do we achieve this?

Property Flood Resilience (PFR) can help to reduce the flood damages experienced by property owners, occupiers and businesses[19] and enable faster recovery in local communities. There are two types of PFR:

- **Resistance measures** – which aim to prevent or reduce the amount of floodwater from entering a building. These can include changes to public infrastructure (such as kerb heights) in addition to temporary flood barriers fitted to external doors and air brick covers.
- **Recoverability measures** – which aim to reduce the impact of damage when water does enter a building, to make the cleaning and drying process easier and faster. Recoverability measures can include changes to drainage arrangements and permanent structural work such as raised electrics, hard flooring and waterproof plaster.

The government's Flood and Coastal Erosion Risk Management Policy Statement identifies the need to accelerate the uptake of PFR to limit the damage and disruption flooding can cause. Resistance and recoverability PFR measures support the Policy Statement's goals of **better protecting** against and **better preparing** for flooding respectively.

Flood defence grant in aid can, in certain circumstances, be used for resistance measures through wider flood alleviation approaches – such as temporary flood doors or gates fitted to a property's external doors. This section of the Call for Evidence seeks ideas on how to accelerate the uptake of resistance PFR measures as part of the flood and coastal defence investment programme. **Part 2** of the Call for Evidence considers resilience measures more broadly and seeks evidence on a range of actions to overcome barriers and accelerate further uptake of these measures.

[19] Note that whilst PFR can benefit households and businesses, grant in aid is limited to PFR measures in households.

Grant in aid for Property Flood Resilience

Resistance PFR measures that reduce the probability, level and consequence of damages from flooding are eligible for grant in aid. This eligibility is restricted to those properties that are at a very significant risk of flooding and that will move to a lower risk band as a result of the intervention. The risk bands used for this assessment are summarised in Figure 3.

Figure 3. Flood risk management household risks bands

Risk band	Description
Very significant	Greater than or equal to 5% Annual Exceedance Probability (AEP)[20] (standard of protection less than or equal to 1 in a 20 year flood event)
Significant	Less than 5% AEP but greater than 2% AEP (standard of protection 1 in 21 to 1 in 49)
Intermediate	From 2% AEP but greater than 1% AEP (standard of protection 1 in 50 to 1 in 99)
Moderate	From 1% AEP but greater than 0.5% AEP (standard of protection 1 in 100 to 1 in 199)
Low	Less than or equal to 0.5% AEP ≤0.5% AEP (standard of protection 1 in 200 and above)

Addressing the issue

The uptake of resistance measures through the flood and coastal defence programme could be accelerated by:

1. **Relaxing the restriction** that grant in aid is only available for households that are in the very significant risk band; and

[20] Risk bands are described in terms of annual probability of a flood, known as the annual exceedance probability (AEP). The AEP applies to the probability of water crossing the threshold of a household.

2. **Increasing the underlying payment rate** specifically for resistance measures.

1 Relaxing the household eligibility restriction

An evidence review[21] about PFR identified a number of studies that concluded that using manually operated resistance measures (such as demountable door gates and manual airbrick and vent covers) is generally cost beneficial for properties at a flood risk greater than 2-3% AEP. This evidence indicates that there could be a category of households currently in the significant flood risk band (2 to 5% AEP) for which PFR could be cost-beneficial, but which would not be eligible for grant in aid. This issue could be addressed by reducing the restriction in the Partnership Funding policy such that grant in aid is available for households in both the very significant and significant risk bands.

If this change was made, consideration would need to be given as to whether households would also be required to move to a lower flood risk band as a result of the intervention or whether an alternative measure of improvement should be considered for PFR.

2 Increasing the underlying payment rate

Another approach could be to increase the payment rate of benefits specifically for resistance measures in the Partnership Funding policy.

However, there are limitations with these approaches. For example:

- **Value for money**: If households in the significant risk band are able to qualify for grant in aid for resistance measures, this could provide a standard of protection against a 1 in 21 year to a 1 in 49 year flood event (Figure 3). Assuming that a PFR measure has a limited operational life, potentially under 21 years, it could be the case that grant in aid funding is being provided to better protect against a flood event that is not likely to happen within the operational life of the asset.
- **Wider benefits**: PFR measures are property specific and provide fewer flood risk management benefits to the public than investments in community level infrastructure.

[21] University of the West of England and Flood Re. (2018). Evidence review for Property Flood Resilience Phase 2 Report.

Questions

18. In addition to work referenced in the Call for Evidence document (page 23)[22], what other evidence should we draw upon to consider the cost effectiveness and practicality of encouraging the uptake of flood resistance measures in the flood and coastal defence investment programme?
19. What are the key challenges in delivering flood resistance measures in the flood and coastal defence investment programme?
20. What lessons should we learn about what has worked well in delivering flood resistance measures in the flood and coastal defence investment programme, and what has not worked well, in the past?
21. In addition to the approaches of (1) reducing the household eligibility restriction (such that grant in aid is available for households in both the very significant and significant risk bands) and (2) increasing the underlying payment rate for Property Flood Resilience measures, what other approach(es) could accelerate the uptake of Property Flood Resilience as part of the flood and coastal defence investment programme?
22. What are the advantages of these approaches (in addition to other approach(es) you suggested in response to question 21)? Please refer to social, health, economic and environmental impacts, and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to.
23. What are the disadvantages of these approaches (in addition to other approach(es) you suggested in response to question 21)? Please refer to social, health, economic and environmental impacts, and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to.

[22] In particular the study undertaken by the University of the West of England and Flood Re. (2018). Evidence review for Property Flood Resilience Phase 2 Report.

Inefficiencies caused by the length of time taken to develop schemes

The issue

Issue summary: how do we encourage the more timely development of flood and coastal defence projects and how do we incentivise increased private sector contributions to these projects?

Long term investment decisions should follow an adaptive approach to enable local decision-makers to identify both the right combination of resilience actions and the right time to act and invest[23]. Critical to this is the timely and efficient development of flood and coastal defence projects. The Government's National Infrastructure Strategy[24] emphasises the need to accelerate and improve project delivery. Chapter 5 of the Strategy highlights that government and industry must work together to accelerate the delivery of the government's ambitious infrastructure portfolio – including the delivery of flood defences – and deliver projects better, greener and faster.

To claim flood and coastal defence grant in aid, a risk management authority[25] needs to develop a business case. This typically has three stages:

- **Strategic Outline Business Case (SOBC),** which makes the case for resources to develop the project;
- **Outline Business Case (OBC),** which sets out an appraisal of short-listed options with costs and benefits and explains the selection of the preferred option and how it will be developed; and
- **Full Business Case (FBC),** which includes finalised prices from a procurement exercise, terms of any legal agreements such as contributions and a completed delivery plan.

The length of time it takes to develop a business case depends on a range of factors including its size, complexity, funding and local context. Some of the time-consuming but critical activities include stakeholder engagement and consultation, design development,

[23] HM Government (2020). Flood and coastal erosion risk management Policy Statement. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/903705/flood-coastal-erosion-policy-statement.pdf

[24] HM Treasury (November, 2020). National Infrastructure Strategy. Fairer, Faster, Greener. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938539/NIS_Report_Web_Accessible.pdf

[25] Risk management authorities include the Environment Agency, Lead Local Flood Authorities, local authorities, coast protection authorities, water and sewerage companies, internal drainage boards and highways authorities.

funding negotiations and planning. Anecdotal evidence suggests that progress, particularly between SOBC and OBC, can be slow especially for larger projects.

This section of the Call for Evidence explores how we could encourage the more timely development of projects by incentivising quicker contributions and increasing contributions from non-public sources.

The timely development of projects

The Partnership Funding policy does not make grant in aid conditional on the timely progress from one business case stage to the next. This has the advantage of providing maximum flexibility for a project to progress at a pace relevant to its local context and wider stakeholder needs.

However, one potential effect of this approach is to delay funding negotiations as there are minimal incentives for financial contributors to engage early in a project's development[26]. This can impact on a project's cost and development programme due to the challenges associated with securing contributions to a more advanced project that investors have not had early involvement in. This is likely to be one of a number of factors which may limit early engagement with potential funders.

Encouraging more private investment

This limited early engagement with potential investors can in turn slow the process and limit private-sector contributions to flood and coastal defence schemes. Over the current investment programme (2015-2021), the Partnership Funding policy has generated significant funding with contributions of over £500 million from private and public sources to complement Defra's grant in aid. However, the majority of this has come from other public-sector sources; private investments are expected to amount to approximately 7% of total contributions for the current investment programme[27]. In some cases, flood and coastal defence schemes can be eligible for 100% of grant in aid funding from Defra and no contributions are made even in local areas where the economy is dynamic and there may be beneficiaries who could contribute. If contributions were made in these cases, the overall grant in aid funding would go further, supporting more schemes in the programme as a whole.

[26] As shown by the economic theory - Varian, Hal R.: "Sequential contributions to public goods" Journal of Public Economics, 53. Ed. North-Holland, 1994.

[27] Sourced from data and analysis collated by the Environment Agency for the current 6 Year Programme (2015-2021).

Our Flood and Coastal Erosion Risk Management Policy Statement sets out a number of issues we will explore to incentivise contributions from others including from businesses and the private sector. These include considering options to expand and promote the use of local powers which local authorities can access to secure additional funding to manage flood and coastal erosion risk, and reviewing current guidance on corporation tax relief on Partnership Funding contributions that companies make to ensure it provides clarity on the scope and availability of the relief. Alongside this, the Environment Agency is refreshing its approach to securing wider financial contributions.

Addressing the Issue

A number of different approaches could be taken to address these issues.

We are interested in exploring the role of clearer and more transparent information, for example about the time taken between approval stages for a flood and coastal defence scheme. There may also be a role for incentives or levers which speed up the wider financial contributions provided by others which complement Defra's grant in aid. These might form part of the Partnership Funding policy or feed into the annual refresh of schemes or decisions made through local choices in each RFCC.

Another approach could be to introduce time limits for projects to progress through the business case development stages, with exceptions used on a case by case basis. This could for example include a time limit across the full business case cycle i.e from strategic outline business case to full business case. Or at specific business case stages, such as between strategic and outline business case or between outline and full business case.

These approaches could improve the efficiency of some technical development activities such as modelling and economic assessments and encourage early stakeholder engagement, potentially pre-SOBC, to drive forward projects. This could have a number of advantages by incentivising:

- early, timely and open engagement with stakeholders and potential investors;
- focus, pace and innovation for projects in a limited time period;
- a level playing field for all projects; and
- timely investigations that confirm the financial viability of future investments.

Some of these advantages are likely to reinforce others. For example, by engaging with stakeholders and investors early, they are more likely to invest (potentially in both finance and resource terms) in a project's development which could then also help with focus, pace and innovation in driving the project forward.

However, the approaches could also have drawbacks. For example, implementing time limits could undermine the current flexibility associated with the Partnership Funding policy and potentially the management of the flood and coastal defence investment programme. It could result in a project with a strong business case and wider stakeholder support being rejected due to an unforeseen delay or complexity.

Finally we are interested in exploring whether there are some circumstances where there is a high degree of potential for some level of wider financial contributions which is overlooked because the flood scheme may be eligible for 100% grant in aid funding. Introducing a way of checking this may allow the overall grant in aid funding to go further and support more schemes or to address other issues covered by this Call for Evidence.

Questions

24. What good practice examples can you cite from the way infrastructure delivery programmes operate in other sectors, both in public and private spheres?
25. Drawing on evidence, what are the key factors that delay flood and coastal defence projects at Strategic Outline Business Case, Outline Business Case and Full Business Case stages?
26. How could clearer or more transparent information about the progress of a flood and coastal defence scheme through its approval stages help drive progress and encourage wider contributions?
27. What incentives could be applied in relation to the Partnership Funding policy or appraisal policy to encourage wider financial contributions to come forward early on and in a timely manner?
28. In addition to the approaches listed on page 27 of the Call for Evidence document, what other approach(es) could encourage the more timely development of projects as part of the flood and coastal defence investment programme?
29. What are the advantages of the different approaches set out on page 27 of the Call for Evidence document (in addition to other approach(es) you suggested in response to question 28) for encouraging the more timely development of projects? Please refer to social, health, economic and environmental impacts, and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to.
30. What are the disadvantages of the different approaches set out on page 27 of the Call for Evidence document (in addition to other approach(es) you suggested in response to question 28) for encouraging the more timely development of projects? Please refer to social, health, economic and environmental impacts, and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to.
31. How could we assess the potential, and apply it to the grant in aid formula, for some level of wider contributions towards flood and coastal defence schemes that may be eligible for 100% grant in aid funding (such as in areas where the economy is dynamic or there are beneficiaries who could contribute)?

Metrics and reporting

The issue

Issue summary: what additional data do we need to collect, track and report on for the flood and coastal defence investment programme to ensure we measure progress towards our goals?

Our Investment Plan for 2015-2021[28] describes how we will measure the success of our current six-year capital programme. This will include measuring against the **indicators** and **outcomes**[29] listed in our Investment Plan and the four Partnership Funding policy Outcome Measures[30]. Following the conclusion of the programme, Defra will work with the Environment Agency to undertake an assessment of all of the benefits achieved by the 2015-2021 programme and will publish this by the end of 2021.

We will also be preparing the metrics, indicators and reporting arrangements needed for the new £5.2 billion flood and coastal defence programme for 2021-2027. These will be developed to ensure we can understand the progress the programme is making to achieve its objectives and deliver the benefits expected; that it is delivered efficiently; and that it demonstrates value for money.

This is separate to, but will complement, the action in our Flood and Coastal Erosion Risk Management Policy Statement to develop a national set of indicators by spring 2022 to monitor trends over time to better understand the impact of our policies.

Data Collected

The data that are routinely collected on flood and coastal defence schemes in the investment programme include those listed in Figure 4.

[28] Department for Environment, Food and Rural Affairs (2014). Reducing the risks of flooding and coastal erosion. An investment plan. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/389789/fcerm-investment-plan-201412.pdf

[29] **Outcomes** describe the benefits of the investment and **indicators** of success monitor the mechanisms of delivery.

[30] See the Annex for background on Partnership Funding.

Figure 4. Data collected in developing the case for schemes in the flood and coastal defence programme[31]

- Total project costs
- Contribution of grant-in-aid
- Residential properties in each risk band and the change in these numbers as a result of the project
- Public services and transport networks better protected, such as hospitals, schools and lengths of road and railway
- Industry, commerce and administration better protected, such as offices, shops and hotels
- Utilities better protected, such as electricity sub-stations and water, waste-water and sewerage treatment works
- Agricultural land better protected
- Areas of environmental improvements, such as intertidal habitat, woodland and grassland – both statutory and non-statutory environmental benefits

Addressing the Issue

To support our monitoring and reporting commitments in the Policy Statement and to track the successful delivery of our flood and coastal defence investment programme, we would like to collect additional data, as set out in Figure 5. These data are accessible from readily available sources or are likely to be collected as part of a scheme's development, so are unlikely to create significant additional and unnecessary burdens to those involved in the process.

If further changes are made, for example to the Partnership Funding policy, in the future we will consider the need for outcomes and indicators of success to track the performance of the change against the issue it is seeking to address.

[31] This information has been sourced from the Partnership Funding calculator 2020 for flood and coastal erosion risk management grant-in-aid (www.gov.uk/government/publications/partnership-funding-supporting-documents).

Figure 5. Additional data that could be collected to track the delivery of the flood and coastal defence investment programme

- Local authority area(s) covered by the project
- Office for National Statistic Region covered by the project
- Number of homes in each deprivation band better protected (per flood scheme)
- Number of properties benefitting from property flood resilience measures
- Numbers of residential properties that are better protected in areas that have seen flooding in the recent past
- Source of flooding, e.g. fluvial, coastal, surface, ground
- Source of contribution (i.e. public, private sector contributions)
- Flood schemes which use natural flood management techniques including which technique is the main element
- Local growth and economy benefits, such as enabled jobs or enabled GVA growth
- Measures of wider benefits such as green space creation, cycle path creation and other civic enhancements

Questions

32. What, if any, are the anticipated difficulties with collecting data against the additional items in Figure 5 (page 31 of the Call for Evidence document)? What are the reasons for the difficulties and how could they be overcome? In your response, please outline which specific datum you are referring to.
33. What, if any, additional data (other than those in Figures 4 and 5 (pages 30 and 31 of the Call for Evidence document) could be recorded to monitor improvements and report progress of our flood and coastal defence programme? In your response, please detail what these data will help to track and what readily available sources could be used to support the provision of these data.

Part 2 Property Flood Resilience Policy

Introduction to property flood resilience

Property Flood Resilience (PFR) enables householders and businesses to manage the impact of flooding if it occurs – it can help reduce the damage and help people to get back into their properties quicker after an event. PFR can include **resistance** measures which reduce floodwater entering the building, such as temporary flood barriers and air brick covers, and **recoverability** measures which reduce the impact of flooding such as raising plug sockets or using waterproof plaster. Reviews of previous flood events and other research has shown that PFR measures can be effective at reducing risk and damage, and show that packages of PFR measures could provide cost-effective protection for a wide range of residential and commercial properties across the UK[32].

In our Policy Statement[33] we signalled the government's intention to accelerate the uptake of PFR to reduce the risk and impact of flooding. Our objective is to further boost uptake of PFR in homes and businesses across England. This Call for Evidence will help us support the development of an effective private sector market for PFR and encourage the use of PFR measures by consumers. The Government's Property Flood Resilience Action Plan[34] in 2016 set out how, collectively, business and government can best enable and encourage the use of PFR measures by the public, for buildings at risk of being flooded. Significant progress has been made, however, we need to continue working with stakeholders to unblock the barriers.

Enabling an effective PFR market and encouraging uptake is a shared challenge. There are a range of organisations who benefit and can play a key role, ranging from central government, local government, the buildings sector, insurers, the service and financial sectors.

In order to increase uptake of PFRs we need to overcome a number of barriers currently limiting uptake. There are several complex barriers within the PFR market – for example,

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[32] Lamond et al. 2018, Oakley 2018

[33] Flood and Coastal Erosion Risk Management: Policy Statement - www.gov.uk/government/publications/flood-and-coastal-erosion-risk-management-policy-statement

[34] The Property Flood Resilience Action Plan - assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/551615/flood-resilience-bonfield-action-plan-2016.pdf

there is no widely recognised accreditation scheme for those fitting PFR and a lack of shared data about the benefits[35]. We consider that PFR needs to:

- Have a common metric to determine how flood resilient a property is.
- Have accredited training for advisers and installers.
- Be better integrated within the insurance, mortgage sectors and building industries.
- Be better understood by industry and the public as an effective measure to address flood risk and impacts.

There is an important distinction between retrofitting properties to make them more resilient and designing in as part of new-build developments. The challenges and solutions to uptake for each may be different, but both need consideration.

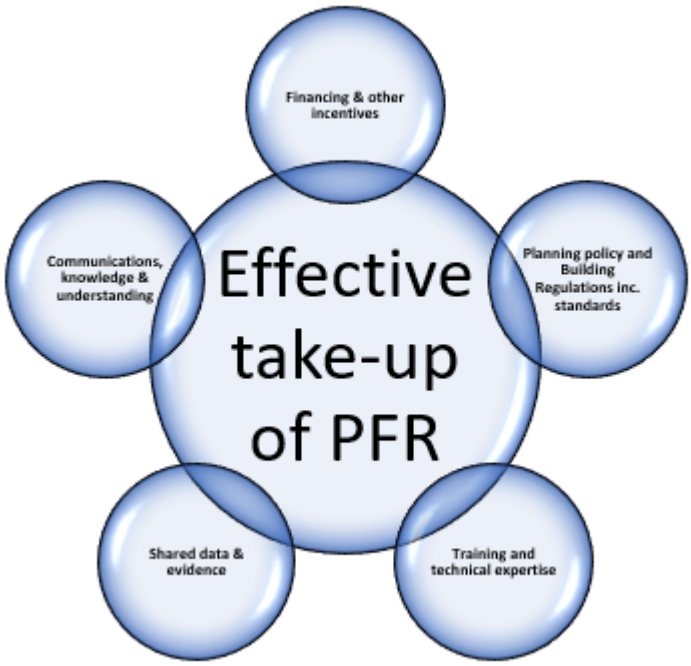
There are a range of 'enablers' which need to work effectively to support the PFR market. These will help ensure the foundations are in place to support communities to be better prepared through the effective use of PFR. We need to work together to overcome these challenges, with all sectors and industries playing their part.

This Call for Evidence is seeking evidence about key enablers related to PFR that we would like to explore in more detail to achieve our shared objective. All of these enablers need to be effective, providing the foundations for a PFR policy framework.

The key enablers are:

- Financing and other incentives
- Planning policy, building regulations and standards
- Training and technical expertise
- Evidence and data sharing
- Communication and understanding

[35] For example see: www.gov.uk/government/publications/applying-behavioural-insights-to-property-flood-resilience



We continue to support the efforts and significant progress made through the Defra and Industry PFR Roundtable and will discuss the results of this Call for Evidence with them to inform future work.

Financing and other incentives

Action to increase uptake of PFR and mitigate flood risk could be undertaken by a range of actors, both for retrofitting existing buildings and new builds. There is a case for property owners, business sectors, local and national government to invest – based on the extent of the benefits or savings which might accrue to them. For example, through protecting their property, owners can benefit from reduced damages and repair costs, and less mental health impacts.

Many of the benefits of PFR are private, in respect of them benefitting the property owner. However, insurers benefit from PFR through reduced risk to properties, resulting in cheaper claims. Business can get back on their feet quicker, supporting local high streets by reducing the likely impact.

As the benefits from the investment in resilience are shared, it should not be for government alone to provide the incentives or pick up costs. We need to have an appropriate balance between the government's contribution and role in unblocking barriers, alongside others. We have already seen some progress, for example through Flood Re's proposals to incentivise uptake through reduced premiums and build back better, but we need to be clear about the role different sectors can play, their responsibilities and the wider benefits for them.

Government plays a key role in contributing to the overall framework of investing in acceleration of take-up.

Government's contribution

- Government investment in PFR has come through Defra pilot schemes, Local Levy and Grant-in-Aid. The Environment Agency and Local Authorities have developed targeted schemes since 2009 with around 6,000 homes benefitting.
  - Grant in aid is awarded on a partnership basis and Part One of this Call for Evidence is seeking views on the process for PFR. Where grant in aid is awarded, most PFR schemes will still need a local contribution to proceed (often from the local levy). Currently only homes at very significant risk qualify and funding is used to install resistance measures as these offer the best benefit cost ratios.
  - Some local authorities have prioritised PFR locally and found funding to maintain their own longstanding PFR schemes. The funding for these has often come from a range of sources including local levy, grant-in-aid and more local funding mechanisms.
- As part of the government's recovery support following some exceptional, multi-regional flood events, Defra has made available a PFR recovery grant scheme. Eligible property owners can receive up to £5,000 towards the cost of making their properties flood resilient through PFR. Prior to 2020, the scheme last operated in 2013/14 and 2015/16, benefitting 17,000 homes and businesses. The scheme was relaunched following exceptional flooding in Yorkshire and the North Midlands in 2019 and in West Mercia in 2020. Up to 7,000 homes and businesses could benefit.

- Between 2019 and 2021, £2.9 million extra funding is supporting 3 PFR pathfinder projects. This is being used to create demonstration centres, to engage with businesses, and to develop local advice portals.
- In the 2020 Budget, the Government announced a 6-year programme to improve the resilience of communities at risk of flooding and coastal change across England. Of which, the Flood and Coastal Resilience Innovation Programme will allocate £150 million to 25 areas to provide an opportunity for local areas to develop and test new and emerging approaches to resilience, including PFR[36].
- Flood Re is a joint government and industry re-insurance scheme to promote the affordability and availability of insurance for households at high flood risk. A consultation is underway, in parallel to this Call for Evidence, on some changes to Flood Re, including proposals which aim to increase uptake of PFR and build closer links between the cost of insurance and the installation of PFR measures.

There are several issues we need to explore to ensure the investment choices made by beneficiaries from all sectors reflect the pace and ambition needed over the coming years to accelerate take-up of PFR. These issues include:

- Unlocking up-front investment for adaptations to properties even though the benefits / savings may not be realised until sometime in the future and is based on risk i.e. benefits will only be realised if there is a flood event. Ways of bridging the two might be needed, in addition to current mechanisms such as links between reduced risk and insurance policy premiums.
- Managing investment choices for individual properties with the economies of scale and efficiencies offered by a broader approach to accelerating uptake in multiple properties together.
- Better aligning the benefits / savings between individual householders, businesses, private industries and public authorities – so that sound investment decisions by each are mutually supportive to enable acceleration of take-up. Ideally, individual investment choices would fully incorporate the costs and benefits of PFR measures as part and parcel of any decisions.
- Getting the right balance in harnessing commercial expertise for financial services / products and the delivery of property measures - with public sector responsibilities and the role of trusted independent or voluntary sector advisers.

We would like to see decisions about flood resilience become a routine part of 'business as usual' management in the property sector and are keen to understand how this could work. We would like to understand the extent to which mortgage providers, banks, landlords, property developers and/or others have roles to play in setting conditions or

[36] The 2020 Budget, the government announced a £200 million fund for a Flood and Coastal Resilience Innovation Programme - www.gov.uk/guidance/flood-and-coastal-resilience-innovation-programme

providing incentives to encourage uptake of PFR. There are several points in the property management cycle where prompts about adopting mechanisms to mitigate flood risk could make a difference.

Flood resilience currently focuses on 'owner occupiers', but there are other types of occupation. An increasing number of people are 'freeholders on private estates', and others rent or lease homes and businesses from private landlords. Therefore, we also want to better understand the barriers for occupiers and tenants in making their buildings flood resilient.

Questions

34. Financing and other Incentives

Under each of the headings we are interested in the breadth of evidence, including:

- from other similar or related sectors;
- homes and business markets;
- new builds and retrofitting existing buildings.

Who could do it?

- Who should develop initiatives in this space?
- Who should deliver initiatives in this space?
- Who is best placed?
- What role could they play?
- What skills, knowledge do they need?
- What function do they provide?
- How could the activities and/or responsibilities be aligned?

How could it be done?

- What specific interventions are needed? When and where?
- What is the possible effectiveness?
- How would these interventions operate?
- How would it work in practice?
- How could interventions empower different groups to increase uptake of PFR e.g. homeowners, businesses, tenants, industry?
- What interventions or approaches are working or have worked in the past?
- What are the current disincentives?

Who should pay for it?

- How could costs for each action be met?
- How could the costs be apportioned between those who benefit, taking into account public and private interests?
- How could the benefits and savings be better aligned between beneficiaries e.g. tenants, householders, businesses, industries and public authorities?
- What principles should be applied to align them?
- Should costs be met nationally where there are national costs or benefits for the market, locally because flood risk and circumstances vary by area, or both?

- What is the right balance and what principles should apply?
- How could value for money and efficiency be demonstrated?
- How could economies of scale and efficiencies be realised, including for individuals and businesses fitting PFR?

Who should oversee it?

- How could assurance, certification, delivery, robustness etc be overseen?
- Who should oversee them?
- Who should enforce any interventions and who should finance this?
- How could this be aligned?
- Is this the role of industry, voluntary sector and public bodies?
- Should they be mandatory, voluntary, other?

Planning policy, building regulation and standards

Planning policy, Building Regulations, voluntary and sector specific standards, agreements and codes of practice are all useful levers to support an effective PFR market. We want to understand whether these could be strengthened or consolidated to improve their effectiveness.

There are two types of government intervention in this space: planning policy and Building Regulations.

The National Planning Policy Framework sets out policies which local authorities must take into consideration when developing local plans and should consider when making planning decisions. Homes built after 2009 are excluded from Flood Re as the National Planning Policy Framework is clear that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at risk. Where it is necessary to build in a flood risk area, and there are no suitable and reasonably available sites in areas with a lower risk of flooding, developments should be made resistant and resilient, as well as safe for its lifetime without increasing flood risk elsewhere. New permitted development rights are still subject to prior approval by the local authority on specific matters including flooding risks.

Building Regulations are minimum standards for design, construction and alterations. The Building Regulations 2010 cover the construction and extension of buildings and are supported by Approved Documents. Approved Documents set out detailed practical guidance on compliance with the regulations for developments. Approved Document C sets out guidance on site preparation and resistance to moisture and is relevant to PFR[37]. Resistance to floods is not currently a requirement of Building Regulations. However, Approved Document C includes advice to developers on construction techniques for buildings in flood prone areas and signposts them to a publication called Improving the Flood Resilience of New Buildings: Flood Resilient Construction which was published by Defra and MHCLG in 2007[38]. The scope of the 2007 guide was updated and expanded to include retrofit in 2015 and has now been formalised as British Standard 85500:2015.

There are also non-government levers. British Standards (BS) are the standards produced by the BSI Group which is incorporated under a royal charter. There are two British Standards covering PFR. Manufacturers test their products or services against these, and

[37] Approved Document C of Building Regulations - www.gov.uk/government/publications/site-preparation-and-resistance-to-contaminates-and-moisture-approved-document-c

[38] Improving the flood performance of new buildings: Flood resilient construction - www.gov.uk/government/publications/flood-resilient-construction-of-new-buildings

where they meet the specifications, they can mark their product with the BS number on the label. However, for PFR, unlike some other sectors, there is no legal requirement for PFR products to meet these standards, and many consumers may be unaware of them.

1) BS 85500:2015[39] - This standard has been developed to provide guidance to architects, engineers and developers on suitable materials and construction techniques for improving the resistance and resilience of buildings to flooding. It applies to all building construction including new builds, extensions and retrofits.
2) BS 851188:2019[40] - This standard covers flood resistance products. It looks at a series of products for flood resistance, which seek to manage water entry into a building. This standard helps to identify products that have met an industry recognised British Standard and consistent impartial performance criteria.

Through the Defra and Industry Property Flood Resilience Roundtable and supported by the Construction Industry Research and Information Association (CIRIA), the commercial sector has developed a new Code of Practice[41]. The Code of Practice refers to the British Standards. The document provides consolidated guidance that provides a standardised approach for the delivery and management of PFR for both retrofit and new build. It is designed to improve confidence in PFR and increase uptake by consumers. Complementary guides for households and businesses was published on 8 January 2021. Guidance for Planners using the code will also be published soon. This Code of Practice is voluntary.

The Building Research Establishment (BRE) has also developed a Home Quality Mark[42] which includes flood resilience. It is aimed at house builders and householders who buy or rent new homes. It aims to help house builders to demonstrate the quality of their homes and to differentiate them in the marketplace. At the same time, it aims to give householders the confidence that the new homes they want to buy or rent are well designed, well built, and cost effective to run.

Whilst these documents play a key role in driving and supporting an effective PFR market, more could be done to strengthen the use of these tools. For example, there are a number of routinely used materials which can improve a property's flood resilience, but which are not marketed or specifically tested for PFR.

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[39] BS 85500:2015 - shop.bsigroup.com/ProductDetail/?pid=000000000030299686

[40] BS 851188:2019 - shop.bsigroup.com/ProductDetail?pid=000000000030372281

[41] PFR Code of Practice - www.ciria.org/Research/Projects_underway2/Code_of_Practice_and_guidance_for_property_flood_resilience_.aspx

[42] Home Quality Mark - www.homequalitymark.com/

Questions

35. Planning Policy, Building Regulations and Standards

Under each of the headings we are interested in the breadth of evidence, including:

- from other similar or related sectors;
- homes and business markets;
- new builds and retrofitting existing buildings.

Who could do it?

- Who should develop initiatives in this space?
- Who should deliver initiatives in this space?
- Who is best placed?
- What role could they play?
- What skills, knowledge do they need?
- What function do they provide?
- How could the activities and/or responsibilities be aligned?

How could it be done?

- What specific interventions are needed? When and where?
- What is the possible effectiveness?
- How would these interventions operate?
- How would it work in practice?
- How could interventions empower different groups to increase uptake of PFR e.g. homeowners, businesses, tenants, industry?
- What interventions or approaches are working or have worked in the past?
- What are the current disincentives?

Who should pay for it?

- How could costs for each action be met?
- How could the costs be apportioned between those who benefit, taking into account public and private interests?
- How could the benefits and savings be better aligned between beneficiaries e.g. tenants, householders, businesses, industries and public authorities?
- What principles should be applied to align them?
- Should costs be met nationally where there are national costs or benefits for the market, locally because flood risk and circumstances vary by area, or both?
- What is the right balance and what principles should apply?
- How could value for money and efficiency be demonstrated?
- How could economies of scale and efficiencies be realised, including for individuals and businesses fitting PFR?

Who should oversee it?

- How could assurance, certification, delivery, robustness etc be overseen?

- Who should oversee them?
- Who should enforce any interventions and who should finance this?
- How could this be aligned?
- Is this the role of industry, voluntary sector and public bodies?
- Should they be mandatory, voluntary, other?

Training and technical expertise

Experts can understand where PFR is appropriate and what type of PFR is needed. Professionals and installers involved in advising and installing PFR measures should have the appropriate skills, training and technical expertise to do PFR work, for advice and design of approaches. Customers need confidence in both the standard of products being used in their properties but also in the expertise for those surveying and fitting them.

There are a limited number of training opportunities currently available but no formal training route that professionals working on PFR can use to upskill and demonstrate they have the necessary background to act as an 'appropriate person' and deliver the kind of process set out in the PFR Code-of-Practice. Given the complexity of PFR a system needs to be developed to ensure that those offering advice are competent to do so.

There are examples of continued professional development training and technical handbooks, as well as training courses but it is unclear how these all come together and how we can use these to effectively support an effective PFR market.

The absence of trained professionals will impact on the effectiveness of the PFR framework, even if the other enablers, as set out in this Call for Evidence, were working effectively. For example, the voluntary Code of Practice launched in February 2020[43] (see section above) set out requirements against which PFR schemes should be developed. However, at present, there is a limited number of professionals and installers who have used the training available to deliver the process which is impacting service delivery.

Questions

36. Training and Technical Expertise

Under each of the headings we are interested in the breadth of evidence, including:

- from other similar or related sectors;
- homes and business markets;
- new builds and retrofitting existing buildings.

Who could do it?

- Who should develop initiatives in this space?
- Who should deliver initiatives in this space?
- Who is best placed?
- What role could they play?
- What skills, knowledge do they need?

[43] PFR Code of Practice - Code of practice and guidance for property flood resilience (ciria.org)

- What function do they provide?
- How could the activities and/or responsibilities be aligned?

How could it be done?

- What specific interventions are needed? When and where?
- What is the possible effectiveness?
- How would these interventions operate?
- How would it work in practice?
- How could interventions empower different groups to increase uptake of PFR e.g. homeowners, businesses, tenants, industry?
- What interventions or approaches are working or have worked in the past?
- What are the current disincentives?

Who should pay for it?

- How could costs for each action be met?
- How could the costs be apportioned between those who benefit, taking into account public and private interests?
- How could the benefits and savings be better aligned between beneficiaries e.g. tenants, householders, businesses, industries and public authorities?
- What principles should be applied to align them?
- Should costs be met nationally where there are national costs or benefits for the market, locally because flood risk and circumstances vary by area, or both?
- What is the right balance and what principles should apply?
- How could value for money and efficiency be demonstrated?
- How could economies of scale and efficiencies be realised, including for individuals and businesses fitting PFR?

Who should oversee it?

- How could assurance, certification, delivery, robustness etc be overseen?
- Who should oversee them?
- Who should enforce any interventions and who should finance this?
- How could this be aligned?
- Is this the role of industry, voluntary sector and public bodies?
- Should they be mandatory, voluntary, other?

Data and evidence

Although there have been around 23,000 publicly funded installations of PFR since 2008, there is no central database of the locations or what measures were installed. Similarly, limited data has been collected on the financial benefits of reduced damages for those properties.

This has meant that there is limited evidence about how these schemes have performed, whether householders still know how to deploy measures or whether they have inadvertently undermined their flood resilience through refurbishment work on their property. The lack of benchmarks about the performance of measures and reduction in expected damages makes it difficult to price PFR into insurance policies and premiums. It also creates challenges when trying to encourage customers of the benefits and when developing specific product or building standards.

There are a number of reasons why collating this information is particularly challenging. For example, installation of PFR can be incentivised through a range of mechanisms e.g. government recovery funds, government grant in aid, individuals funding it themselves, insurance funding of Build Back Better. This means that the data about which properties have PFR fitted does not go through one central organisation. Similarly, when the information is recorded, it can consist of different things e.g. simply whether the property has PFR or not, the specific measures installed, the amount spent. There are also potential data protection barriers arising from collecting and sharing consumer data, as well as commercial sensitivity if, for example, a commercial company funded PFR and wanted to realise the benefits without exposing those to competitors.

A more structured way of recording which properties are flood resilient, to what degree they are resilient and how the condition, or how the resilience is maintained is needed. This information would also need to be accessible to insurers and others.

Questions

37. Data and Evidence

Under each of the headings we are interested in the breadth of evidence, including:

- from other similar or related sectors;
- homes and business markets;
- new builds and retrofitting existing buildings.

<u>Who could do it?</u>

- Who should develop initiatives in this space?
- Who should deliver initiatives in this space?
- Who is best placed?
- What role could they play?
- What skills, knowledge do they need?
- What function do they provide?

- How could the activities and/or responsibilities be aligned?

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- What is the possible effectiveness?
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Communication, knowledge and understanding

A key barrier to the uptake of PFR in high risk households and businesses is a lack of comprehension of the gravity of what flooding could mean for them and a clear understanding of what mitigating action they could take, and why. Many people think that it is the responsibility of government or local authorities to mitigate their flood risk, or that flood defences are the only option.

Some research has found that the level of trust in the individuals or institutions communicating the risk seems to make a difference to how effective the messages are[44]. Informal social networks can be more effective than official advice due to a tendency to adopt and internalise the beliefs, attitudes and actions of peers[45].

For the PFR framework to work effectively, individual householders and businesses need to be confident about the quality and accuracy of the information they access. We want people to have the information they need to take considered action at the appropriate time and to trust the messages they are given.

There is now a great deal of information on flood risk and mitigating action available from several sources such as the Environment Agency, local authorities, voluntary groups, insurers, chartered surveyors, loss adjusters, builders, flood professionals and flood product suppliers. In addition, other professionals like lenders, estate agents and property conveyancers may signpost people to key information.

However, this information is often only highlighted to property owners once a property has already been flooded. A property owner can come into contact with a range of organisations, many of whom could communicate messages about PFR. Whilst it is important that all beneficiaries play their part, it is important that we understand who the trusted voices are and when they can have most impact.

Questions

38. Communication, Knowledge and Understanding

Under each of the headings we are interested in the breadth of evidence, including:

- from other similar or related sectors;

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[44] HEITZ, C., SPAETER, S., AUZET, A. and GLATRON, S., 2009. Local stakeholders' perception of muddy flood risk and implications for management approaches: a case study in Alsace (France). *Land Use Policy*, 26, no. 2 (April 1, 2009): 443–51

[45] Applying behavioural insights to property flood resilience - assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/913967/Applying_behavioural_insights_to_property_flood_resilience_-_report.pdf

- homes and business markets;
- new builds and retrofitting existing buildings.

Who could do it?

- Who should develop initiatives in this space?
- Who should deliver initiatives in this space?
- Who is best placed?
- What role could they play?
- What skills, knowledge do they need?
- What function do they provide?
- How could the activities and/or responsibilities be aligned?

How could it be done?

- What specific interventions are needed? When and where?
- What is the possible effectiveness?
- How would these interventions operate?
- How would it work in practice?
- How could interventions empower different groups to increase uptake of PFR e.g. homeowners, businesses, tenants, industry?
- What interventions or approaches are working or have worked in the past?
- What are the current disincentives?

Who should pay for it?

- How could costs for each action be met?
- How could the costs be apportioned between those who benefit, taking into account public and private interests?
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- How could assurance, certification, delivery, robustness etc be overseen?
- Who should oversee them?
- Who should enforce any interventions and who should finance this?
- How could this be aligned?
- Is this the role of industry, voluntary sector and public bodies?
- Should they be mandatory, voluntary, other?

Questions

About you

Question 1: What is your name?

Question 2: What is your email address?

Question 3: What is your organisation?

If you're replying as an individual, please type 'individual'.

Question 4: What is your position in the organisation?

Question 5: Would you like your response to be confidential? **(Required)**

Part 1 Strengthening the assessment of local circumstances in the government's flood and coastal defence programme

6. How could we define frequently/repeatedly flooded communities for the purposes of the investment programme?
7. Drawing on evidence, should we consider a community's historic frequent flooding in the funding or prioritisation of schemes?
8. What evidence (other than that referenced in pages 12-13 of the Call for Evidence document) should we draw upon when considering whether a community that has experienced frequent flooding in the past should carry additional weight?
9. In addition to the approaches of (1) giving extra weight in the policy to flood schemes that better protect properties that have been frequently flooded in the past; (2) counting damages to previously flooded properties in the Partnership Funding calculator; and (3) prioritising previously flooded communities through local choices (pages 13-14 of the Call for Evidence document), what other approach(es) could improve the resilience of communities that have been frequently flooded?
10. What are the advantages of these approaches (in addition to other approach(es) you suggested in response to question 9)? Please refer to social, health, economic and environmental impacts, and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to.
11. What are the disadvantages of these approaches (in addition to other approach(es) you suggested in response to question 9)? Please refer to social, health, economic and environmental impacts, and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to.
12. Of the approaches provided, and your own, which do you consider the most suitable, if any, and why?
13. How difficult is it for economically vulnerable and small communities to secure grant in aid for flood and coastal defence schemes? Please detail sources of national and representative data that we should draw upon when assessing the nature and scale of the issue.
14. In addition to developing a measure on local economic circumstances, what other approaches could provide better flood and coastal erosion resilience for economically vulnerable and small communities in the flood defence programme?
15. What are the advantages of developing a measure on local economic circumstances (in addition to any other approaches you suggested in response to question 14)? Please refer to social, health, economic and environmental impacts, and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to.
16. What are the disadvantages of developing a measure on local economic circumstances (in addition to any other approaches you suggested in response to question 14)? Please refer to social, health, economic and environmental impacts,

and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to.

17. What indicators could we use to measure potential economic growth benefits and use these to inform the prioritisation of flood and coastal erosion schemes for the award of grant in aid?

18. In addition to work referenced in the Call for Evidence document (page 23)[46], what other evidence should we draw upon to consider the cost effectiveness and practicality of encouraging the uptake of flood resistance measures in the flood and coastal defence investment programme?

19. What are the key challenges in delivering flood resistance measures in the flood and coastal defence investment programme?

20. What lessons should we learn about what has worked well in delivering flood resistance measures in the flood and coastal defence investment programme, and what has not worked well, in the past?

21. In addition to the approaches of (1) reducing the household eligibility restriction (such that grant in aid is available for households in both the significant and very significant risk bands) and (2) increasing the underlying payment rate for Property Flood Resilience measures, what other approach(es) could accelerate the uptake of Property Flood Resilience as part of the flood and coastal defence investment programme?

22. What are the advantages of these approaches (in addition to other approach(es) you suggested in response to question 21)? Please refer to social, health, economic and environmental impacts, and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to.

23. What are the disadvantages of these approaches (in addition to other approach(es) you suggested in response to question 21)? Please refer to social, health, economic and environmental impacts, and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to.

24. What good practice examples can you cite from the way infrastructure delivery programmes operate in other sectors, both in public and private spheres?

25. Drawing on evidence, what are the key factors that delay flood and coastal erosion risk management projects at Strategic Outline Business Case, Outline Business Case and Full Business Case stages?

26. How could clearer or more transparent information about the progress of a flood and coastal erosion scheme through its approval stages help drive progress and encourage wider contributions?

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[46] In particular the study undertaken by the University of the West of England and Flood Re (2018). Evidence review for Property Flood Resilience Phase 2 Report.

27. What incentives could be applied in relation to the Partnership Funding policy or appraisal policy to encourage wider financial contributions to come forward early on and in a timely manner?

28. In addition to the approaches listed on page 27 of the Call for Evidence document, what other approach(es) could encourage the more timely development of projects as part of the flood and coastal defence investment programme?

29. What are the advantages of the different approaches set out on page 27 of the Call for Evidence document (in addition to other approach(es) you suggested in response to question 28) for encouraging the more timely development of projects? Please refer to social, health, economic and environmental impacts, and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to.

30. What are the disadvantages of the different approaches set out on page 27 of the Call for Evidence document (in addition to other approach(es) you suggested in response to question 28) for encouraging the more timely development of projects? Please refer to social, health, economic and environmental impacts, and the feasibility of implementing and undertaking the approaches. In your response, please outline which approach(es) you are referring to?

31. How could we assess the potential, and apply it to the grant in aid formula, for some level of wider contributions towards flood and coastal defence schemes that may be eligible for 100% grant in aid funding (such as in areas where the economy is dynamic or there are beneficiaries who could contribute)?

32. What, if any, are the anticipated difficulties with collecting data against the additional items in Figure 5 (page 31 of the Call for Evidence document)? What are the reasons for the difficulties and how could they be overcome? In your response, please outline which specific datum you are referring to.

33. What, if any, additional data (other than those in Figures 4 and 5 (30 and 31) of the Call for Evidence document) could be recorded to monitor improvements and report progress of our flood and coastal defence programme? In your response, please detail what these data will help to track and what readily available sources could be used to support the provision of these data.

Part 2 property flood resilience

34. Financing and other Incentives

Under each of the headings we are interested in the breadth of evidence, including:

- from other similar or related sectors;
- homes and business markets;
- new builds and retrofitting existing buildings.

Who could do it?

- Who should develop initiatives in this space?
- Who should deliver initiatives in this space?
- Who is best placed?
- What role could they play?
- What skills, knowledge do they need?
- What function do they provide?
- How could the activities and/or responsibilities be aligned?

How could it be done?

- What specific interventions are needed? When and where?
- What is the possible effectiveness?
- How would these interventions operate?
- How would it work in practice?
- How could interventions empower different groups to increase uptake of PFR e.g. homeowners, businesses, tenants, industry?
- What interventions or approaches are working or have worked in the past?
- What are the current disincentives?

Who should pay for it?

- How could costs for each action be met?
- How could the costs be apportioned between those who benefit, taking into account public and private interests?
- How could the benefits and savings be better aligned between beneficiaries e.g. tenants, householders, businesses, industries and public authorities?
- What principles should be applied to align them?
- Should costs be met nationally where there are national costs or benefits for the market, locally because flood risk and circumstances vary by area, or both?
- What is the right balance and what principles should apply?
- How could value for money and efficiency be demonstrated?
- How could economies of scale and efficiencies be realised, including for individuals and businesses fitting PFR?

Who should oversee it?

- How could assurance, certification, delivery, robustness etc be overseen?
- Who should oversee them?
- Who should enforce any interventions and who should finance this?

- How could this be aligned?
- Is this the role of industry, voluntary sector and public bodies?
- Should they be mandatory, voluntary, other?

35. Planning Policy, Building Regulations and Standards

Under each of the headings we are interested in the breadth of evidence, including:

- from other similar or related sectors;
- homes and business markets;
- new builds and retrofitting existing buildings.

Who could do it?

- Who should develop initiatives in this space?
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36. Training and Technical Expertise

Under each of the headings we are interested in the breadth of evidence, including:

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37. Data and Evidence

Under each of the headings we are interested in the breadth of evidence, including:

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38. Communication, Knowledge and Understanding

Under each of the headings we are interested in the breadth of evidence, including:

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How you can have your say

How to respond

This public consultation will run for 8 weeks from 1 February 2021. It is open to anyone with an interest in providing comments. Please provide answers that explain your opinions fully.

Please respond to this consultation using the Citizen Space consultation system: https://consult.defra.gov.uk/flood-coastal-erosion-risk-management-investment-reform/local-factors-and-pfr-call-for-evidence

Responses by post or email should be clearly marked 'Floods Call for Evidence' and sent to:

Flood Risk and Coastal Erosion Risk Management Team

Department for Environment, Food and Rural Affairs
Foss House, Kings Pool 1-2
Peasholme Green
York
YO1 7PX

These must be received by the Department before the closing date.

Floodandcoastevidence@defra.gov.uk

The government will aim to publish a summary of responses within 12 weeks of the consultation ending.

Confidentiality and data protection

A summary of responses to this consultation will be published and placed on the government website at: www.gov.uk/defra.

The summary will include a list of names and organisations that responded but not personal names, addresses or other contact details. Information provided in response to this consultation, including personal data, may be published or disclosed in accordance with the access to information regimes these are primarily the Environmental Information Regulations 2004 (EIRs), the Freedom of Information Act 2000 (FOIA) and the Data Protection Act 2018 (DPA). We have obligations, mainly under the EIRs, FOIA and DPA, to disclose information to particular recipients or to the public in certain circumstances.

If you want information, including personal data, that you provide to be treated as confidential, please say so clearly in writing when you provide your response to the consultation why you need to keep these details confidential. If we receive a request for disclosure under the FOIA, we will take full account of your explanation, but we cannot provide an assurance that confidentiality can be maintained in all circumstances. An

automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as a confidentiality request.

This consultation is being conducted in line with the Cabinet Office “Consultation Principles” and can be found at: https://www.gov.uk/government/publications/consultation-principles-guidance.

If you have any comments or complaints about the consultation process, please address them to:

Consultation Coordinator
Foss House
Kings Pool
1-2 Peasholme Green
York
YO1 7PX

Or email: consultation.coordinator@defra.gov.uk

Annex: Background on Partnership Funding

Flood and coastal erosion risk management investment is funded by the Department for the Environment, Food and Rural Affairs (Defra). Defra only provides this investment in England as flood and coastal erosion risk management is a devolved matter. Funding is provided as grant in aid (money from central government) to the Environment Agency which spends it directly on managing flood risk and coastal erosion and also provides it as capital grants to local authorities or internal drainage boards for risk management projects.

The government uses a Partnership Funding approach to allocate grant in aid for flood and coastal erosion risk management projects. However, the overall call on grant in aid for these projects each year exceeds the total amount of funding available from the government. Therefore, projects need to be prioritised to optimise the outcomes we get for the investments we make – as such funding decisions are based on a rigorous assessment of local needs and the value of benefits the proposed schemes will deliver.

The amount of funding a project can attract will depend on the damages avoided and benefits delivered (assessed in relation to four Outcome Measures). The benefits that determine the grant in aid available are mainly those benefits to people and property that result from reduced flood and coastal erosion risk. Projects in more deprived areas and ones that provide environmental or other wider economic benefits may attract more grant in aid. Where the grant in aid does not cover the full costs of the project, contributions will be needed from local partners, the local community or other organisations. In this way, the Partnership Funding approach shares the costs between national and local sources of funding.

Regional Flood and Coastal Committees (RFCCs) play a key role in bringing these schemes together. RFCCs co-ordinate risk management authorities to ensure plans are in place to manage flood and coastal erosion risks, make local choices and agree the final programmes in their areas.

It is important to note that investment in England's flood and coastal erosion risk management is not limited to Defra's grant in aid. For example, public and private sector infrastructure providers fund the resilience of their infrastructure and services, and other government departments provide funding that can indirectly contribute to flood and coastal erosion risk management.

Further information on the current Partnership Funding approach can be found here: www.gov.uk/government/publications/flood-and-coastal-resilience-partnership-funding