

BRICKS & WATER:

FLOOD & COASTAL EROSION
RISK MANAGEMENT POLICY
FOR A NEW GOVERNMENT

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Foreword

Publication of this report follows the first anniversary of Storm Babet, which coincided with the wettest three-day period in England and Wales since 1891 and led to the flooding of 2,150 homes. Sadly, there is likely to be little respite for communities vulnerable to flooding and coastal erosion as the Met Office has predicted a wetter-than-average winter. As Parliamentarians, we have seen first-hand the devastating effects flooding can have on our constituents' lives and livelihoods. All too often, it is the vulnerable in society who suffer the most when homes and businesses are flooded.

This fourth Bricks and Water inquiry by the Westminster Sustainable Business Forum comes at a critical time. The new Government has pledged to make flood risk management a priority and we welcome the creation of the Flood Resilience Taskforce to bolster nationwide flood preparedness and take a long-term, strategic approach to managing flood risk. Similarly, proposals for planning reform are an opportunity to create sustainable growth and facilitate better collaboration between Local Authorities at the catchment scale. However, as part of this inquiry, we have heard that new homes are continuing to be built within areas of high flood risk and coastal change, often against the advice of the Environment Agency. It is therefore essential that the introduction of mandatory housing targets must not result in an increase in the number of new homes being built in these areas.

Economic growth cannot happen when people are displaced from their homes, public transport is disrupted, and businesses are closed – all direct impacts of flooding. Effective flood risk management is not only a vital prerequisite to deliver on the new Government's Mission for Growth, but it is also a good use of public money given that, on average, £5 of property damage is avoided for every £1 invested in flood protection.

The recommendations in this report focus on the planning system, policy for funding and maintaining flood defences, coastal change, and the use of property flood resilience measures. We recognise the constrained nature of public finances, which is why many of these recommendations do not require new Treasury funding, but rather simple changes to policy, which can make a big difference to the way that the Environment Agency, Local Authorities, developers, and other stakeholders protect people and places from flooding.

This work has been informed by a wide range of expert opinions, including those from the water, construction, insurance, and academic sectors, along with non-departmental public bodies and local authorities. We would particularly like to thank our generous sponsors, Aviva, Queen Mary University of London, Resilico, Southend on Sea City Council, and Watertight International for their support.

Inquiry Chair



Baroness McIntosh of Pickering
(Conservative)

Inquiry Vice Chairs



Lee Pitcher MP
(Labour)



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(Liberal Democrat)



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Executive summary

The ‘Bricks and Water’ series began in 2018 with an inquiry on housebuilding and governance of the water sector in England. Since then, the Westminster Sustainable Business Forum has produced follow-up reports exploring water resources, water quality, land drainage, and flooding, all in the context of the Government’s ambition for new homes. This fourth addition to the Bricks and Water series explores the risks associated with flooding and coastal change in more detail, and makes recommendations to the new Government to help better manage these risks.

The winter of 2023/24 saw the highest number of named storms since records began and the economic cost of Storm Babet alone is estimated at between £450 and £650 million.¹ Across the country, the Environment Agency estimates that around 6.3 million properties are at risk of flooding, along with a significant proportion of England’s road, rail, and utility infrastructure.² To combat these risks, the previous Government invested a record £5.2 billion into Flood and Coastal Erosion Risk Management (FCERM) between 2021 and 2027. This policy context is discussed further in **Chapter 1**, along with the aims and scope of this report.

The new Government has pledged to build 1.5 million homes over the next five years and has proposed to reform the planning system to help achieve this. England’s National Planning Policy Framework (NPPF) sets vital guardrails to ensure that new development is directed away from areas of high flood risk. **Chapter 2** considers proposals for NPPF reform and makes recommendations, which call for robust flood risk management to remain at the heart of the planning system.

While the planning system serves to ensure the safe location of new homes, existing communities are protected through the Government’s Capital Programme of flood defence schemes. However, this Programme is likely to protect fewer homes than originally anticipated due to COVID-19 lockdowns, inflation, and skills shortages. **Chapter 3** makes recommendations for funding policy reform and highlights the need for maintenance of flood defences throughout their lifetime.

Coastal erosion presents an existential threat to many seaside communities. Without intervention, up to 28,000 homes could be lost to the sea over the 35-year period between now and 2060.³ However, lower benefit-cost ratios make coastal defence schemes harder to justify, and funding for their maintenance is not ringfenced within Local Authority budgets. **Chapter 4** highlights the value of strategic planning for the coast and calls for consideration of Shoreline Management Plan approaches to be a requirement within planning policy.

Given the limitations of the planning process, the efficacy of existing flood defences, and the impacts of climate change, it will not be possible to protect all communities from flooding. The use of Property Flood Resilience (PFR) measures are therefore vital to ensure that homes in vulnerable communities remain habitable and insurable through the next century. **Chapter 5** makes several recommendations for mainstreaming the use of PFR including increasing grant funding, mandating the use of PFR in Building Regulations, and introducing a Flood Performance Certificate.

¹ Insurance costs of Storm Babet initially estimated to be between £450 and £650 million due to impact of flooding as England and Channel Islands prepare for Storm Ciarán, PWC (online), November 2023

² National assessment of flood and coastal erosion risk in England 2024, Environment Agency, December 2024

³ Direct submission of evidence, Environment Agency, July 2024

Recommendations

PLANNING POLICY

Recommendation 1: new mandatory housing requirements should not lead to increased allocations and permissions for development in areas vulnerable to flooding and coastal erosion. Local Planning Authorities should still be able to justify a lower housing requirement within their Local Plan, based on constraints associated with flood risk and coastal erosion.

Recommendation 2: the National Planning Policy Framework and associated Planning Practice Guidance should be updated once the Environment Agency has fully published its forthcoming National Flood Risk Assessment, which includes allowances for climate change. An updated Flood Map for Planning should be published to inform the Sequential Test and to enable developers and planners to make better-informed decisions.

Recommendation 3: measures necessary to mitigate flood risk in new development should be agreed upon earlier in the planning application process. Where planning conditions for flood mitigation are necessary, these should be as specific as possible and consistent across Local Planning Authority areas.

Recommendation 4: the existing 'Call-In' Direction should be broadened in scope to include development of all sizes (not just major development). It should also be broadened to include areas where development is planned in areas of low flood risk but:

- a. is identified as being at increased risk of flooding in future, due to climate change.
- b. is on land likely to be needed for future flood or coastal risk management infrastructure.

FLOOD DEFENCE FUNDING & MAINTENANCE

Recommendation 5: the Government's forthcoming review of funding policy for new Flood and Coastal Erosion Risk Management schemes should include consideration of the following:

- a. simplification of the Risk Management Authority application process.
- b. bringing together funding from Government departments at a national level – allocated as part of the forthcoming multi-year spending review.
- c. development of a mechanism to mandate contributions from the private sector where businesses gain benefit from new flood defences.
- d. access to long-term funding for schemes that help communities to adapt or relocate away from areas at risk of coastal erosion.

Recommendation 6: the Environment Agency should be granted the flexibility to move underspend from the Capital Programme to its budget for asset maintenance. Alternatively, a 'totex' budget could be allocated as part of the next funding settlement, including provision for both capital investment and ongoing maintenance.

Recommendation 7: Local Authorities should be fully eligible for government Grant-in-Aid funding for the maintenance of coastal flood and erosion risk management assets. Funding should be allocated based on the number of people protected rather than the number of properties.

COASTAL CHANGE

Recommendation 8: the National Planning Policy Framework should be strengthened to make consideration of Shoreline Management Plan approaches mandatory and factored into the development of Local Plans.

Recommendation 9: the National Planning Policy Framework should be updated to:

- a. be more explicit in allowing for the designation of Coastal Change Management Areas in locations affected by sea level rise or other physical changes expected as a result of climate change (such as estuaries and tidal rivers).
- b. provide clear guidance on when a Coastal Change Vulnerability Assessment is required to support an individual planning application.

PROPERTY FLOOD RESILIENCE

Recommendation 10: to help accelerate the uptake of Property Flood Resilience measures, the Government should:

- a. allow for the installation of both resistance and resilience measures as part of property flood resilience schemes funded by the Environment Agency.
- b. review the eligibility criteria and distribution process for the Property Flood Resilience Repair Grant Scheme to make it more widely accessible and streamlined.
- c. align all PFR funding sources (including the Environment Agency's Property Flood Resilience Framework, Flood Re's Build Back Better, and the Department for Environment, Food and Rural Affairs' Flood Resilience Repair Grant) to the same amount at £15,000. This should be allocated as part of the forthcoming multi-year spending review.

Recommendation 11: to normalise the use of property flood resilience in both new and existing properties, Part C of building regulations should be updated to require the installation of basic property flood resilience measures for properties at risk of flooding, and the installation of very basic, 'no regret' measures for all new homes, irrespective of risk.

1. Introduction

To date, the Westminster Sustainable Business Forum (WSBF) has completed three ‘Bricks and Water’ inquiries, which have explored environmental governance, water resources, water quality, land drainage, and flooding – all in the context of housebuilding in England. This inquiry focusses specifically on flooding and coastal change and makes recommendations to the new Government on how associated risks can be better managed in both new and existing communities.

1.1. Policy context

The Department for Environment, Food and Rural Affairs (Defra) has overall responsibility for Flood and Coastal Erosion Risk Management (FCERM) policy in England. The Environment Agency is the non-departmental public body that takes strategic overview of these risks and distributes funding for flood defence schemes. In 2020, the Environment Agency published a national FCERM strategy, alongside a government policy statement.^{4,5} These documents set a long-term ambition to create “a nation more resilient to flood and coastal erosion risk”. The FCERM Strategy also sets expectations for other Risk Management Authorities (RMAs) that help to manage flooding. RMAs include Lead Local Flood Authorities, Local Authorities, Internal Drainage Boards, Water and Sewerage Companies, and Highways Authorities.

1.2. The impact of flooding

The Environment Agency estimates that 6.3 million properties in England are at risk of flooding, along with significant proportions of the country’s road, rail, and utility infrastructure.⁶ 2023/24 saw the highest number of named storms in a single year (12) resulting in at least 13 deaths.^{7,8}

The cost of flooding is hard to quantify. Direct loss and damage to life, properties, possessions, vehicles, infrastructure, agriculture, and livestock must be weighed, along with loss of productivity, disruption to education, and long-term health impacts. As a guide, the Environment Agency has estimated the cost of flooding in summer 2007 at £3.9 billion, the winter 2013/14 floods at £1.3 billion, and the winter 2015/16 floods at £1.6 billion (not adjusting for inflation).⁹ The impacts of climate change, such as wetter winters, more intense rainfall, and more frequent winter storms, will lead to steadily increasing costs. The value of investment in flood defence, mitigation, and adaptation measures should therefore not be underestimated. For example, the Environment Agency has calculated that, during the winter of 2019/20, flood protection measures helped to avoid between £4.6 and £9.3 billion in damage – a sum at least 14 times greater than the actual economic loss during that time (£333 million).¹⁰

1.3. Aims and scope

Work on this report began in Spring 2024. A scoping session was held on 6 March, which was chaired by Baroness McIntosh of Pickering and attended by a range of stakeholders including regulators, local authorities, insurance companies, water companies, consultancies, and non-governmental organisations. Following this discussion, it was agreed that the inquiry should focus on four key themes within FCERM: planning policy, flood defence funding and maintenance, coastal change, and property flood resilience. The following sections of this report focus on these topics in detail and make associated recommendations to the new Government. Flood risk management is a devolved issue, and this report considers therefore the situation in England only.

⁴ National flood and coastal erosion risk management strategy for England, Environment Agency, July 2020

⁵ Flood and coastal erosion risk management: policy statement, Department for Environment, Food and Rural Affairs, July 2020

⁶ National assessment of flood and coastal erosion risk in England, Environment Agency, December 2024

⁷ Looking back at a storm-laden season, Met Office, August 24 (online) <https://blog.metoffice.gov.uk/2024/08/27/looking-back-on-a-storm-laden-season/>

⁸ Autumn and winter storms in the UK 2023-24, Grantham Institute, May 24 (online) <https://www.imperial.ac.uk/grantham/publications/background-briefings/>

⁹ Estimating the economic costs of the 2015 to 2016 winter floods, Environment Agency, January 2018

¹⁰ Flood and coastal erosion risk management report 1st April 2019 to 31st March 2020, Environment Agency, July 2024

2. Planning policy

TOP LINES

- **Despite planning policy for flood risk management being robust in principle, thousands of new homes are constructed on the floodplain each year, condemning individuals to years of misery and economic hardship when floods occur.**
- **The WSBF welcomes the Government’s proposals for planning reform, particularly the promotion of a more strategic approach, with the opportunity for better collaboration across Local Planning Authority (and catchment) areas. However, it is vital that planning reform does not come at the expense of safeguards that protect new homes from flooding.**
- **The National Planning Policy Framework and accompanying Planning Practice Guidance should be updated following full publication of the Environment Agency’s forthcoming National Flood Risk Assessment to ensure that planning decisions are based on the best available evidence.**

2.1. Flood risk and the planning process

Planning policy on flood risk is set out in the National Planning Policy Framework (NPPF) and accompanying Planning Practice Guidance (PPG). These documents help Local Planning Authorities (LPAs) when drawing up Local Plans for future development and provide guidance for developers when preparing individual planning applications. The NPPF states that “inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk,” and that “where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere”.¹¹

However, the WSBF’s previous Bricks and Water inquiry (2023) found that new development is frequently being located within areas of high flood risk without adequate mitigation measures.¹² Although reasons for this vary, unprecedented demand from the Government to meet housebuilding targets and a chronic lack of capacity for enforcement within LPAs were both cited as key factors.

Last year, Bricks and Water inquiry Chair, Baroness McIntosh of Pickering, proposed an amendment to the Levelling Up and Regeneration Bill (now Act) to specify that “Local Planning Authorities must not grant permission for residential properties to be built on functional floodplains or areas at high risk of flooding”. The House of Lords agreed to this amendment, but it was ultimately not taken up by the then government. Although it is acknowledged that a blanket embargo on new homes within areas at high risk of flooding may not be suitable in all parts of the country, participants in this inquiry widely cited that development within areas of high flood risk should be limited to only the most essential infrastructure and that the principle of avoidance (i.e. steering development to areas of lowest flood risk) should continue to play a central role in planning policy.

¹¹ National planning policy framework, Ministry of Housing, Communities and Local Government, December 2024

¹² Bricks and water: managing flood risk and accelerating adaptation in a climate emergency, Policy Connect, June 2023

In August 2024, the Government launched a consultation on reform to the National Planning Policy Framework.¹³ The WSBF agrees with the overall aim of these reforms to achieve sustainable growth within the planning system. Proposals to promote a more strategic approach to planning and to strengthen cross-boundary collaboration are both things that the WSBF has called for previously as part of a catchment-based approach to water management.¹⁴ However, growth must not come at the expense of safeguards that protect homes from flooding. Any relaxation of planning rules that would allow new homes to be located within undefended areas of flood risk will inevitably lead to future problems, as these buildings become increasingly exposed to more intense rainfall, higher river levels, and sea level rise. Planning policy must be the primary mechanism for the appropriate location of new development, rather than relying on site-specific mitigation measures, which can vary significantly across the country in terms of application and enforcement.

RECOMMENDATION 1:

New mandatory housing requirements should not lead to increased allocations and permissions for development in areas vulnerable to flooding and coastal erosion. Local Planning Authorities should still be able to justify a lower housing requirement within their Local Plan, based on constraints associated with flood risk and coastal erosion.

2.2. Evidence-based decision making

The Sequential Test is an important planning tool that helps to steer new development to areas with the lowest risk of flooding. The Test requires LPAs and developers to consider all sources of flooding to a proposed development, including an allowance for climate change. However, planning guidance currently cites the Environment Agency's Flood Map for Planning as a resource to determine site-specific flood risk, which does not account for climate change and is therefore not reflective of areas that will become at risk of flooding in the future. This discrepancy means that proposals for new development in areas at low current risk, but higher future risk of flooding, may not receive proper scrutiny. In these instances, there is also no mechanism for Local Authorities to seek advice from the Environment Agency as a statutory consultee on individual planning applications.

LPAs are required to produce a Strategic Flood Risk Assessment (SFRA), which provides detailed information on local flood risk (including the extent of flood zone 3b – the functional floodplain) to help inform Local Plan preparation and application of the Sequential Test. However, there is no requirement for LPAs to keep the SFRA up to date once a local plan has been adopted. Limitations on LPA resources mean that SFRA documents frequently become outdated, which risks planning decisions being made based on inaccurate or unsuitable evidence.

The Environment Agency's second National Assessment Flood Risk will provide rich and flexible new data on current and future flood risk from rivers, the sea, and surface water. This will make it easier for LPAs to consider the impact of climate change on individual planning applications and will also reduce the reporting burden for producing and maintaining SFRA's. However, the NPPF and PPG will need to be updated to reflect this and ensure that new homes and infrastructure are planned based on the best available information.

RECOMMENDATION 2:

The National Planning Policy Framework and associated Planning Practice Guidance should be updated once the Environment Agency has fully published its forthcoming National Flood Risk Assessment, which includes allowances for climate change. An updated Flood Map for Planning should be published to inform the Sequential Test and to enable developers and planners to make better-informed decisions.

¹³ Proposed reforms to the National Planning Policy Framework and other changes to the planning system, Ministry of Housing, Communities and Local Government, August 2024

¹⁴ Bricks and water: a plan of action for building homes and managing water in England, Policy Connect, April 2018

2.3. Planning conditions

The granting of planning consent in any location should be contingent on a proposal meeting national and local policy requirements on flood risk, underpinned by relevant evidence as described above. Where development is unavoidable in areas of flood risk and planning permission is granted, mitigation measures (such as raised floor levels or flood resilient design) may be agreed through the application of planning conditions. Planning conditions should be set by the LPA and discharged once evidence of compliance has been provided by the developer.

Recent research by the Town and Country Planning Association (TCPA) has drawn attention to the limitations of planning conditions to manage flood risk, given that they can only secure measures that make development ‘acceptable’ rather than more comprehensive measures that are often required to make a development fully resilient to all forms of flooding.¹⁵ TCPA research also suggests that there is a tendency for Local Planning Authorities to over-rely on the use of planning conditions to mitigate flood risk, with case study evidence from a site at Twigworth Green in Gloucestershire indicating that conditions were used to secure mitigations in place of a more fundamental appraisal of the principle of development.¹⁶ Another limitation to the use of planning conditions, rather than relying on robust planning policy from the outset, is that there is often variation between LPAs in how conditions are applied. The TCPA compared the average number of flood risk conditions applied to a variety of planning permissions across two Local Planning Authority areas (Erewash and Doncaster) and found differences, especially for sites with surface water and lower flood risk.¹⁷

RECOMMENDATION 3:

Measures necessary to mitigate flood risk in new development should be agreed upon earlier in the planning application process. Where planning conditions for flood mitigation are necessary, these should be as specific as possible and consistent across Local Planning Authority areas.

2.4. Enforcement

Given the challenges associated with the sequential approach to locating new development and setting planning conditions that can meaningfully mitigate residual risk, it is vital that conditions can be robustly enforced. The WSBF has previously found that resource and skills shortages within LPAs mean they often lack the capacity to enforce planning conditions.¹⁸ This finding was supported by a Defra review of flood risk policy, which reported that over half of the LPAs surveyed said they rarely or never inspected a new development to check for compliance with flood risk planning conditions.¹⁹ Evidence submitted to this inquiry indicates that this situation remains unchanged – further emphasising the importance of dealing with flood risk issues as early as possible in the planning application process.

¹⁵ Delivering flood resilience through the planning system in England, Town and Country Planning Association, September 2024

¹⁶ Ibid

¹⁷ Ibid

¹⁸ Bricks and water: managing flood risk and accelerating adaptation in a climate emergency, Policy Connect, June 2023

¹⁹ Review of policy for development in areas of flood risk, Department for Environment, Food and Rural Affairs & Ministry for Housing, Communities, and Local Government, July 2021

2.5. The consultation gap

It is essential that Local Authority planning officers can access expert advice on flood risk, both when preparing local plans and when considering individual planning applications. The Environment Agency is the statutory consultee to the planning process for issues relating to fluvial and tidal flooding. However, evidence submitted to this inquiry indicates that there are several ‘consultation gaps’ that exist, which prevent planning officers from being able to access the expert advice that they need. These include:

1. Areas at future risk of flooding from rivers and the sea due to climate change (as detailed in section 2.2).
2. Areas in proximity to existing main river and sea defences.
3. Areas at residual flood risk from reservoirs.
4. Areas at risk of flooding from surface water and groundwater.
5. Areas at risk of coastal change.

The Environment Agency estimates that its advice helps to prevent around 40,000 homes being granted planning permission in an unsafe way every year, and for every £1 invested in its role as a statutory consultee on flood risk, at least £12 is avoided in future flood damage.^{20,21} However, after the pre-application stage, the Environment Agency cannot recover costs associated with the provision of advice to the LPA as a statutory consultee. The creation of a mechanism to fund statutory consultee advice, either by Defra grant or cost recovery from the developer, would help to close the consultation gaps detailed above.

2.6. The ‘call-in’ direction

There are some instances where the Environment Agency provides advice to the LPA, but it is not followed. For example, in 2022/23, 267 homes were granted planning permission against Environment Agency advice on flood risk.²² The WSBF has previously highlighted the importance of the ‘Call In’ direction as a tool to increase compliance with Environment Agency advice. This mandates that, in cases where the LPA intends to grant planning permission, against the advice of the Environment Agency on the grounds of flood risk, the case should be referred to the Secretary of State for Housing, Communities and Local Government, to allow it to be ‘called-in’ for further scrutiny.

The WSBF has previously called for a government review of the Call-In Direction to allow it to be more streamlined, understood, and effectively applied. The existing Direction can only be invoked for ‘major’ development or for development that is at present-day risk of flooding from rivers or the sea. Broadening the scope of the Direction could help reduce the number of planning applications approved against Environment Agency advice. However, this should be funded accordingly, either via Defra grant or a cost recovery mechanism.

RECOMMENDATION 4:

The existing ‘Call-In’ Direction should be broadened in scope to include development of all sizes (not just major development). It should also be broadened to include areas where development is planned in areas of low flood risk but:

- a. is identified as being at increased risk of flooding in future, due to climate change.
- b. is on land likely to be needed for future flood or coastal risk management infrastructure.

²⁰ Flood and coastal erosion risk management report: 1 April 2022 to 31 March 2023, Environment Agency, July 2024

²¹ Planning for flood resilient places, Environment Agency, September 2021 (online) <https://environmentagency.blog.gov.uk/2021/09/22/planning-for-flood-resilient-places>

²² Flood and coastal erosion risk management report: 1 April 2022 to 31 March 2023, Environment Agency, July 2024

3. Flood defence funding and maintenance

TOP LINES

- **The Government's current £5.2 billion Capital Programme for building flood defences is under pressure due to COVID-19 lockdowns, inflation, and skills shortages. The Programme is anticipated to 'better protect' around 136,000 fewer properties than originally planned.**
- **The partnership approach by which most flood defence schemes are funded is labour-intensive and fails to draw adequate contributions from the private sector. The Government should review and reform existing partnership funding policy rules to achieve better outcomes.**
- **Maintenance of existing flood defences and resilience measures is vital if they are to continue to provide adequate protection throughout their design lifetime. The Environment Agency should be granted greater flexibility to re-allocate funds for asset maintenance and coastal Local Authorities should be eligible for government funding to maintain any assets that they own or build.**

3.1. Capital Programme

Most government funding for flood defences in England is provided by Defra to the Environment Agency as Grant-in-Aid (GiA). The Environment Agency allocates these funds as part of its Capital Programme of FCERM schemes. The current Capital Programme runs between 2021 and 2027 and is valued at £5.2 billion.²³ The primary performance indicator for the Capital Programme is the number of properties 'better protected' from flooding. It was originally forecast that the Capital Programme would better protect 336,000 properties by 2027, but delivery has been hampered by lockdowns during the COVID-19 pandemic, skills shortages within the construction sector, and high inflation. The Environment Agency has recently reduced its forecast of properties better protected to 200,000 by 2027.²⁴

In recognition of these delays, the Environment Agency has introduced a suite of improvements to help speed up project delivery. These include taking a proportionate approach to business case checks, removing the need for national assurance for projects costing less than £3 million, and reducing the analysis requirements for property flood resilience projects. Even taking these improvements into account, participants in this inquiry have questioned whether the Capital Programme will be able to deliver on its revised targets.

3.2. Partnership funding policy

Funding for most flood defence schemes relies on a partnership funding approach, rather than being funded by the Government in full. Under this approach, the Environment Agency agrees to provide a share of the funding required, with the total made up by contributions from beneficiaries, such as businesses or developers. A Defra review of the previous Capital Programme (2015-2021) identified that this approach led to the funding of more flood defence schemes than would have been possible using solely government GiA.²⁵ However, evidence submitted to this inquiry has been critical of the partnership funding approach, arguing that aligning funding sources from several partners significantly slows the application process, it is highly labour-intensive, and often results in an unsuccessful outcome. It has also been suggested that many schemes in receipt of partnership funding are being secured using other sources of public funds, rather than contributions from the private sector. In 2019, the Environment, Food and Rural Affairs Committee recommended that the previous government should demonstrate its seriousness in attracting investment from the private sector to reverse the "apparent stalling" of this source of revenue.²⁶ In 2023, the National Audit Office found that in the current Capital Programme, only 9% of funding had come from private sector contributions.²⁷

²³ Programme of flood and coastal erosion risk management schemes, Environment Agency, July 2021

²⁴ Resilience to flooding, National Audit Office, November 2023

²⁵ Partnership funding evaluation, Department for Environment, Food and Rural Affairs, June 2019

²⁶ Coastal flooding and erosion, and adaptation to climate change: interim report, Environment, Food and Rural Affairs Committee, October 2019

²⁷ Resilience to Flooding, National Audit Office, November 2023

Alternatives to the partnership funding approach are available, including the Other Government Funding scheme (announced in the 2020 budget), which contributes to schemes that benefit wider national infrastructure, such as schools or hospitals, but have a funding gap. In 2023, the previous government also announced the Frequently Flooded Allowance, which ringfenced funding from the Capital Programme for flood defence schemes and did not require partnership funding. However, funding for these projects was limited to £100m in total.

Risk Management Authorities can apply for funding from the Environment Agency for flood defence projects and allocation is made according to the benefits, or ‘outcome measures’ that a scheme provides. Examples of outcome measures include positive cost-benefit, whole-life benefits, reduced flood/erosion risk, and benefits to wildlife. To find out how much funding they are eligible for, Risk Management Authorities use a spreadsheet known as the Partnership Funding Calculator, which is completed at the earliest stage of project development and developed further as projects progress through various assurance stages. Respondents to this inquiry have also been critical of the FCERM economic appraisal process, citing its narrow scope of outcome measures and short-term planning horizon, which only considers protection to homes up to 2040, rather than their design lifetime of 100 years. Participants have also suggested that the process does not align with ‘Green Book’ guidance from the Treasury on how to appraise public sector projects. Research by Coastal Partners cited a scheme providing whole-life benefits of £160 million, a 9:1 benefit-cost ratio, protection to over 650 properties, and over £5.5 million of external contributions, but was struggling to gain approval under the current economic appraisal process and partnership funding rules.²⁸ Updates to the Partnership Funding Calculator were made in 2020, which factored in inflation, climate change, risks from surface water, and acknowledgement of the wider environmental benefits that flood defence schemes can play.²⁹ However, participants in this inquiry have called for further changes, especially to recognise the need for funding for adaptation and to make approval for schemes that include natural flood management and property flood resilience easier. Some of these measures fall outside of Defra’s responsibility, so government departments should work together to provide funding where flood defences provide a wider community benefit – for example, to highways or public health infrastructure. In November 2024 (following completion of the evidence-gathering stage of this inquiry), Defra announced that the existing funding formula for new flood defence projects would be reviewed, with a consultation commencing in 2025.³⁰ The WSBF welcomes this announcement.

RECOMMENDATION 5:

The Government’s forthcoming review of funding policy for new Flood and Coastal Erosion Risk Management schemes should include consideration of the following:

- a. simplification of the Risk Management Authority application process.
- b. bringing together funding from Government departments at a national level – allocated as part of the forthcoming multi-year spending review.
- c. development of a mechanism to mandate contributions from the private sector where businesses gain benefit from new flood defences.
- d. access to long-term funding for schemes that help communities to adapt or relocate away from areas at risk of coastal erosion.

²⁸ Outcome measures: a help and a hindrance to our flood and coastal erosion risk management partnership projects, Straton, M and Wadey, M, June 2017.

²⁹ Building flood defences fit for the future, Department for Environment, Food and Rural Affairs, April 2020 (online) www.gov.uk/government/news/building-flood-defences-fit-for-the-future

³⁰ Reforms to flood funding and investment to protect farming communities, Department for Environment, Food and Rural Affairs, November 2024 (press release) <https://www.gov.uk/government/news/reforms-to-flood-funding-and-investment-to-protect-farming-communities>

3.3. Asset maintenance

Once flood defences are constructed, they require regular maintenance to ensure that they can continue to operate effectively. However, if maintenance spending is cut, the lifespan of an asset may decrease, and it could provide a lower standard of protection. Recent research by the Association of British Insurers found that, for every £1 increase in maintenance spending, almost £7 is saved in capital investment.³¹

3.3.1. Environment Agency assets

Maintenance of flood defences owned by the Environment Agency is funded from resource budgets, rather than the Capital Programme, and is allocated on a one-year rolling basis. The Environment Agency regularly assesses the condition of its defence assets and has determined that it is best value for money to have 98% of its 'high-consequence' assets at the required condition.³² In 2021 the Environment Agency estimated that it needed annual funding of £235 million to maintain 98% of its assets at the required condition, however, it only received £201 million. The Environment Agency anticipated that this shortfall would mean that it would only be able to maintain 94%-95% of its assets at the required condition, resulting in 203,000 properties at increased risk of flooding.³³ Respondents to this inquiry raised significant concerns about the risks associated with deteriorating flood defence assets, particularly as these assets will come under increasing pressure as a result of climate change. Last year, the Public Accounts Committee recommended that the Environment Agency should explore options for moving underspent funds from the Capital Programme to the maintenance budget.³⁴ The previous government agreed with this recommendation.³⁵

RECOMMENDATION 6:

The Environment Agency should be granted the flexibility to move underspend from the Capital Programme to its budget for asset maintenance. Alternatively, a 'totex' budget could be allocated as part of the next funding settlement, including provision for both capital investment and ongoing maintenance.

³¹ Modelling the impact of spending on defence maintenance on flood losses, Association of British Insurers, Flood Re, and JBA, May 2021

³² Flood and coastal risk management: an investment plan for 2021 to 2027, Department for Environment, Food and Rural Affairs, July 2021

³³ Resilience to flooding, National Audit Office, November 2023

³⁴ Resilience to flooding, Committee of Public Accounts, January 2024

³⁵ Resilience to flooding (Government response), Committee of Public Accounts, April 2024

3.3.2. Local Authority assets

Where defences provide protection against flooding from the sea, the Environment Agency can access GiA funding from the Government to maintain these assets, depending on the level of risk. However, coastal Local Authorities cannot access this funding source in the same way, and maintenance grants are highly dependent on the number of properties protected. Funding for Local Authorities is provided by the Ministry of Housing, Communities and Local Government. Local Authority FCERM activities are not ringfenced and compete for funding with other responsibilities, such as waste collection, planning, and social care. The consequence of this is that many Local Authorities have a backlog of maintenance works, which they are unable to complete, resulting in the deterioration of flood defence assets and the need for replacement much earlier than would otherwise be expected. One coastal Local Authority participating in this inquiry indicated that its non-ringfenced budget for maintenance of assets along a 60km stretch of coastline was as little as £15,000 per annum. A recent report by the Chartered Institute of Water and Environmental Management (CIWEM) recommended that Local Authority funding for FCERM operations should be ring-fenced and calculated on a needs basis using flood and coastal erosion rates.³⁶ A needs-based approach would also help in situations where ageing flood defences may not directly protect homes or businesses but are nonetheless vital for environmental protection. For example, preventing erosion in and around coastal landfill sites can reduce risks to public health from the re-introduction of pollutants.

RECOMMENDATION 7:

Local Authorities should be fully eligible for government Grant-in-Aid funding for the maintenance of coastal flood and erosion risk management assets. Funding should be allocated based on the number of people protected rather than the number of properties.

At the national scale, data on the age, condition, and ownership of coastal flood defence assets is patchy, and approaches to data collection vary significantly between Local Authorities. As a result, Local Authorities struggle to collectively demonstrate the scale of this problem or successfully lobby for improved resourcing for asset maintenance.

³⁶ Postcards from the edge, adapting to our changing coast, CIWEM, June 2024

4. Coastal change

TOP LINES

- **Coastal erosion presents an existential threat to many seaside communities. Without intervention, up to 28,000 homes could be at risk of loss to the sea between now and 2060.**
- **Shoreline Management Plans are a vital tool to help guide investment decisions for the coast. However, they are not statutory documents and there is therefore no reliable source of funding available to help deliver on their aims.**
- **Planning policy should be updated to make consideration of Shoreline Management Plan approaches a requirement.**

4.1. The threat from coastal erosion

For people living in coastal communities, the risk of flooding from the sea can pose a significant threat to their lives and livelihoods. Climate change will exacerbate this risk, with the Environment Agency predicting that sea levels around England's coast will rise by between 1.01m and 1.62m by 2125.³⁷ For some, coastal erosion represents an existential threat: complete loss of a home or business to the sea. Under the existing approach to shoreline management, around 2,000 properties are at risk of loss from coastal erosion between 2010 and 2060, and without intervention this figure could rise to 28,000.^{38,39} In addition, much of the UK's essential infrastructure is located around the coast – in 2018 the Committee on Climate Change estimated up to £150 billion of coastal assets were at risk of flooding, including oil refining and gas distribution infrastructure.⁴⁰

4.2. Shoreline Management Plans

Shoreline Management Plans (SMPs) are plans developed by the Environment Agency, local authorities, and other interested stakeholders, that help to guide investment decisions for the coast. These decisions include recommendations for the construction and maintenance of defences, the implementation of adaptation plans, and the creation of new coastal habitats. SMPs also specify how each section of the coast should be managed over the next century, based on flood and erosion risk now and in the future. Approaches include 'hold the line', 'no active intervention', 'managed realignment', and 'advance the line'.⁴¹ Evidence submitted to this inquiry has been supportive of the role played by SMPs – especially following the recent SMP refresh and publication of a digital SMP explorer tool last year.⁴² However, participants raised concerns that they are not statutory documents and, as such, there is no requirement for current planning policy (including the NPPF and Local Plans) to be prepared in line with SMPs and no reliable source of funding to deliver on their aims. CIWEM recently reported that, given this funding situation, it can take over ten years to go from SMP policy to breaking ground on project delivery.⁴³ Furthermore, SMPs provide a vital source of evidence for informing local planning policies, allocations, and decisions in areas affected by coastal change. It is therefore concerning that there is currently no requirement for either Local Plans or individual planning applications to be prepared in line with SMP management approaches. Although the obvious solution to the challenges described above associated with funding for, and compliance with SMPs would be to make them statutory documents, participants in this inquiry suggested that statutory adoption may have unintended consequences. For example, a situation where some areas of the coastline require public funding, which is financially unsustainable and disproportionate to the benefit gained. CIWEM has recently called for near-term SMP policies to be made statutory – a position that could represent a good compromise.⁴⁴

³⁷ Flood risk assessments: climate change allowances, Environment Agency, May 2022

³⁸ Flood and coastal erosion risk management report: 1 April 2021 to 31 March 2022, Environment Agency, July 2024

³⁹ Direct submission of evidence, Environment Agency, July 2024

⁴⁰ Managing the coast in a changing climate, Committee on Climate Change, October 2018

⁴¹ Guidance: shoreline management plans, Environment Agency, January 2024

⁴² The coast is clear: strengthening shoreline management planning, Environment Agency, January 2024 (online) www.environmentagency.blog.gov.uk/2024/01/30/the-coast-is-clear-strengthening-shoreline-management-planning/

⁴³ Postcards from the edge, adapting to our changing coast, CIWEM, June 2024

⁴⁴ Ibid

RECOMMENDATION 8:

The National Planning Policy Framework should be strengthened to make consideration of Shoreline Management Plan approaches mandatory and factored into the development of Local Plans.

The importance of funding to help communities adapt to coastal change has been discussed in section 3.2. This also applies to farmers, whose livelihoods can be affected when SMP approaches lead to loss of farmland and are not directly compensated for this. Financial support is available where new habitat is created, either from grants under the Environmental Land Management Scheme or through the sale of biodiversity net-gain units. However, farmers and farming groups must continue to be consulted as part of the development of future SMPs.

4.3. Coastal Change Management Areas

Coastal Change Management Areas (CCMAs) are identified in Local Plans as areas likely to be affected by physical changes to the coast, for example, erosion, landslip, or inundation.⁴⁵ CCMAs are defined where rates of shoreline change are expected to be significant over the next 100 years and will often coincide with SMP areas of ‘no active intervention’ or ‘managed realignment’. Designation of a CCMA can help restrict the location of new development in unsuitable areas and identify where the transition of existing vulnerable buildings and infrastructure is needed. However, there is some ambiguity within the NPPF as to where a CCMA can be designated. Respondents to this inquiry suggested that greater clarity and flexibility is needed so that CCMAs can be designated in areas further inland affected by sea level rise, such as estuaries and tidal rivers. Coastal Change Vulnerability Assessments (CCVAs) can also be a useful tool to ensure that new homes and infrastructure in CCMAs will proceed safely and in consideration of a development’s lifespan. However, unlike the role of a site-specific flood Risk assessment, the NPPF does not provide clear guidance on when a CCVA is required to support an individual planning application.

RECOMMENDATION 9:

The National Planning Policy Framework should be updated to:

- a. be more explicit in allowing for the designation of Coastal Change Management Areas in locations affected by sea level rise or other physical changes expected as a result of climate change (such as estuaries and tidal rivers).
- b. provide clear guidance on when a Coastal Change Vulnerability Assessment is required to support an individual planning application.

4.4. Flood & coastal innovation programmes

In the 2020 Budget, the previous government announced a £200 million innovation fund to help meet the aims of the Environment Agency’s FCERM programme. The fund included:

1. A Coastal Transition Accelerator Programme (£36m) to help communities and businesses adapt to a changing coast.
2. An Adaptation Pathways Programme (£8m) for work on long-term planning for climate adaptation in the Thames and Humber estuaries, the Severn Valley, and Yorkshire.
3. A Flood and Coastal Resilience Innovation Programme (£150m) where 25 local areas will demonstrate how practical innovative actions can work to improve resilience to flooding and coastal erosion.

⁴⁵ Guidance: flood risk and coastal change, Ministry for Housing, Communities, and Local Government, August 2022

The Coastal Transition Accelerator Programme (CTAP) currently supports pilot projects in North Norfolk and the East Riding of Yorkshire, which have the highest coastal erosion rates in England. Local Authorities in these areas will work with residents and businesses on interventions to support the long-term resilience of these areas. Prospective interventions include ‘rolling back’ of property and infrastructure from the coast, improving and replacing infrastructure, repurposing land for new use, and using the planning system to support the transition of existing development. The CTAP is welcome, however it remains a pilot scheme. For coastal adaptation funding to be made sustainable in the long-term, a funding mechanism should be developed that aligns with the existing FCERM strategy and is formally allocated in the next spending review.

The Flood and Coastal Resilience Innovation Programme (FCRIP) aims to encourage local authorities, businesses, and communities to test and demonstrate innovative and practical resilience actions in their areas. Types of resilience actions include nature-based solutions, use of property flood resilience measures, and building community capacity to respond and recover from flooding. The Programme has allocated funding to 25 local areas to improve resilience and limit the damage and disruption associated with flooding and coastal erosion.⁴⁶

CASE STUDY: CATCHMENT TO COAST

Catchment to Coast is one of the 25 FCRIP projects that has received funding to improve whole-catchment resilience within the city of Southend-on-Sea and the borough of Thurrock. The programme includes interventions within the upper, middle, and lower catchment.

Within the **upper catchment**, land management measures such as leaky dams, contour ploughing, tree planting, and innovative wet verge systems are being used. These interventions aim to hold water upstream for longer and reduce the volumes of water moving down through the catchment, thereby improving flood resilience downstream in urban areas.

Within the urban **middle catchments** of Stanford-le-Hope, Prittlewell, and Shoebury, micro-Sustainable Drainage Systems (SuDS) are being trialled including green roofs, rain gardens and water butts. The viability of SuDS retrofit is also being demonstrated within existing homes using a demonstrator property owned by Southend on Sea City Council.

Within the **lower catchment**, surface water flood warning beacons are being installed along the Southend seafront, which will be connected with the surface water network and will flash at times of high risk. Natural flood management solutions have also been deployed at Two-Tree Island to prevent the existing landfill site from coastal erosion. Interventions include protecting the existing sea wall with ‘exotiles’, re-establishment of the saltmarsh in front of the sea wall, and development of a floating barrier island to reduce the impact of waves on the shore.

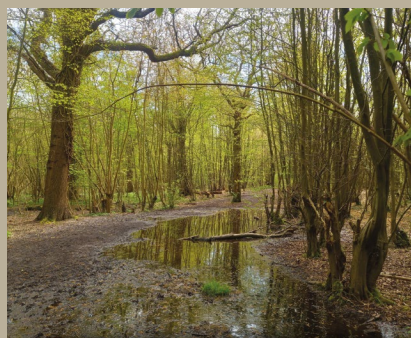


Image credit – Southend on Sea City Council

⁴⁶ Guidance: flood and coastal innovation programmes, Environment Agency, May 2023

5. Property flood resilience

TOP LINES

- **Given the impacts of climate change, it will not be possible to protect all homes from flooding. Property Flood Resilience (PFR) measures help to keep floodwater out and ensure that buildings can be quickly and cost-effectively restored after a flood.**
- **The use of PFR is vitally important to demonstrate that homes at risk of flooding can remain insurable once the Flood Re reinsurance scheme is withdrawn in 2039 and individuals can still access mortgage finance.**
- **Even though mainstreaming PFR is a specific objective of the Environment Agency's FCERM strategy, uptake has been slow. Recommendations to help mainstream the use of PFR include: increasing grant funding available for resilient restoration after a flood, mandating the use of PFR in Building Regulations, introducing a Flood Performance Certificate, and raising awareness of the need for resilience via the BeFloodReady campaign.**

5.1. The need for property flood resilience

Property Flood Resilience (PFR) describes the measures that can be taken at the individual property level to either keep water out (resistance measures) or to adapt the building to reduce the damage if water should get in (recoverability measures). It also includes the need for adequate preparation, including access to flood planning tools, where necessary.

Given the limitations of the planning process, the efficacy of existing flood defences, and the impacts of climate change described earlier in this report, it will not be possible to protect all properties from flooding. Therefore, the use of PFR is vitally important to limit the damage caused by flooding, especially from surface water, which can be harder to predict.

The Flood Re reinsurance scheme allows access to affordable home insurance for communities at risk of flooding. However, this scheme does not cover homes constructed after 2009, domestic properties that are not owner-occupied, or commercial property. Flood Re will also be withdrawn entirely in 2039, whereby home insurance will be priced according to the individual level of risk. The use of PFR can help to ensure that homes in these communities will remain insurable once Flood Re is withdrawn.

Furthermore, the inability to access insurance is beginning to impact access to lending for properties in areas of high flood risk. Evidence submitted to this inquiry suggests that lenders are now using mapping technology to consider flood risk as part of mortgage eligibility criteria (alongside insurability), with anecdotal evidence of applications being turned down on this basis.⁴⁷

⁴⁷ Banks are sinking our mortgage applications (article), Sunday Times, 6 October 2024

5.2. Funding property flood resilience

Risk Management Authorities can access funds for community-scale PFR schemes via the Environment Agency's PFR Framework, which is managed across six regional hubs. These schemes are typically proactive and often include properties that are at risk of flooding but have not yet flooded. Works completed within this framework utilise flood resistance measures (such as flood doors and non-return valves) and require a high level of product certification, with an average cost of around £12,500 (excluding VAT) per property. However, under current funding policy, the Environment Agency is only able to provide resistance measures, as opposed to wider recoverability measures to help make vulnerable communities more adaptable to flooding over the long term.

In some circumstances, grant funding is also available directly to the homeowner following a flood. Grants include the £5,000 (including VAT) Property Flood Resilience Grant Repair Scheme for homeowners and businesses in England or reimbursement of up to £10,000 (including VAT) via insurers registered with Flood Re's Build Back Better scheme, described below. Although these grants can fund both recoverability and resistance measures, they rarely cover the full cost of all the PFR measures required to protect the property against future flooding.

RECOMMENDATION 10:

To help accelerate the uptake of Property Flood Resilience measures, the Government should:

- a. allow for the installation of both resistance and resilience measures as part of property flood resilience schemes funded by the Environment Agency.
- b. review the eligibility criteria and distribution process for the Property Flood Resilience Repair Grant Scheme to make it more widely accessible and streamlined.
- c. align all PFR funding sources (including the Environment Agency's Property Flood Resilience Framework, Flood Re's Build Back Better, and the Department for Environment, Food and Rural Affairs' Flood Resilience Repair Grant) to the same amount at £15,000. This should be allocated as part of the forthcoming multi-year spending review.

5.3. Build Back Better

Some progress has been made against mainstreaming the use of PFR, including the introduction of the Build Back Better (BBB) scheme, which enables Flood Re to reimburse insurers up to £10,000 (in addition to standard repair costs) to incorporate PFR into the property refurbishment.⁴⁸ The WSBF has previously called for all insurance companies to offer Build Back Better as part of their home instance policies. Although BBB remains a voluntary scheme, it is understood that it is now offered by almost all the main insurers. However, challenges remain relating to the uptake of BBB, with average uptake rates at around 30%, compared to >60% for Defra grants and Environment Agency PFR schemes. Increasing the amount that can be reimbursed under the BBB scheme to £15,000, as recommended above, could help to increase uptake.

⁴⁸ Flood Re launches world first 'Build Back Better' scheme to help householders after a flood, Flood Re, press release, April 2022

5.4. Flood Performance Certificates

The WSBF has also previously called for the introduction of a Flood Performance Certificate (FPC). Such a certificate would assign a home a rating, based on the level of flood risk, its existing flood resilience, and the implications to the property should a flood occur. The certificate would make recommendations to improve the property's resilience to flooding, so that residents are better prepared, and third parties (such as insurers and lenders) understand what level of flood resilience the building has. Flood Re has recently published a roadmap for FPC roll-out, which includes the development of a scoring system, a method for standardising this across all properties, and proposals for certification.⁴⁹ Participants in this inquiry have been broadly supportive of this approach. However, some challenges to widespread adoption of FPCs remain, these include:

1. The skills and capacity required to carry out an initial assessment of a property's flood risk, resilience, and any mitigation measures currently in place.
2. Agreement between insurers on a shared model/data source that should be used to assess the risk of flooding to a property.
3. Agreement between insurers as to what FPC 'rating' is to be achieved to guarantee that affordable insurance cover will remain available to future owners/occupiers.
4. Quantification of how the implementation of recommendations for resilience measures would link to a reduction in insurance premiums or lending costs.
5. Agreement of a timeline by which a certificate should be mandatory, whenever a home is sold or rented.

Finally, property owners and renters will be disadvantaged by an FPC if the scheme leaves consumers with a list of requirements that cannot be implemented in a cost-effective or timely manner. Evidence submitted to this inquiry has highlighted that there is currently a shortage of facilities available to test PFR products to meet the current British Standard and that the Standard itself has limitations in terms of its binary pass/fail approach. The WSBF understands that new testing suppliers have recently been added to the Environment Agency PFR Framework to increase competitiveness for product certification. However, further research is required to understand the performance, cost-effectiveness, and real-world application of PFR products.

5.5. Mainstreaming property flood resilience

Another policy change that could help to mainstream the use of PFR would be to make the incorporation of basic PFR measures a requirement within the Building Regulations regime. The WSBF has previously recommended that part C of Building Regulations should be updated to require all properties at high risk of flooding to include PFR measures – something that the Committee on Climate Change has also called for.⁵⁰ This should be reconsidered by the new Government as part of any future review of Building Regulations.

As detailed in Section 5.6 below, it would be beneficial for homeowners to have a much higher level of understanding and awareness of their own flood risk, especially given the future impact of climate change. One way of raising awareness would be for mandatory inclusion of very basic, 'no-regret' PFR measures in all new homes, such as raised electrical sockets and non-return valves on pipework. This would also help to change the culture in the construction industry and product supply chain so that the use of PFR is normalised and contractors are upskilled in fitting and retrofitting techniques.

⁴⁹ Flood performance certificates: the roadmap, Flood Re, June 2024

⁵⁰ Progress in adapting to climate change: 2021 report to Parliament, Committee on Climate Change, June 2021

RECOMMENDATION 11:

To normalise the use of property flood resilience in both new and existing properties, Part C of building regulations should be updated to require installation of basic property flood resilience measures for properties at risk of flooding, and the installation of very basic, 'no regret' measures for all new homes, irrespective of risk.

5.6. Understanding, awareness and preparedness

If the use of PFR is to be fully mainstreamed, individuals must understand their level of flood risk, be aware of the solutions available to them, and then feel empowered to take action. Flood preparedness is a key part of this process and includes access to flood warnings, having an emergency response plan in place, and ensuring that any PFR measures are well maintained and working properly.

The BeFloodReady platform provides a vital tool to help improve awareness and preparedness. The campaign was originally developed as a solution as part of a Defra Pathfinder project for the South West, which completed in 2021. BeFloodReady has since been used as a Community of Practice for PFR to support professionals and the public interested or involved in PFR delivery. The website (www.befloodready.ciwem.org) provides a platform for sharing case studies, good practice, and policy updates to support improved flood resilience. It also hosts regular webinars and events.

6. Conclusion

Despite a record level of investment in flood risk management by the previous government, serious challenges remain associated with risks to homes, businesses, and infrastructure. Climate change will continue to exacerbate these challenges, with annual rainfall, storm frequency, and sea level around our coast all set to rise significantly by the end of the century. The new Government will have to make difficult decisions – starting with how flood risk management activity will be funded from 2027 onwards. The Environment Agency’s Long Term Investment Scenarios should continue to play a key role in informing the Ministers and Civil Servants tasked with making these decisions.

Economic growth cannot happen when people are displaced to temporary accommodation, pupils are sent home from school, hospital operations are cancelled, trains are delayed, and businesses are closed – all direct impacts of flooding. Good flood risk management is therefore a vital prerequisite for the new Government’s Mission for Growth. The recommendations within this report seek to support sustainable growth through robust planning policy, reform of funding policy for flood defences and their maintenance, prioritisation of sustainable shoreline management, and acceleration of the use of property flood resilience measures for individual homes and businesses. The WSBF recognises the constrained nature of public finances, which is why many of the recommendations within this report do not require new funds from the Treasury, but rather simple changes to policy that can make a big difference to the way that the Environment Agency, Local Authorities, developers, and other stakeholders operate. The WSBF looks forward to supporting the new Government in making flood and coastal erosion risk management a priority in this Parliament.

Steering group

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Methodology

Work on this inquiry began in March 2024, when the WSBF held a scoping session in Parliament, kindly chaired by Baroness McIntosh of Pickering.

This project draws on third party research from a large number of organisations, as well as primary data collected following a call for evidence and through one-to-one interviews with experts across industry, academia, Parliament, and NGOs. An evidence session was also held at the 2024 Flood and Coast conference, entitled *Bricks and Water: evidence session to inform a Parliamentary inquiry on FCERM*.

Policy Connect would like to thank all the individuals and organisations that participated in this inquiry. Our particular thanks to our Chair, Baroness McIntosh of Pickering, and Vice Chairs, Blake Stephenson MP, Lee Pitcher MP, and Helen Morgan MP for their leadership and dedication to the project. A full list of contributors is outlined below. The views in this report are those of the author and Policy Connect. Whilst these were informed by the listed contributors, they do not necessarily reflect the opinions of these organisations.

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Association of SuDS Authorities	Jo Matthews C.WEM, CIWEM
Atkins Realis	Local Government Association Coastal Special Interest Group
Autodesk	Mott MacDonald
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Cranfield University	Southend on Sea City Council
East Riding of Yorkshire Council	Town and Country Planning Association
East Suffolk Council	Travis Perkins
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Fiona Crayston	University of Southampton
Flood Re	Vistry Group
Flood Technology Group	Waterman Aspen
GJB Consultancy	Watertight International
Great Yarmouth Borough Council	Wiltshire Council

About this report

THE WESTMINSTER SUSTAINABLE BUSINESS FORUM

The Westminster Sustainable Business Forum (WSBF) is Policy Connect's coalition of high-level stakeholders informing better policy-making on sustainability issues for the built environment.

The WSBF's members include key UK businesses, Parliamentarians, Civil Servants, academics and third sector organisations. Providing a politically neutral environment for knowledge sharing and discussion on sustainability policy, the WSBF helps to impact the agenda in government and is a trusted source of independent information and advice for policymakers.

The WSBF publishes authoritative research reports; impacts Government policy through its in-depth round table policy discussions and outputs; and informs the wider sustainability debate by convening key stakeholders at events and seminars. The WSBF works in the policy areas of construction, infrastructure, water, sustainable planning, green finance and natural capital. It is cross-party, independent and not-for-profit.



THE SUSTAINABILITY TEAM

The All-Party Parliamentary Sustainable Resource Group (APSRG), Carbon Connect, the Sustainable Resource Forum, and the Westminster Sustainable Business Forum (WSBF) make up the Sustainability team at Policy Connect.

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