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Environment, Food and Rural Affairs Committee

Flooding

Fourth Report of Session 2019–21

Report, together with formal minutes relating to the report

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The Environment, Food and Rural Affairs Committee

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Summary

Over 5.2 million homes and businesses in England are currently at risk from flooding, according to the Environment Agency, and more will become threatened in the future. The Climate Change Committee has listed flooding and coastal change as one of the greatest climate change risks for the UK, both now and in the future. The increasing frequency of severe weather, and its impact on people and communities, was demonstrated in the flooding that occurred over the autumn and winter of both 2019–20 and 2020–21. In July 2020, the Government published a new Flood and Coastal Erosion Risk Management Policy Statement, which it described as "the most significant ramping up of flood policies for a decade".

Our inquiry looked at several aspects of Government policy on flood risk management and the response to increasingly frequent severe flood events. Our key findings are as follows:

- **The Government should provide greater certainty about its long-term objective for flood resilience and how it aligns to climate change.** The Government's has rejected the National Infrastructure Commission's recommendation of a nationwide standard for flood resilience, but evidence shows that such a standard would improve public confidence and address limitations of cost-benefit approaches to allocating funding.

- **The Government has committed to doubling capital investment in flood risk management, but it is critical that this not wasted by failing to maintain existing defences.** Pressures on the maintenance budget for flood risk will only be exacerbated by the increased investment in new defences, as well as the impact of climate change. The Government should put in place a long-term resource budget settlement, aligned with the increased capital investment, so that the Environment Agency and others are able to effectively plan for and maintain the network of flood and coastal defences.

- **There is an absence of support for the long-term recovery of communities in the aftermath of a flood.** Local communities have vividly described the significant long-term challenges that result from being flooded, especially the impact on mental health. The Government needs to develop a properly resourced action plan with local partners for the long-term physical, economic, and psychological recovery of communities impacted by flooding.

- **The Government must provide leadership to local authorities facing potentially significant increases in future flood risk due to the changing climate.** Local planning authorities lack the knowledge and/or resources to effectively factor the impacts of climate change into their local plans and development decisions. The Government must ensure that all local planning authorities have the powers, resources and information they need to perform this function, including properly trained dedicated staff.

- **The current approach to promoting sustainable drainage systems, coupled with the persistence of the automatic right to connect surface water drainage**

to the public sewer, is not working. While the uptake of sustainable drainage systems has improved in recent years, the installation of high-quality SuDS features delivering multiple environmental benefits may still be insufficiently incentivised. The Government has not adequately explained why it believes the widespread support for the commencement of Schedule 3 of the Flood and Water Management Act 2010 amongst stakeholders to be mistaken. The Government should commit to ending the automatic right to connect to the public sewer, and consult on measures to improve the uptake of high-quality SuDS, including an option for commencing Schedule 3.

- **The Government needs to explain how it will ensure a catchment-based approach to incentivising natural flood management.** Working with natural processes is an important part of a holistic approach to flood risk management, but measures need to be suited to each catchment. There are several initiatives that could serve as delivery vehicles for natural flood management, and a catchment-based approach requires join-up between them to ensure that interventions are appropriately targeted and incentivised. Any measures which call on farmers and land managers to allow their land to be used for flood management must provide proper payment for the public goods provided.

- **Meaningful engagement with local communities on decisions about flood risk brings practical benefits.** Local people often feel disengaged and ignored in decisions relevant to flood risk, and risk management authorities' consultations are often not perceived as meaningful or impactful. Communities must be vital delivery partners in the Government's approach to building resilience, not just treated as passive recipients. The Government should work with the voluntary sector to develop guidance for all risk management and planning authorities on how to meaningfully engage with local people. It should also review the institutional arrangements for community engagement in flood risk management, to identify best practice, and ensure that risk management authorities are properly resourced to carry out this engagement.

Introduction

Our inquiry

1. The Climate Change Committee (CCC) has listed flooding and coastal change as one of the greatest climate change risks for the UK, both now and in the future.[1] Over 5.2 million homes and businesses in England are at risk from flooding, according to the Environment Agency, with levels of risk ranging from "very low" to "high".[2] Properties are at risk from a number of types of flooding:

- Rivers (fluvial flooding) and the sea: in 2018–19, 2.5 million properties were at risk, with 200,000 at high risk (that is, a greater than 3.3% chance of flooding in any given year).
- Flooding caused by rainwater not draining away (surface water flooding): in 2018–19, 3.2 million properties were at risk, with 324,000 at high risk.
- Water rising under the ground (groundwater flooding): in 2018–19, between 122,000 and 290,000 properties were at risk.[3]

2. The increasing frequency of severe weather was demonstrated in the widespread flooding that occurred over the autumn and winter of 2019–20. Over 4,600 properties were flooded across England due to heavy rainfall and the impacts of Storms Ciara and Dennis.[4] The Association of British Insurers (ABI) said that insurers expected to pay out over £543 million following Storms Ciara, Dennis and Jorge (including £305 million relating to flooded property claims).[5]

3. In the aftermath of these events, we launched an inquiry into flooding on 4 March 2020. During the course of our inquiry, the Government published a new Flood and Coastal Erosion Risk Management Policy Statement in July 2020, which it described as "the most significant ramping up of flood policies for a decade".[6] This coincided with the Environment Agency's (EA) publication of an updated National Flood and Coastal Erosion Risk Management Strategy, replacing a previous strategy from 2011.[7] The final terms of reference for our inquiry, updated to reflect these publications, were:

a) How effectively do the new Government policy statement and Environment Agency strategy meet the challenge posed by a changing climate?

b) Are the current national and local governance and co-ordination arrangements for floods and coastal risk management in England effective?

1 Committee on Climate Change, UK Climate Change Risk Assessment 2017—Synthesis report: priorities for the next five years (July 2016), p 2
2 Environment Agency, 'Flood and coastal erosion risk management report: 1 April 2018 to 31 March 2019,' accessed 20 January 2021
3 Environment Agency, 'Flood and coastal erosion risk management report: 1 April 2018 to 31 March 2019', accessed 20 January 2021
4 Environment Agency (FLO0037) para 3.1
5 Association of British Insurers (FLO0092) para 6
6 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), p 4
7 Environment Agency, 'National Flood and Coastal Erosion Risk Management Strategy for England' (July 2020)

c) What level of investment will be required in future in order to effectively manage flood risk in England, and how can this best be targeted?

d) How can communities most effectively be involved, and supported, in the policies and decisions that affect them?

e) With increasing focus on natural flood management measures, how should future agricultural and environmental policies be focussed and integrated with the Government's wider approach to flood risk?

f) How can housing and other development be made more resilient to flooding, and what role can be played by measures such as insurance, sustainable drainage and planning policy?

g) What lessons can be learned from the recent winter floods about the way Government and local authorities respond to flooding events?[8]

The inquiry also drew on the evidence received, and questions raised, during the previous Environment, Food and Rural Affairs Committee's inquiry into *Coastal flooding and erosion, and adaptation to climate change* which was ended by the 2019 General Election. The Committee published an interim report in November 2019 prior to the dissolution of Parliament.[9]

4. We received over 100 written submissions to our inquiry, and held four oral evidence sessions with bodies involved in managing the risk of flooding, charities, trade bodies and experts on climate change, infrastructure and insurance. We also held a virtual "roundtable" discussion with local flood risk community groups on 8 October 2020, facilitated by the National Flood Forum, and a summary report of this discussion is annexed to this Report. We are grateful to everyone who contributed to this inquiry and shared their experiences with us.

5. The final stages of our inquiry coincided with further flooding in December 2020 and January 2021, with heavy rainfall and exceptionally high river levels following the impact of Storm Christoph.[10] While the evidence received for our inquiry predated this severe weather and we have therefore been unable to consider it in detail, we did put further questions to the Environment Agency on their response when they appeared before us on 19 January 2021.[11]

8 Environment, Food and Rural Affairs Committee, 'Flooding', accessed 26 January 2021
9 Environment, Food and Rural Affairs Committee, First Report of Session 2019, Coastal flooding and erosion, and adaptation to climate change: Interim Report, HC 56, para 12
10 "A Cold Spell to Come", Met Office press release, 21 January 2021; 'River levels remain exceptionally high across England", Environment Agency news story, updated 23 January 2021
11 Oral evidence taken on 19 January 2021, HC (2019–21) 1155, Qq2–7

1 Meeting the challenge

Climate change and flood risk

6. The Climate Change Committee has listed flooding and coastal change as one of the greatest climate change risks for the UK, with risks arising due to increases in heavy rainfall, river flows, sea level rise and a corresponding increase in the height of tidal surges, and an increased rate of coastal erosion along vulnerable coastlines.[12] Hugh Ellis of the Town and Country Planning Association told us that "the scale of the challenge offered by the climate science" includes "1.6 metres of sea level rise by 2125 in 100 years' time—half a metre roughly halfway through that process—100% increases in river flows or 40% increases in rainfall intensity".[13] The increase in risk depends, in part, on the level of global warming, with the Climate Change Committee's Adaptation Committee recommending "planning for 2°C and considering plans for 4°C".[14] The CCC said in 2016 that "warming of 4°C or more implies inevitable increases in flood risk across all UK regions even in the most ambitious adaptation scenarios considered".[15]

7. The Government stated that its flooding and coastal erosion policy statement, published in July 2020, "forms part of the government's wider commitment to tackle climate change".[16] It places an emphasis on "resilience", consisting of actions to both "better protect" against, and "better prepare" for, the risk of flooding.[17] The new Environment Agency national strategy also incorporates the concept of "adaptive pathways"; planning ahead for how flood risk might change in future. This has already been used in the Thames Estuary 2100 plan, which "identifies a series of approaches or options for different climate change, social and economic futures".[18]

8. Nevertheless, some evidence suggested that the Government's approach does not go far enough to address future increases in flood and coastal risk due to climate change. Hugh Ellis of the Town and Country Planning Association (TCPA) told us that the scale of the challenge is "not reflected" in the policy statement and strategy, and a "break point difference" rather than "incremental" response is required.[19] The Chartered Institution of Water and Environmental Management (CIWEM) said that, while flooding was among the highest risks identified by the Climate Change Committee, the Government's National Adaptation Programme is "currently not an overarching framework driving adaptation and resilience across the economy, as it should be".[20] They continued that the Government's priority on flood risk policy should be to "ensure that it is not regarded by many departments as Defra or the Environment Agency's problem", but rather that "all should take ownership of understanding flood risk in their areas of responsibility".[21]

12 Committee on Climate Change, UK Climate Change Risk Assessment 2017—Synthesis report: priorities for the next five years (July 2016), pp 2, 32
13 Q89
14 Adaptation Committee of the Committee on Climate Change (FLO0018) para 11
15 Committee on Climate Change, UK Climate Change Risk Assessment 2017—Synthesis report: priorities for the next five years (July 2016), p 4
16 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), p 6
17 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), p 11
18 Environment Agency (FLO0037) para 4.6
19 Q89
20 Chartered Institution of Water and Environmental Management (FLO0104) para 24
21 Chartered Institution of Water and Environmental Management (FLO0104) para 25

9. We make recommendations around factoring the impacts of climate change into Government flooding policy and funding in the next section.

Level of ambition

Funding

10. The main central Government vehicle for directly funding flood schemes is the Flood and Coastal Erosion Risk Management (FCERM) programme managed by the Environment Agency.[22] This includes a multi-year capital budget from which local schemes can be funded, £2.6bn for the current six-year programme (2015–21), and funding for schemes can be supplemented by partnership funding from local sources (public and private).[23] The March 2020 Budget announced that capital investment in the next six-year programme (2021–27) would double to £5.2 billion.[24] Funding of £200 million was also announced for "innovative projects", and "up to £170 million" was later committed to "accelerate work on shovel-ready schemes".[25] The EA also has a FCERM resource budget, including funding for routine maintenance.[26]

11. The doubling of capital investment itself falls below the long-term annual average investment of £1 billion, identified as the "overall economic optimum" by the Environment Agency's 2019 Long Term Investment Scenarios.[27] Defra believes that revenue funding and other sources of funding will result in levels exceeding the EA's 2019 estimate.[28] The National Infrastructure Commission's (NIC) Chief Economist James Richardson told us that £5.2 billion "puts Government on a trajectory to meet the levels of investment that would be needed in a [2°C] climate change world", although he stressed the long-term challenge as "it is certainly not one six-year period and you are done".[29] He also noted that 4°C warming would necessitate "significantly higher funding", although the Government's approach of planning for 2°C and "considering how you would then adapt those investments and how you could enhance them in future if things turn out worse" was correct.[30] Flood Re (a reinsurance scheme for household flood cover) stressed that the Government's investment commitment must "provide more long-term clarity and certainty with funding spanning a rolling 10 or 20 year period".[31]

12. **We welcome the doubling of investment in flood defences announced at Budget 2020, amounting to £5.2 billion over the next six years. It is vital that measures to address the growing, long-term, flood and coastal risk in the face of climate change are adequately resourced. The Government should therefore keep the level of**

22 Department for Environment, Food and Rural Affairs, Central Government Funding for Flood and Coastal Erosion Risk Management in England (September 2019)
23 Department for Environment, Food and Rural Affairs, Central Government Funding for Flood and Coastal Erosion Risk Management in England (September 2019); National Audit Office, Managing flood risk, HC (2019–21) 962, p 4
24 HM Treasury, Budget 2020, HC (2019–21) 121, para 1.138
25 "Multi-billion pound investment as government unveils new long-term plan to tackle flooding", Department for Environment, Food & Rural Affairs press release, 14 July 2020
26 Department for Environment, Food and Rural Affairs, Central Government Funding for Flood and Coastal Erosion Risk Management in England (September 2019), pp 3–4
27 Environment Agency, 'Long-term investment scenarios (LTIS) 2019', accessed on 20 January 2021
28 National Audit Office, Managing flood risk, HC (2019–21) 962, para 20
29 Qq107, 110
30 Q107
31 Flood Re (FLO0097)

investment under constant review, with reference to the Environment Agency's long-term investment scenarios. ***The Government should commit to ensuring that funding for flood and coastal erosion risk management will keep pace with climate science and modelling of flood and coastal risk, both during the 2021–27 programme and beyond.***

13. The formula used to allocate Grant-in-Aid from the FCERM budget to particular schemes has also been criticised over the years. The Local Government Association (LGA) told us that under the existing model "smaller, more rural and dispersed areas are unable to compete for funding", while catchments characterised by "industry, commerce and critical infrastructure, yet with little residential accommodation" would also only secure "very low levels of national funding contributions".[32] The National Flood Forum also said that the cost-benefit approach means "there are many places, both rural and urban, which will never score highly enough".[33]

14. Evidence suggests that the existing formula also fails to take into account the wider benefits of flood risk investment. CIWEM told us that the benefit-cost ratios used for FCERM schemes are "an underestimation of the true benefit to the UK economy, human wellbeing and the protection of nature".[34] It also noted that "the relocation of communities, infrastructure and loss of housing stock or valuable land is not properly accounted for" in funding decisions on coastal defences, and current appraisal methods limit "our ability to account for the benefits of our coastline to the rest of the nation".[35] The Wildlife Trusts told us that "it will be important to ensure that climate factors and other public benefits are properly valued in cost benefit assessments", if the Government's approach is to ensure that flood risk measures are "climate-smart".[36]

15. The Government announced changes to the formula in April 2020, including increased payments for schemes protecting properties that will become at risk in future, and enabling schemes that prevent surface water flooding to qualify for more funding.[37] Defra also said that it would launch a public consultation later in 2020, to help "further develop our floods funding vision for the future".[38] A call for evidence was launched in February 2021, seeking information on "additional ways in which specific local circumstances can be taken account of in the government's future flood and coastal defence investment programme". It is due to close on 29 March 2021.[39]

16. **We welcome the steps taken thus far to improve the partnership funding formula, to better take account of climate change and the wider impacts of flooding. However, it is disappointing that the Government's call for evidence on further changes to the formula has only just been launched, and will not close until the eve of the next investment programme starting in April 2021. We believe there is more work to be done to ensure that flood capital investment protects people and property without favouring certain areas or disproportionately focussing on certain types of flooding.**

32 Local Government Association (FLO0088)
33 The National Flood Forum (FLO0045)
34 Chartered Institution of Water and Environmental Management (FLO0104) para 33
35 Chartered Institution of Water and Environmental Management (FLO0104) para 38
36 The Wildlife Trusts (FLO0101)
37 "Building flood defences fit for the future", Department for Environment, Food & Rural Affairs news story, 17 April 2020
38 "Building flood defences fit for the future", Department for Environment, Food & Rural Affairs news story, 17 April 2020
39 Department for Environment, Food and Rural Affairs, 'Local factors in managing flood and coastal erosion risk and Property Flood Resilience - call for evidence', accessed 1 February 2021

When considering cost-benefit analyses, natural capital should also be a factor that is taken into consideration. *The Government should ensure that any further steps to address shortcomings of the flood funding formula, following the current call for evidence, are communicated and implemented as quickly as possible.*

Partnership contributions

17. The EA, which will largely be responsible for managing the Government's £5.2 billion investment, said that "significant" partnership contributions from local authorities and private sources would be needed to deliver its outcomes, and that this will be "challenging".[40] Our predecessor Committee's report on *Coastal flooding and erosion, and adaptation to climate change* in the last Parliament recommended that:

> The Government should demonstrate its seriousness about attracting private sector funding and how it will reverse the apparent stalling of private sector contributions under the Partnership Funding model, and how it intends to strengthen the system including the use of tax incentives for private investment.[41]

18. The National Audit Office (NAO) found in November 2020 that partnership funding is "almost all from the public sector", with the proportion from the private sector in the period 2015–21 being "even lower than when we last reported in 2014".[42] The LGA's Councillor David Renard told us that there is "not enough incentivisation for private companies, particularly utilities, to make those investments in the local area".[43]

19. In terms of the effectiveness of the partnership model, the Government response to our predecessor Committee's report stated that an evaluation of partnership funding, published in 2018, showed that an additional 421 schemes had been funded (than would have been the case if they were fully funded by Government).[44] However, the NAO highlighted that the partnership model may lead to projects that cannot secure partnership funding not proceeding, despite offering better value for money than others which do secure contributions.[45] They also pointed to "big regional differences" in the amount of partnership funding committed, but noted that it is not possible to ascertain whether these variations are a result of difficulties in obtaining contributions for some schemes, because the Environment Agency does not keep a record of schemes where partnership funding cannot be secured.[46]

20. The Government's flooding policy statement in July committed to "review current guidance on corporation tax relief on partnership funding contributions […] to ensure it provides clarity on the scope and availability of the relief".[47] Defra also intends to expand

40 Environment Agency (FLO0037) para 4.3
41 Environment, Food and Rural Affairs Committee, First Report of Session 2019, Coastal flooding and erosion, and adaptation to climate change: Interim Report, HC 56, para 46
42 National Audit Office, Managing flood risk, HC (2019–21) 962, para 18
43 Q63
44 Environment, Food and Rural Affairs Committee, Fourth Special Report of Session 2019–21, Coastal flooding and erosion, and adaptation to climate change: Interim Report, HC 272, para 14
45 National Audit Office, Managing flood risk, HC (2019–21) 962, para 18, para 2.20
46 National Audit Office, Managing flood risk, HC (2019–21) 962, para 18, para 2.20
47 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), p 18

and promote the use of local powers through which local authorities can secure additional funding, while the Environment Agency plans to introduce training to help local staff secure additional partnership funding from the private sector.[48]

21. David Cooper (Deputy Director, Flood and Coastal Erosion Risk Management at Defra) told us in oral evidence that "we estimate a need for about £430 million in contributions in the future programme compared to the £530 million we have in the current one".[49] The Secretary of State also told us that it is open to the Government to "look at" cases where "we felt we needed to move certain projects forward and there was a shortage of partnership funding".[50]

22. **We share the concern of our predecessor Committee about the apparent stalling of private sector contributions under the partnership funding model. The recent National Audit Office report shows the Government faces an uphill struggle to reverse the decline in private sector contributions. We welcome the steps the Government is taking to encourage more private contributions, including reviewing guidance on corporation tax relief. However, we note with concern that the Environment Agency has said it will be challenging to secure the partnership funding needed to deliver the outcomes of the next multi-year capital investment.**

23. **While we acknowledge the great value of partnership contributions from public sources, it is obvious that private sector investment is too low (as the Government has implicitly accepted), and this could contribute to uncertainty about whether schemes will be deliverable.** ***The Government should explain how it will monitor whether the level of partnership funding, including private sector contributions, is jeopardising the outcomes of the multi-year capital investment programme.***

24. ***The Environment Agency should facilitate this by keeping a record of schemes that are unable to proceed due to being unable to secure adequate partnership contributions, including a quantification of the losses in flood resilience that result.***

Maintenance

25. Alongside capital investment, another ongoing issue is the budget for maintenance of flood risk assets. Paul Cobbing of the National Flood Forum told us that the capital investment would be "pointless" if the Government did not ensure "the revenue spend that is required to maintain the assets we have already".[51] The NFU told us that "thousands of acres of agricultural land" were flooded in the summer and autumn of 2019 due to breaches in flood embankments, highlighting a lack of investment in maintenance.[52]

26. The NAO found that the EA had only met its target on the number of properties at risk due to the condition of its own structures and defences in 2 of the last 6 years. The number at risk increased by 171% in 2019/20 to 189,000 owing to the damage caused by the winter floods.[53] The NAO also referred to EA research indicating that maintenance and repair costs could increase by between 20% and 70% a year up to 2050, as a result of climate change.[54]

48 National Audit Office, Managing flood risk, HC (2019–21) 962, para 18, para 1.24
49 Q184
50 Q181
51 Q91
52 National Farmers Union (FLO0091) para 72
53 National Audit Office, Managing flood risk, HC (2019–21) 962, para 2.15
54 National Audit Office, Managing flood risk, HC (2019–21) 962, para 22

27. In its evidence, the EA highlighted that higher levels of capital investment would put more pressure on revenue funds, and called for a long-term revenue budget settlement:

> Due to the increased frequency and severity of flood incidents, our operational costs are rising. We continue to make the case for funding the operation and maintenance of Environment Agency maintained FCERM assets in the new spending review. This includes a long term revenue settlement aligned to the capital investment announced in the Budget. Over time, the higher levels of capital investment will also generate further pressure on our revenue funds.[55]

In oral evidence, the EA's Executive Director of Flood and Coastal Risk Management John Curtin also noted that climate change placed stress on flood assets in other ways, such as hot summers causing compaction in earth banks.[56] Mr Curtin reiterated that "we need to make a really strong case and need Government support on our maintenance".[57] He also stressed that it is not just a matter of funding for the Environment Agency, and that "we need a collective view of the overall investment in the Environment Agency, local authorities and IDBs [Internal Drainage Boards]".[58]

28. Budget 2020 allocated an extra £120m to repair flood defences damaged in the flooding of winter 2019–20.[59] The Government told us in January 2021 that "any flood defences and equipment damaged during last winter's flooding are now repaired or have robust contingency plans in place to provide the expected standard of protection to communities this winter".[60] However, the Spending Review in November contained no commitment to a long-term revenue settlement for flood and coastal erosion risk management.[61] Following his appearance, the Secretary of State wrote to us on the subject of maintenance funding. He said:

> The Government is committed to the ongoing maintenance of our existing flood defences, alongside the delivery of its £5.2 billion capital investment programme over the next six years. Further details of this will be confirmed soon once Defra has concluded its budget setting process for 2021/22. I will write again in early 2021 once final spending allocations have been settled.[62]

29. **It is critical that the considerable outlay of public money through the Government's £5.2 billion capital investment in flood defences is not wasted through a failure to adequately resource the maintenance of new and existing assets. We are concerned by the evidence we have received about existing shortcomings in asset maintenance, and this situation will only be exacerbated by the twin pressures of climate change and increased capital funding if the Government does not act. We recognise the Government's stated commitment to ongoing maintenance, but a step change is needed.** ***The Government should put in place a long-term resource budget settlement for***

55 Environment Agency (FLO0037) para 4.4
56 Q40
57 Q40
58 Q41
59 HM Treasury, Budget 2020, HC (2019–21) 121, para 1.138
60 Department for Environment, Food and Rural Affairs (FLO0116)
61 HM Treasury, Spending Review 2020, CP 330, November 2020
62 Department for Environment, Food and Rural Affairs (FLO0116)

flood and coastal erosion risk management, that is aligned with the increased multi-year capital investment programme, so that the Environment Agency and others are able to effectively plan and maintain the network of flood and coastal risk assets.

Resilience

30. While the Government has set out its investment plans, we have heard evidence that there is an absence of a clear long-term objective for flood resilience. Professor Richard Dawson, of the Climate Change Committee's Adaptation Committee, argued that "we do need to set a long-term outcome for what we want to achieve with flood risk management".[63] The Adaptation Committee's written evidence recommended that the Government set "a long-term, quantitative, evidence based outcome for flood risk management", with metrics of vulnerabilities and benefits in the context of climate change.[64] Hugh Ellis of the Town and Country Planning Association told us that the UK should have an "endpoint resilience vision" over the next 100 years, and said that the Netherlands are an example of this long-term planning.[65] The National Flood Forum's Paul Cobbing said that "it is only when we have a clear level of ambition that we are then able to measure progress against it".[66]

31. One suggestion has been a "national standard for flood resilience", as recommended to us by the National Infrastructure Commission (NIC).[67] The NIC had previously recommended, in its 2018 National Infrastructure Assessment, that "a national standard should be set for resilience to flooding with an annual likelihood of [0.5%] by 2050, where feasible".[68] It proposed that a higher standard (resilience to flooding with a 0.1% annual probability) should be set for "densely populated areas, where the consequences of flooding are potentially much more serious".[69] NIC Chief Economist James Richardson told us that the Commission's other work had discussed resilience "in terms of preparing, resisting, absorbing, recovering and then adapting or transforming".[70] He said that a standard of resilience to flooding would provide "a strategic aim in order to be able to identify the optimum mix of interventions", while it would also address limitations of the existing cost-benefit approach to allocating funding.[71]

32. We heard some support for resilience standards in other evidence. The Wildlife Trusts told us that "such standards could give certainty to communities at risk of flooding or coastal change", and would also provide greater certainty to developers and businesses about where to target investment.[72] The Association of Drainage Authorities also supported the setting of a "nationwide objective" for resilience "wherever feasible", although it urged that a move toward resilience should not "come at the expense of reducing standards of defence or as an excuse not to maintain systems and assets in certain areas".[73] Environment Agency Chief Executive Sir James Bevan told us that, while "a common

63 Q113
64 Adaptation Committee of the Committee on Climate Change (FLOO0018) para 12
65 Q91
66 Q89
67 National Infrastructure Commission (FLO0067)
68 National Infrastructure Commission, National Infrastructure Assessment (July 2018), pp 12–13
69 National Infrastructure Commission, National Infrastructure Assessment (July 2018), pp 12–13
70 Q112
71 Q119
72 The Wildlife Trusts (FLO0101) paras 3.2, 3.3
73 Association of Drainage Authorities (FLO0049)

standard for the level of protection that each individual flood defence scheme provides" would be "unwieldy", pursuing a resilience standard for a "place" is an "important and interesting subject that is worth discussing".[74]

33. Nevertheless, in its July 2020 policy statement, the Government decided not to pursue a national standard, arguing in a letter to the NIC Chair Sir John Armitt that there is no agreed understanding of resilience, and that a national standard would inevitably be a "lowest common denominator".[75] Mr Richardson said he was "puzzled" by the argument about a "lowest common denominator", noting that deciding on a standard is a "political choice" and that the standard proposed by the NIC was "considerably above the standard of resilience in many parts of the country today".[76]

34. When we asked the Secretary of State about the Government's national ambition for flood resilience, he replied that the ambition is set out in the policy statement and the Environment Agency's national strategy.[77] He continued to defend the decision not to set a national resilience standard, suggesting that it could have resulted in "lots of reports that try to define and codify things in words without actually getting on and doing the job".[78] The Secretary of State said that "what people want from the Environment Agency and from Government is to crack on with this £5.2 billion capital budget".[79]

35. **The Government's refusal to set a national standard for resilience to flooding means there is uncertainty about the level of its ambition. We would expect the Government to show leadership in the face of severe and growing risk by setting out its long-term objective. We are not convinced by the Government's rationale for rejecting the National Infrastructure Commission's recommendation of a nationwide standard for flood resilience. Such a standard could address limitations of cost-benefit approaches to allocating funding, and would improve public confidence in the Government's approach to creating a country better protected and better prepared for flooding. The Government believes that national standards would be a "lowest common denominator", but it is surely right for the Government to take a political decision on what its policies are meant to achieve.** ***The Government should clearly set out the level of resilience that its interventions, including future capital investment and the actions in its July 2020 policy statement, are intended to deliver in the long term. This should be aligned to climate projections, and should include qualitative and quantitative objectives for what a nation resilient to flooding looks like. The Government should seriously re-examine the case for expressing this as a national standard for flood resilience, as recommended by the National Infrastructure Commission.***

36. **Climate change poses a grave threat to the flood resilience of communities, with the Climate Change Committee warning that warming of 4°C or more implies inevitable increases in flood risk even in the most ambitious adaptation scenarios considered. The Government needs to be frank about the level of risk it is prepared to accept in extreme climate change scenarios, and those likely to be affected need to know now.** ***The Government should explain how a reasonable worst-case scenario for***

74 Qq19, 20
75 Rt Hon George Eustice MP to Sir John Armitt, 14 July 2020
76 Q112
77 Q190
78 Q189
79 Q191

increased flood and coastal risk due to climate change would impact upon its national objective for flood resilience, and what this would mean for funding and decisions about whether to protect any given place.

37. Instead of resilience standards, the Government has said it will take an "alternative approach" that is "focused on a similar vision".[80] The July 2020 policy statement sets out the following actions to "drive forward progress and monitor trends":

- Develop and improve the approach to assessing costs and benefits to target funding for maximum benefit.
- By spring 2022, develop a national set of indicators to monitor trends over time, to better understand the impact of policies.
- By spring 2022, strengthen reporting of progress towards goals so it is clearer and more accessible, and consider how the existing arrangements can be improved.[81]

38. However, the National Audit Office (NAO) pointed out that neither the policy statement nor the strategy "quantifies the level of resilience or risk reduction the Government expects to achieve".[82] On the multi-year capital investment programme, the NAO also concluded that the Environment Agency's metric of "homes better protected" fails to take account of other types of property, as well as homes whose risk increases due to other factors.[83] The previous EFRA Committee's interim report on *Coastal flooding and erosion, and adaptation to climate change*, also received evidence suggesting that Government coastal change policy has too narrow a focus on protecting residential properties, and recommended that this be reconsidered.[84] For the next six-year capital programme, the Government has talked in terms of "homes and non-residential properties" better protected.[85] The EA estimates that increased investment over the period 2021–2027 will better protect 336,000 properties and reduce flood risk by "up to 11%", but the NAO noted that the EA "has no plans to monitor its progress toward this".[86]

39. **We welcome the focus on protecting not just homes, but also other properties. It is crucial that the success or otherwise of flood risk management interventions is closely monitored, in order to demonstrate progress toward strategic objectives and ensure value for money. We are particularly concerned that the Environment Agency has no plans to monitor progress on the number of properties that will be better protected in the next capital investment programme.** ***The Government should provide further detail on its intentions for a "national set of indicators", including how they will monitor progress toward a defined objective for flood resilience, and address shortcomings of the "homes/properties better protected" metric.***

80 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), p 11
81 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), pp 39–40
82 National Audit Office, Managing flood risk, HC (2019–21) 962, para 19
83 National Audit Office, Managing flood risk, HC (2019–21) 962, para 14
84 Environment, Food and Rural Affairs Committee, First Report of Session 2019, Coastal flooding and erosion, and adaptation to climate change: Interim Report, HC 56, paras 12, 13
85 "Building flood defences fit for the future", Department for Environment, Food & Rural Affairs news story, 17 April 2020
86 National Audit Office, Managing flood risk, HC (2019–21) 962, para 21

Arrangements for managing flood risk

40. There is a range of flood risk management authorities (RMAs). Table 1 shows the RMAs which manage the risk of flooding from various sources. Furthermore, the Environment Agency produces a national Flood and Coastal Erosion Risk Management Strategy, and Lead Local Flood Authorities (unitary and county councils) prepare Local Flood Risk Management Strategies.

Table 1: Roles in managing flood risk

Risk management authorities	Types of flood risk managed
Environment Agency	Main rivers, sea, reservoirs
Lead local flood authority (LLFA), i.e. unitary or county council	Surface water, groundwater, ordinary watercourses
District council	Ordinary watercourses, sea
Internal Drainage Board (IDB)	Ordinary watercourses, sea, main rivers
Water and sewerage companies	Flooding from surface water and foul or combined sewer systems
Highways authorities	Highway drainage and roadside ditches

Source: Local Government Association, 'Managing flood risk: roles and responsibilities', accessed 1 February 2021; Department for Environment, Food and Rural Affairs and Environment Agency, 'Flood and coastal erosion: risk management authorities', accessed 1 February 2021

41. A lack of strategic co-ordination among the various bodies and plans has been highlighted. Professor Richard Dawson, of the Climate Change Committee's Adaptation Committee, told us that "there are lots of organisations, plans and strategies", covering different spatial areas, sectors and timeframes.[87] The National Flood Forum stressed the "absence of strategic coordination on flood risk management across sectors in most places".[88] The Association of Drainage Authorities said that England has "a well-developed system of governance arrangements" but that aspects of flood risk management are "overly centralised, require greater resources, especially at a local level, and need to strengthen cooperative working".[89]

42. In its July 2020 policy statement, the Government committed to "reform local flood and coastal erosion risk planning so that every area of England will have a more strategic and comprehensive plan that drives long-term local action and investment", by 2026.[90] While the Adaptation Committee's Professor Richard Dawson welcomed the "integrated approach" emphasised by the policy statement and strategy, he noted that "we still find we are lacking that overarching strategy and clear outcome, direction of travel and ambition".[91] Hugh Ellis of the Town and Country Planning Association also said that "there is no clear line of sight on delivery from national Government through to local government" to implement the policy statement and Environment Agency strategy, leaving England "critically unprepared for the medium and long-term challenge of climate change".[92]

87 Q106
88 National Flood Forum (FLO0045)
89 Association of Drainage Authorities (FLO0049) paras 1.1, 1.2
90 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), p 37
91 Q106
92 Q89

43. We heard a number of suggestions as to how the various bodies involved in managing flood risk could better co-ordinate their approaches in the face of climate change, such as a "climate emergency framework", recommended by the Local Government Association (LGA), or "Adaptation Strategies" across catchments and along the coast, recommended by the National Trust.[93] The National Trust also highlighted that Catchment Partnerships could "play a greater role in helping to engage communities with flood risk management".[94] There is also some evidence that the approach being taken on the coast is more effective and may hold valuable lessons for inland catchments. The National Trust told us that Shoreline Management Plan Coastal Groups are an example of where the majority of stakeholders "increasingly recognise the need to embrace adaptive approaches to flood management".[95]

44. **The Government must provide leadership to ensure that the division of flood risk responsibilities among various organisations does not result in local communities experiencing a less efficient and responsive approach to flood risk management than if all responsibilities were brought under one roof. We cautiously welcome the Government's commitment to reform flood risk planning, but it must effectively address the concerns we have heard about lack of integration, and not simply place unnecessary new bureaucracy or burdens on risk management authorities.** ***The Government should provide further detail on its plans to reform local flood risk planning, including which bodies will be expected to lead and co-operate, and how these plans will relate to existing plans and a cross-Government approach to climate adaptation. The Government should draw on best practice from Shoreline Management Plans and Catchment Partnerships in this process. The Government should also ensure that local authorities and other partners receive any additional funding required for this work.***

45. As well as risk management authorities, property owners have a key role in ensuring that their own actions do not increase the risk of flooding. Riparian ownership means that owners of land adjacent to watercourses have responsibilities to maintain them.[96] However, there is evidence of a lack of awareness by riparian owners of their responsibilities. The National Flood Forum noted that "people purchasing a property currently have no way of knowing whether they are acquiring riparian responsibilities", unless a watercourse happens to appear on a publicly available map, and that many people have unwittingly taken on liability for culverts.[97] We also heard that there is a need to identify the right management options for ordinary watercourses such as ditches. The National Trust noted that "regular wholesale clearance" of some watercourses may actually increase flood risk downstream, and stressed that "those with statutory responsibility need support to help them understand and assess the management options available".[98]

46. Where riparian responsibilities are not discharged, there is evidence that Risk Management Authorities are often unable to enforce them. The National Flood Forum said that enforcement is "in many areas non-existent", because "the risks to organisations and the resources required to implement enforcement actively prevent action from being

93 Local Government Association (FLO0088); National Trust (FLO0089) para 3.4
94 National Trust (FLO0089) para 2.2
95 National Trust (FLO0089) para 2.4
96 LexisNexis, 'Riparian rights and obligations—overview', accessed 26 January 2021
97 National Flood Forum (FLO0045)
98 National Trust (FLO0089) para 4.5

taken".[99] Hampshire County Council told us that legislation often does not give authorities sufficient powers to enforce maintenance works by riparian owners, which leads to the authorities having to undertaken works on their behalf.[100]

47. The July 2020 policy statement said that the Government will "ensure that riparian owners are both clear on their responsibilities and better engaged in the protection of their communities".[101] It also committed to "a review of the statutory powers and responsibilities to map, monitor, inspect and maintain all assets", aiming to ensure that responsibilities are clear and that powers to "enable inspection and maintenance" are effective.[102] The Defra-commissioned independent review of responsibility for surface water management, conducted by David Jenkins and published in August 2020, recommended that the Environment Agency's guidance on *Owning a watercourse* be promoted more widely, and that Defra consider "what further steps the public interest requires to be taken, to ensure the maintenance of privately owned watercourses and related features".[103]

48. **The responsibility of riparian owners to maintain watercourses so as not to increase flood risk to others is well established in common law. Obviously, individuals must first know whether they are riparian owners, and their responsibilities, if they are to be expected to discharge them. Risk management authorities also need to be properly enabled and resourced to identify and communicate the right management approaches for riparian assets, and enforce maintenance where necessary.** ***The Government's review of statutory responsibilities for asset maintenance should include reviewing the powers and resources of risk management authorities to communicate appropriate riparian management options, and effectively enforce responsibilities by riparian owners.***

The role of local authorities

49. Local authorities have various roles in relation to flood risk management. Lead Local Flood Authorities (county and unitary councils) are responsible for preparing local flood risk management strategies and plans.[104] Local strategies must be consistent with the national strategy prepared by the Environment Agency.[105] In addition to this strategic role, local authorities (whether district, county or unitary) are variously responsible for managing the risk of flooding from surface runoff, groundwater and ordinary watercourses, as well as coastal erosion.[106] District and unitary councils are also local planning authorities, and we look in more detail at development and flood risk in Chapter 3.

50. The evidence shows that resourcing and capacity are key for ensuring that local flood risk management is coherent. Specific issues that have been highlighted include inadequate resources to carry out "Section 19" investigations following a flood, as well as

99 National Flood Forum (FLO0045)
100 Hampshire County Council (FLO0024)
101 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), p 16
102 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), p 17
103 Department for Environment, Food & Rural Affairs, 'Report of a review of the arrangements for determining responsibility for surface water and drainage assets' (May 2020), p 10
104 Flood and Water Management Act 2010, section 9; Department for Environment, Food and Rural Affairs and Environment Agency, 'Flood and coastal erosion: risk management authorities', accessed 1 February 2021
105 Flood and Water Management Act 2010, section 9
106 Department for Environment, Food and Rural Affairs and Environment Agency, 'Flood and coastal erosion: risk management authorities', accessed 1 February 2021

insufficient powers to enforce responsibilities of riparian owners (see above).[107] The Local Government Association told us that local authorities would "welcome clarity" on how the responsibilities of Lead Local Flood Authorities would be funded beyond the 2020–21 financial year.[108] Local authorities can bid for funding for flood defence schemes from the Government's capital investment programme (see the section on funding above). They also use money from their central Government grant for flood risk management activities, but this is not ringfenced. The Local Government Association told us that grant funding from Defra for Lead Local Flood Authorities (LLFAs) runs out at the end of the 2020/21 financial year, and "it is not clear how this critical role will be funded from 2021".[109] The LGA also noted the pressures on local government finance as a result of covid-19.[110] The National Audit Office report on *Managing flood risk* in November 2020 found that "Defra does not assess whether funding to local authorities is adequate to cover the level of flood risk individual authorities face", meaning the Government is "unable to assess whether organisations, such as lead local flood authorities, have the resources they need to manage flood risk effectively".[111]

51. Experience and expertise of flood risk management also varies between local authorities. Flood risk campaigner Mary Dhonau told us that some local authorities lack a dedicated flood risk team and place LLFA responsibilities on highways or planning officers, which "can lead to being more reactive than proactive due to the restrictions of budgets and resources".[112] The Caterham Flood Action Group said that "regional variations in LLFA expertise [have] created a flood risk lottery".[113]

52. When we put the NAO's findings to the Secretary of State, he responded that "we know what resources [Lead Local Flood Authorities] have and I have had discussions with them".[114] David Cooper also told us that "it is down to local councils to prioritise their spending", and that the Government tracks local authority flood expenditure.[115] Nevertheless, the Government's July 2020 policy statement contains a commitment to "review local government funding for local statutory flood and coastal erosion risk management functions to ensure it is fair and matches the needs and resources of local areas".[116] The NAO report notes that no date has been set for this review.[117]

53. **Local authorities will be a key delivery partner for the Government's new flooding policies, so we are very concerned by evidence of inconsistency and shortcomings in capacity. While it is for local authorities to take local decisions, central Government must ensure that they are properly resourced to implement their existing functions and the Government's new flooding policies. We note that the Government has recognised**

107 For example Cheshire Mid-Mersey (CMM) Flood and Coastal Erosion Risk Management (FCERM) Partnership (FLO0065); National Flood Forum (FLO0045). Section 19 of the Flood and Water Management Act 2010 provides for LLFAs to carry out investigations following flooding incidents. The investigations cover which RMAs have relevant flood risk management functions, and whether they have been exercised in response to the flood. It is for the LLFA to decide whether a formal investigation is necessary or appropriate. See Flood and Water Management Act 2010, section 19
108 Local Government Association (FLO0105)
109 Local Government Association (FLO0088)
110 Local Government Association (FLO0088)
111 National Audit Office, Managing flood risk, HC (2019–21) 962, para 9
112 Know your Flood Risk Campaign (FLO0031)
113 Caterham Flood Action Group (FLO0013)
114 Q212
115 Q213
116 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), p 18
117 National Audit Office, Managing flood risk, HC (2019–21) 962, para 3.26

the need to review funding for local government statutory flood risk functions, and it is essential that this review is completed in good time especially given the wider financial pressures local authorities are facing. *The Government should set out details on the scope and timescale of its planned review of funding for local government flood risk functions. The Government should ensure that local authorities have dedicated resources to effectively deliver existing flood risk management functions and any new roles, and that their needs are continually monitored to avoid future shortfalls.*

2 Lessons from the 2019–20 flooding

54. During the winter of 2019–20 over 4,600 properties were flooded across England due to heavy rainfall and the impacts of Storms Ciara and Dennis.[118] The Association of British Insurers (ABI) said that insurers expected to pay out over £543 million following Storms Ciara, Dennis and Jorge (including £305 million relating to flooded property claims).[119] In looking at the response to these events we examined both the immediate operational response, as well as the schemes that were put in place to support affected communities and businesses to recover.

Operational response

55. Some of the evidence we have received indicates that bodies responding to flood events face considerable challenges in performing their role. The Association of Drainage Authorities (ADA) said that Internal Drainage Boards "do not have an agreed route to seek recovery funding where their assets, systems and workforce have been impacted by flood events even though their actions significantly contributed to coordinated recovery efforts".[120] The Fire Brigades Union also reiterated its call for fire and rescue services in England to be given a statutory duty to respond to major flooding, to help provide "clarity, direction and the resources necessary".[121] A predecessor EFRA Committee recommended this in its 2016 report on *Future flood prevention*.[122] We also heard some evidence that local procedures may sometimes inhibit an effective emergency response. The Association of Drainage Authorities' Innes Thomson said that the decision of a Local Resilience Forum (LRF) commanding officer to "close down the emergency or the incident response procedure, and hand it across to what they call a recovery procedure" means that assets such as fire and rescue service pumps can no longer be called on, and that this decision sometimes happened "perhaps two or three days" after the flooding incident.[123]

56. In addition to the civilian emergency response, the 2019–20 flooding saw military involvement. Troops were deployed to South Yorkshire to assist civilian authorities, and Royal Air Force Chinook helicopters were called in to assist a pumping station near Doncaster by dropping 40 tonnes of aggregate to ensure flood defences could function.[124] CIWEM told us that the deployment of the armed services, while it can "offer vital resource in an emergency scenario", does nonetheless indicate "a lack of capacity within risk management and emergency response authorities, in the face of prolonged extreme events" and should be regarded as a "systems failure".[125]

57. The Government's evidence highlighted that MHCLG's Resilience and Emergencies Division (RED) supports England's 38 LRFs to develop plans and by providing expertise

118 Environment Agency (FLO0037) para 3.1
119 Association of British Insurers (FLO0092) para 6
120 Association of Drainage Authorities (FLO0049) para 2.10. Internal Drainage Boards (IDBs) are independent public bodies responsible for managing water levels in low-lying areas. They are funded by drainage rates and special levies in their districts, and contributions from the Environment Agency. There are 112 IDBs in England. See Association of Drainage Authorities, 'Internal Drainage Boards', accessed 2 February 2021
121 Fire Brigades Union (FLO0004)
122 Environment, Food and Rural Affairs Committee, Second Report of Session 2016–17, Future flood prevention, HC 115, para 67
123 Q67
124 "200 UK troops deploy to support flood relief", British Army press release, 13 November 2019
125 Chartered Institution of Water and Environmental Management (FLO0104) para 18

and liaison during and after emergencies.[126] The Secretary of State said that the development of the National Flood Response Centre, local resilience forums and improved flood forecasting together have made flood response "more sure-footed over the last five to 10 years", even as he acknowledged that the UK faces such flood events "now pretty much on an annual basis".[127] The Resilience and Emergencies Minister, Lord Greenhalgh, also told us that "we need to see the leadership not just at the centre […] it needs to come both at regional level and local level".[128]

58. **We recognise and pay tribute to the substantial effort undertaken by all emergency responders, as well as local communities and the armed services, in responding to the severe flooding over the autumn and winter of 2019–20. However, we are concerned by ongoing indications of resourcing issues for those bodies undertaking the vital work of helping protect lives and livelihoods in the immediate wake of a flood. As the Secretary of State has rightly acknowledged the increasing frequency of severe flooding events, it is not right to expect these organisations to operate at the limit of their capacity.** ***The Government should engage with all bodies involved in flooding incident response to review their capacity to deal with more frequent severe flooding. The review should ensure that local co-ordination is effective and all partners are properly resourced to meet future challenges.***

Government support schemes

59. Various schemes were announced to support individuals and businesses who had been impacted by the flooding. Several of these fell under the Flood Recovery Framework created by MHCLG following the extreme flooding caused by Storm Desmond and Storm Eva in 2015/16.[129] This is "a collection of 'off the shelf' packages" of support, including council tax and business rates relief, that can be offered by local authorities and reimbursed by central Government in certain circumstances.[130] It was activated for the first time in November 2019, and then again in February 2020 following Storms Ciara and Dennis.[131] In addition to the Flood Recovery Framework, a property flood resilience scheme was announced to provide grants of up to £5,000 to pay for a range of improvements against future flooding.[132]

60. Some press coverage described a "postcode lottery" for support.[133] Only people in lower tier or unitary local authority areas with 25 or more flooded households were eligible for household recovery grants, council tax/rate relief and property flood resilience grants.[134] Gloucestershire Lead Local Flood Authority told us that "the limitation of the funding

126 Department for Environment, Food and Rural Affairs (FLO0042), para 1.12
127 Q173
128 Q174
129 Ministry of Housing, Communities & Local Government, 'Flood recovery framework: guidance for local authorities in England,' accessed 21 January 2021; Department for Environment, Food and Rural Affairs (FLO0042), para 2.9
130 Department for Environment, Food and Rural Affairs (FLO0042), paras 2.9, 2.10
131 Department for Environment, Food and Rural Affairs (FLO0042), para 2.9
132 Department for Environment, Food and Rural Affairs (FLO0042), para 6.21
133 "Hundreds miss out on flood grants due to 'obscene postcode lottery'", The Guardian, 30 January 2020
134 PQ 128728, 16 December 2020; "Major package of support for storm-hit areas", Ministry of Housing, Communities & Local Government, Department for Business, Energy & Industrial Strategy, Department for Environment, Food & Rural Affairs press release, 18 February 2020; "Government support for recovery from flooding", Ministry of Housing, Communities & Local Government and Department for Business, Energy & Industrial Strategy news story, 15 November 2019

to Unitary [*sic*] and second-tier authorities was highly inequitable", as a large unitary authority could "easily demonstrate the required >25 internally-flooded properties", while a much smaller district authority "could not collate sufficient numbers".[135] Some evidence also suggested that local authorities had not received adequate information from central Government on the property flood resilience grant scheme, with Telford and Wrekin Council telling us in Spring 2020 that "there has been no notification of when these funds will be available and how businesses can access them, despite repeated requests".[136] The Local Government Association told us that "community expectations have to be managed by the lead local flood authority", and "councils have raised concerns about conflicting advice being given to residents on eligibility".[137] The LGA also noted that local authorities had "struggled" to find the resource to administer central Government grant schemes, and some had resorted to using money from other budgets to cover these administrative costs.[138]

61. We also received some evidence on the Bellwin scheme which, when activated, allows local authorities to be reimbursed for costs they incur when dealing with the aftermath of an emergency. The West Yorkshire Combined Authority said that better co-ordination between local/regional and national tiers would enable support such as the Bellwin scheme to be considered more quickly.[139] The Local Government Association's Councillor David Renard also called for improvements to the Bellwin scheme "so that councils can access bigger grants more easily and more quickly, because clean-up costs are often not covered as part of that scheme".[140]

62. The Secretary of State told us in oral evidence that it is the role of local authorities to "step in to deal with certain issues and it is only when it passes a particular threshold that it triggers a new burden, where it becomes legitimate for Government to step in", hence the threshold of 25 or more impacted homes for the resilience grants scheme to be activated.[141] The Government has said it will review both the Flood Recovery Framework and the resilience grant scheme, as well as "support[ing] the voluntary sector to improve their capacity and capability to help local communities in the event of a flood".[142]

63. **It is welcome that the Government has now put in place a package of support measures for households and businesses impacted by severe flooding. While it is right that local authorities will usually be best placed to deliver these measures in their areas, it is concerning that some appear to have been left ill-prepared to deal with expectations being set by high-profile announcements from central Government. The eligibility criteria for these schemes have also created at least the impression of unfairness. The use of a single threshold of 25 or more flooded houses, across local authority areas of different sizes, also raises questions of fairness.**

64. ***The review of the Flood Recovery Framework and the property flood resilience grant scheme should include an evaluation of the timeliness and adequacy of communication from central Government to local authorities, as well as whether the***

135 Gloucestershire Local Flood Authority (FLO0036) para 2.5
136 Telford & Wrekin Council (FLO0008) para 2.11
137 Local Government Association (FLO0105)
138 Local Government Association (FLO0105)
139 West Yorkshire Combined Authority (FLO0052)
140 Q63
141 Q171
142 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), p 33

scheme ought to include an additional element of reimbursement for administrative costs. The Government should also ensure that the eligibility criteria for these schemes are clearly communicated, and fairly reflect the differences between local authority areas, including size. The operation of the Bellwin scheme in relation to flood events should also be reviewed as part of this work.

Long-term recovery

65. A key message that has arisen from our engagement with community groups is the absence of support for long-term recovery once the immediate flooding period has ended. Flood risk campaigner Mary Dhonau told us that "the average person is out of their home for about 9 months" following flood damage, and that this could be exacerbated by the covid-19 disruption, a message which also emerged from our roundtable discussion in October.[143] The National Flood Forum highlighted "a focus on incident management, but an absence of support for long term recovery", with "only a very few local authorities […] putting in long term support mechanisms".[144] It also said that it "has particular skills in this area but needs to build capacity in order to be able to respond more effectively across the country", and that it could be involved in training and developing local authorities in their ability to support recovery.[145]

66. The mental health impacts of flooding have emerged as an area where long-term support is needed. Research by the Environment Agency and Public Health England has found that flooding can increase the chance of facing mental health problems such as stress and depression by 50%, and that a quarter of people who have been flooded still live with these issues at least two years after the event.[146] Participants in our roundtable discussion with flood risk community groups shared personal experiences of the trauma and anxiety that can persist after a flooding event.[147] The Environment Agency also acknowledged in its evidence that there is "more to do" on "ensuring people and businesses receive the support they need from all those involved in recovery so they can get back to normal quicker after flooding, including better accounting for the long term mental health impacts".[148] The changes to the partnership funding formula announced in April 2020 included "updated payments to account for inflation and based on new evidence on the overall impacts of flooding, such as mental health", but this applies to investment in flood risk management rather than funding for recovery.[149]

67. The Government's July 2020 policy statement said that "we will support people and communities to repair damages, restore local economies and better manage the impacts of flooding and coastal erosion on mental health and wellbeing".[150] It also includes a commitment to "support the voluntary sector to improve their capacity and capability to help local communities in the event of a flood".[151] The Resilience and Emergencies

143 Know Your Flood Risk Campaign (FLO0031); see also Annex.
144 National Flood Forum (FLO0045)
145 National Flood Forum (FLO0045)
146 "Sunday Times article on flood defence spending formula", Department for Environment, Food & Rural Affairs blog, 23 February 2020
147 See Annex.
148 Environment Agency (FLO0037)
149 "Building flood defences fit for the future", Department for Environment, Food & Rural Affairs news story, 17 April 2020
150 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), p 33
151 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), p 33

Minister, Lord Greenhalgh, told us that access to mental health support "is something that is not just solved by policy at the centre", but requires "making those services more available for people who need them".[152] The Secretary of State acknowledged the "real impacts on people's wellbeing and mental health as a result of flooding", but stressed that "what they really want from the Environment Agency and Defra is action to ensure that it does not happen again".[153]

68. **Our engagement with local communities at risk of flooding has highlighted the significant long-term challenges that result from a flood. In particular, the mental health impacts of flooding have been vividly described to us. This includes both the initial trauma of having one's home flooded, and the resultant anxiety whenever severe weather approaches. There is a lack of support for long-term recovery after a flood, once the immediate response phase has passed. We agree with the Government that support should be delivered in the most effective way, often by local government or voluntary groups. In establishing the Flood Recovery Framework the Government has, rightly, accepted that it has a responsibility to support communities struck by severe flooding. It should not forget them when the flood waters recede. We look forward to further detail from the Government on how it will engage with local partners to make sure that these communities are properly supported.**

69. ***The Government should supplement its July 2020 policy statement with an additional action plan, developed with local partners, for the long-term physical, economic, and psychological recovery of communities impacted by flooding. This should include a clear explanation of which national and local actors should be responsible for key aspects of flood recovery support, how they will be supported and resourced, and a plan to monitor delivery against a set of recovery indicators. The Government's commitment to support the voluntary sector should include funding to help charities respond to flooding and build capacity in other organisations.***

152 Q177
153 Q177

3 Development and flood risk

National planning policy

70. The previous EFRA Committee's interim report on *Coastal flooding and erosion, and adaptation to climate change* in November 2019 noted concerns that Government housebuilding targets may be leading to councils allowing inappropriate development in areas at risk from flooding.[154] The Environment Agency says that the total number of properties at risk from flooding would almost double over the next 50 years if current planning outcomes continue, although it noted that this is mainly due to development in low risk areas.[155] National planning policy is that inappropriate development should be avoided, and instead alternative lower risk locations should be identified. Where this is not possible, the proposed development should be made safe without increasing the risk elsewhere.[156] The National Planning Policy Framework (NPPF) states that local plans should apply the "sequential test" (aimed at steering new development to areas with the lowest risk).[157] If it is not possible for development to be located in lower risk zones, the NPPF states that the "exception test" may need to be applied, demonstrating that the benefits of the development outweigh the risk, and that it will be safe for its lifetime.[158]

71. We have heard concerns that national policy does not adequately address the increases in flood risk that are possible with climate change. CIWEM told us that "there is a risk that the current standards set by the requirements of the exception test and climate change allowances will not be sufficient to ensure safety and resilience across a development's lifetime".[159] Professor Richard Dawson, of the Climate Change Committee's Adaptation Committee, likewise told us that the risk will "move towards exponential rates if we continue to grow at the current rate", urging that "we need to put the brakes on a little bit more".[160]

72. The proposals in the Government's planning White Paper, published in August 2020, would provide for automatic outline planning permission for the principle of development in "Growth areas" (those areas identified in local plans as "suitable for substantial development").[161] The White Paper states that "areas of flood risk" would be excluded from Growth areas, "unless any risk can be fully mitigated".[162] Professor Richard Dawson, of the Climate Change Committee's Adaptation Committee, said of the Planning White Paper that "there is actually very little there on flood risk management".[163] He called for central leadership, such as from the Cabinet Office or Treasury, to "pull these strategies, different planning policies and so on together".[164] Blueprint for Water's Ali Morse also highlighted the White Paper's proposed removal of the duty for local planning authorities to co-operate, which she called "quite concerning in terms of flood risk management".[165]

154 Environment, Food and Rural Affairs Committee, First Report of Session 2019, Coastal flooding and erosion, and adaptation to climate change: Interim Report, HC 56, para 49
155 Environment Agency, Long-term investment scenarios (LTIS) 2019, accessed on 20 January 2021
156 National Planning Policy Framework, CP 52, February 2019, para 155
157 National Planning Policy Framework, CP 52, February 2019, para 158
158 National Planning Policy Framework, CP 52, February 2019, paras 159–160
159 Chartered Institution of Water and Environmental Management (FLO0104) para 59
160 Q123
161 Ministry of Housing, Communities & Local Government, Planning for the Future (August 2020), pp 28, 34
162 Ministry of Housing, Communities & Local Government, Planning for the Future (August 2020), p 28
163 Q123
164 Q126
165 Q147

73. **It is widely recognised that inappropriate development in areas at risk from flooding represents a serious threat to flood resilience, particularly as the scale of the risk is likely to increase with climate change. Defra must do more to integrate its approach to flood resilience across the whole of Government, and this must include greater interaction between planning policy and approaches to managing flood risk.** ***The Government should explain how its proposals for planning reform will contribute to better flood resilience outcomes than the current planning system. It should also explain how leadership will be provided within Government so that flood risk and planning policies are integrated within a coherent approach to climate adaptation.***

Advice from risk management authorities

74. As a statutory consultee, the Environment Agency comments on development proposals (other than minor development) in areas that are at medium or high risk of flooding from rivers or the sea, as well as proposals within 20 metres of a main river, or in an area with critical drainage problems.[166] The EA told us that 99.4% of new homes included in planning applications were determined in line with EA advice in 2018/19, and that "current planning policy is very effective at limiting inappropriate development in the floodplain".[167] Professor Richard Dawson, of the Climate Change Committee's Adaptation Committee, said that "as a general proportion, it is around 7% to 11% or so of applications that have gone through against [the EA's] advice", and that "in some cases this seems like a small number, but it all adds up".[168]

75. We heard calls for greater transparency about decisions taken against EA advice. The Association of British Insurers called for "a mandatory responsibility to report publicly on planning decisions in a clear and transparent way, especially when decisions have been taken against EA advice".[169] EA Chief Executive Sir James Bevan also highlighted that the EA is only a statutory consultee for development in areas of existing flood risk, and that the EA would be "interested in extending our role" to be consulted on development in areas "that are also at flood risk because of climate change".[170]

76. Lead Local Flood Authorities also undertake a statutory consultee role, providing technical advice on surface water drainage for major developments.[171] Paul Cobbing of the National Flood Forum stressed that "the vast majority [of planning applications] have nothing to do with main rivers and nothing to do with the Environment Agency".[172] He told us that staff performing this role within LLFAs are often very junior and doing the job alongside other roles, and said that "whether those comments are actually taken into account is going to be the big area that we need to work on".[173] We have made recommendations around resourcing of local authorities in Chapter 1 of this Report.

77. It was also suggested to us that more needs to be done to ensure that developers follow through on commitments to ensure that at-risk development is made resilient. Environment Agency Chief Executive Sir James Bevan said that "we do not have the

166 PQ 20551 [on Property Development: Floods], 2 March 2020
167 Environment Agency (FLO0037) para 7.3
168 Q123
169 Association of British Insurers (FLO0092) para 14
170 Q30
171 Local Government Association, 'Managing flood risk: roles and responsibilities', accessed 27 January 2021
172 Q91
173 Q91

resources, neither do the local authorities, to go and check if the developers have done what they promised to do, or to make them do what they did not do".[174] He said that "there is an issue there about resourcing either us or the local authorities better to police development decisions", and also suggested the approach of requiring developers to post a bond to guarantee the required flood risk mitigations.[175]

78. The Government has said it will review policy for building in areas at flood risk, assessing "whether current protections […] are enough" and considering "options for further reform".[176] This includes "consider[ing] what more can be done" in cases where the EA's advice is not followed.[177] In oral evidence, the Secretary of State provided further detail on the measures under consideration, including decisions at Ministerial level about whether to "call in" applications where EA advice had not been followed.[178] The July 2020 policy statement also said that the Government will "consider ways to boost transparency, data collection and reporting" where EA or LLFA advice is given.[179]

79. **We are concerned that the words on flood risk in national planning policy still do not always translate into actions. We are encouraged by the Government's proposal that planning applications approved against flood risk advice could in future be subject to call-in by the Secretary of State.** ***The Government should provide further detail on its proposals for cases in which flood risk advice on planning applications is not followed. The remit of the Environment Agency as a statutory consultee should be expanded to include areas of future risk owing to climate change.***

80. **While we welcome the commitment to consider improving transparency for flood risk advice, the Government must ensure that any development which still goes ahead against advice is clearly communicated to prospective homebuyers.** ***The Government should ensure that information on development against flood risk advice is published in a clear and accessible form.***

81. **It is clear that planning and risk management authorities must be empowered and resourced to effectively monitor and enforce the fulfilment of planning conditions in areas at risk of flooding.** ***The Government should urgently review whether planning conditions to mitigate flood risk are being fulfilled. The Government should then bring forward proposals to address any limitations in the powers and resources available to appropriate authorities for the enforcement of planning conditions.***

Cumulative development

82. Submitters also raised concerns that the EA has less ability to comment on smaller applications which make up the bulk of planning decisions. The Town and Country Planning Association (TCPA) told us that in 2019, there were 6,000 applications for major housing developments, but 39,000 applications for minor developments.[180] Although national planning policy is that strategic policies should consider "cumulative impacts", the National Flood Forum said the risks are "totally ignored".[181]

174 Q30
175 Q30
176 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), pp 28–29
177 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), p 30
178 Q200
179 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), p 29
180 The Town and Country Planning Association (TCPA) (FLO0039) para 3.1
181 National Planning Policy Framework, CP 52, February 2019, para 156; The National Flood Forum (FLO0045) para 7

83. Permitted development also plays a role, with the NFU providing the example of front gardens being replaced with hard surface car parking, with water running off directly to the drain.[182] The NFU said that exercise of this permitted development right above a certain threshold theoretically includes conditions relating to porosity, but told us that "in practice they are often not enforced".[183] The National Flood Forum also highlighted the cumulative impacts of permitted development, which it said "poses some of the biggest risks to peoples' lives by placing them at greater flood risk and reducing the options for adaptive solutions".[184]

84. We put concerns about cumulative impacts to MHCLG Minister Lord Greenhalgh. He said that it is "absolutely right that you do need to have regard to the cumulative impact", and indicated that the Secretary of State for Housing, Communities and Local Government would "listen to this Committee and act upon your advice" regarding this issue.[185]

85. **We welcome the Government's commitment to act upon our recommendations regarding the cumulative impact on flood risk of smaller developments. While we recognise that national planning policy does refer to cumulative impacts, this has clearly not allayed concerns that these impacts are not given due regard when planning decisions are made.** ***The Government should, as part of its review of planning policy for flood risk, establish to what extent flood risk is increased by the lack of scrutiny given to the cumulative impacts of smaller and permitted development.***

Local capacity and knowledge

86. Evidence to our inquiry suggests concern over the capacity of local planning authorities, and the quality of information available to them. The Association of Drainage Authorities said that, outside of areas with a unitary structure, planning authorities are typically not LLFAs and can therefore lack "sufficient technical expertise".[186] A survey conducted by the Town and Country Planning Association found that "just 12% of local authorities strongly agree that they have the skills and expertise to take account of flood risk now and in the future in planning decisions".[187] The TCPA's Hugh Ellis explained that there is "an enormous deficit in resources for councillors in climate change", and "very little awareness" of the Environment Agency's flood risk allowances despite these being published online.[188] Professor Richard Dawson, of the Climate Change Committee's Adaptation Committee, said that "very few local authorities have the resources to even have one full-time person" working on climate change adaptation.[189]

182 The National Farmers Union (FLO0091) para 65
183 The National Farmers Union (FLO0091) para 65
184 National Flood Forum (FLO00107)
185 Q196, Q199
186 Association of Drainage Authorities (ADA) (FLO0049) para 6.3
187 Town and Country Planning Association (FLO0080)
188 Q97. Environment Agency guidance states that "to increase resilience to flooding and coastal change, you should make allowances for climate change in your flood risk assessment". Climate change allowances are predictions of anticipated change for peak river flow, peak rainfall intensity, sea level rise, and offshore wind speed and extreme wave height. See Environment Agency, 'Flood risk assessments: climate change allowances', accessed 26 January 2021.
189 Q128

87. In the light of its survey findings, the TCPA told us that local authorities require "more information regarding the expected impacts of climate change in the local area; and knowledge of how to incorporate climate projections into planning decisions".[190] Professor Dawson recommended that local authorities be resourced for full-time staff working on adaptation, and that "national capacity" be provided to train these staff as "some of these decisions need to be taken across multiple local authorities because of the physical boundaries of how water likes to move".[191] Planning reform is also part of this dynamic, with CIWEM noting that "if there is a direction of travel towards the primacy of local plans within land use planning, as set out in the white paper, feeding in the right information on flood risk and land use at the local plan stage will be even more critical than presently".[192]

88. MHCLG Minister Lord Greenhalgh's response to evidence about the capacity of local planning authorities on climate change was that "I do not really recognise the fact that there is not enough money to do a proper job".[193] The Government has also said that its review of planning policy with regard to flood risk will include working with the EA to support planning authorities in "receiving and understanding the appropriate expert advice on all sources of flood risk".[194]

89. **We are very concerned that local planning authorities lack the skills base and resources to effectively factor the impacts of climate change into development decisions. While plans and individual decisions are rightly made at a local level, it is the duty of Government to provide leadership to local authorities facing potentially significant increases in future flood risk.** ***The Government should commit to ensuring that all local planning authorities have the powers, resources and information to effectively factor current and future flood risk into local plans, Strategic Flood Risk Assessments and individual decisions, including properly trained dedicated staff. The Environment Agency should work closely with such staff to improve strategic co-ordination around local plans. The Government should urgently undertake, and publish the findings of, a review of current capacity in local planning authorities to perform this function.***

90. Alongside a lack of professional skills in some planning authorities, a recurring theme of the evidence we received was that community knowledge of flood risk is not taken into account in local plans and individual decisions. The National Flood Forum told us that "often communities become engaged in planning and development far too late in a process when decisions have already been made", such as in the development of local plans.[195] Hugh Ellis of the TCPA told us that local knowledge can "map that detail in ways that professional knowledge is often at too high a level to understand".[196] The Caterham Flood Action Group told us that the omission on flood maps of hydrological features known to residents "renders us powerless to challenge inappropriate planning applications".[197] The National Flood Forum suggested requiring local plans, Strategic

190 Town and Country Planning Association (FLO0080) para 3
191 Q128
192 Chartered Institution of Water and Environmental Management (FLO0104) para 61
193 Q195
194 HM Government, 'Flood and Coastal Erosion Risk Management Policy Statement' (July 2020), p 29
195 National Flood Forum (FLO00107)
196 Q96
197 The Caterham Flood Action Group (FLO0013) para 1.4

Flood Risk Assessments and developers' site-specific Flood Risk Assessments (FRAs) to demonstrate how they have utilised local evidence, and that there was a need for detailed national guidance on involving local communities in providing evidence.[198]

91. Some stakeholders have also raised concerns that planning reforms will remove an element of community input, including in our roundtable with community groups in October.[199] In oral evidence Hugh Ellis said that, while it is not clear whether the planning White Paper will make "any beneficial difference" with respect to flooding, "it is clear that it would make people's voice in the process more difficult".[200] However, MHCLG Minister Lord Greenhalgh described suggestions that the White Paper would remove local input as a "fundamental misunderstanding" of the proposals.[201]

92. **The engagement of communities in the development of local plans is already inadequate, and the proposed reforms to the planning system must not compound this problem. Greater community involvement in planning decisions in many areas at flood risk would have the twin benefits of building trust and contributing valuable technical knowledge about drainage issues.** ***The Government should develop national guidance on incorporating local knowledge of flood risk into planning decisions, the development of local plans and the preparation of strategic and site-specific Flood Risk Assessments.*** We make further recommendations about community engagement in Chapter 5 of this Report.

Supporting information

93. Site-specific Flood Risk Assessments (FRAs) are prepared by, or on behalf of, planning applicants.[202] The Caterham Flood Action Group recommended that FRAs could be improved by instead being carried out by "an independent body" (the Lead Local Flood Authority was proposed) at the developer's expense.[203] The National Flood Forum also called for FRAs to consider whether water leaving a site will have impacts on flood risk interventions elsewhere in the catchment.[204] The planning White Paper proposes streamlining of the planning application process including "greater standardisation of technical supporting information", including about flood risk, with "clear national data standards and templates developed in conjunction with statutory consultees".[205]

94. **We recognise the concerns of several stakeholders about site-specific Flood Risk Assessments, and the Government should use its reform of the planning system as an opportunity to investigate this issue further.** ***The Government's standardisation of technical supporting information should include an evaluation of the current arrangements for the preparation and content of site-specific Flood Risk Assessments, and whether these adequately contribute to flood resilience objectives and public confidence.***

198 National Flood Forum (FLO00107)
199 See Annex.
200 Q96
201 Q197
202 Department for Environment, Food and Rural Affairs and Environment Agency, 'Flood risk assessments if you're applying for planning permission', accessed 27 January 2021
203 The Caterham Flood Action Group (FLO0013) paras 1.5, 6.5
204 National Flood Forum (FLO00107)
205 Ministry of Housing, Communities and Local Government, 'Planning for the Future', August 2020, p 37

Making properties more resilient

Property flood resilience

95. As well as limiting new development in areas at risk of flooding, our inquiry also considered measures to make buildings less vulnerable to flooding (referred to as property-level flood resilience, or PFR/PLR, measures). These include measures to prevent flood water from entering a property, and measures to reduce the impact if flooding does occur.[206] Examples include installing flood doors, air brick covers, and non-return valves, and moving vulnerable features such as sockets above floor level.[207]

96. The Environment Agency calculated in 2019 that it would be cost-effective to invest in PFR for over 200,000 residential properties.[208] However, the Climate Change Committee has highlighted that there are no plans for how to achieve such a level of uptake.[209] In 2019, the CCC said achieving this uptake by 2039 (when Flood Re is due to be withdrawn) would require a rate of over 9,000 properties having PFR installed every year, but the current figure is closer to 500 per year.[210] In its five-yearly review in July 2019, Flood Re recommended that the reinsurance scheme should offer lower premiums on policies where PFR measures have been installed and allow payment of claims that include a limited amount of resilient and/or resistant repair above the flood-related loss.[211] The Government launched a consultation on making these changes to the Flood Re scheme in February 2021.[212] However, the ABI stressed that the success of these proposals "will still be dependent on continuing to address the barriers to uptake of flood resilience measures".[213] We make recommendations about insurance in the next section.

97. Some of the evidence we received suggests that there needs to be better sharing of best practice and quality assurance on PFR. We heard several suggestions of how information on the effectiveness of PFR measures could be better disseminated, including Flood Re's recommendation of "Flood Performance Certificates" to provide information to homebuyers on flood risk and potential resilience measures.[214] At the same time, we have heard suggestions that there needs to be more communication of evidence on the effectiveness of PFR. Zurich Insurance told us that there is a lack of evidence about "which pre-event resilience-building initiatives actually make a difference when a flood comes", and the ABI likewise said that sharing evidence on the reduction in damage and costs achieved by resilience measures would help insurers take them into account.[215]

98. There have also been continued calls for amendments to building regulations to promote PFR installation. The LGA told us it would like to see building regulations

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206 Department for Environment, Food and Rural Affairs, 'The Property Flood Resilience Action Plan' (September 2016), p 8

207 Department for Environment, Food and Rural Affairs, 'The Property Flood Resilience Action Plan' (September 2016), p 8

208 Environment Agency, 'Long-term investment scenarios (LTIS) 2019' (May 2019), accessed 25 January 2021

209 Committee on Climate Change, 'Progress in preparing for climate change', (July 2019), p 129

210 Committee on Climate Change, 'Progress in preparing for climate change', (July 2019), p 128

211 Flood Re, 'Regulation 27: The Quinquennial Review' (July 2019), p 10

212 Department for Environment, Food and Rural Affairs, 'Amendments to the Flood Re Scheme', accessed 1 February 2021

213 The Association of British Insurers (ABI) (FLO0092) para 9

214 Flood Re (FLO0061). For other suggestions, see also e.g. Chartered Institution of Water and Environmental Management (FLO0104).

215 Zurich Insurance (FLO0090) para 1.4; The Association of British Insurers (ABI) (FLO0092) para 8

amended "to include mandatory flood protection measures for new properties", requiring developers to include measures such as raised electrical sockets, fuse boxes, controls and wiring, sealed floors, and raised damp-proof courses.[216] CIWEM recommended that "flood resilient design must become an intrinsic part of building regulations", while Zurich Insurance also said that building regulations could "provide a set of resilience standards that need to be met when properties that have been flooded are being reinstated".[217]

99. We have also heard recommendations for more Government financial assistance for the installation of PFR measures. Referring to the property resilience grant scheme made available after the 2019–20 floods, Zurich Insurance called for grants to be available year-round and able to be administered by insurers.[218] Flood Re also told us that "introducing a better grant scheme for installation of PFR measures could incentivise people to take action", and recommended that the Government's new "Green Homes Grant" scheme should be extended to "provide grants designed to help people install PFR measures".[219]

100. The Government's July 2020 flooding policy statement committed to "explore ways to provide greater clarity about the use and effectiveness of property flood resilience measures", with further details to be published on how to "further boost uptake of property flood resilience in homes and businesses across the country".[220] Separate to the consultation on changes to Flood Re, a Defra call for evidence was also launched in February 2021, seeking information on ways of accelerating uptake of PFR.[221]

101. **A step change is needed in promoting the uptake of appropriate property flood resilience measures. It is important that reforms to Flood Re to incentivise PFR form part of wider work aimed at encouraging people to improve the flood resilience of their own property. We welcome the Government's call for evidence on ways to accelerate PFR uptake, and the findings of our inquiry should inform this work.** ***Following its current call for evidence, the Government should publish an action plan of new measures to deliver a significant increase in the uptake of property flood resilience, including identifying where more evidence is needed on which measures will be most appropriate and effective. The Government should consult on amending building regulations to ensure an ambitious level of flood resilience in new build and reinstatement works. The Government should also consider developing a consistent national funding stream for PFR measures.***

Insurance

102. Flood Re is a reinsurance scheme which does not directly insure customers, but instead allows insurance companies to pass the flood risk element of household policies on to the scheme. Flood Re was always intended to be a transitional measure, ending in 2039. It was intended that by then market conditions would allow flood insurance to reflect risk but still be affordable.[222]

216 Local Government Association (LGA) (FLO0088)
217 Chartered Institution of Water and Environmental Management (FLO0104); Zurich Insurance (FLO0090)
218 Zurich Insurance (FLO0090)
219 Flood Re (FLO0097)
220 HM Government, Flood and coastal erosion risk management Policy Statement (July 2020), p 32
221 Department for Environment, Food and Rural Affairs, 'Local factors in managing flood and coastal erosion risk and Property Flood Resilience—call for evidence', accessed 1 February 2021
222 Flood Re, 'Regulation 27: The Quinquennial Review' (July 2019), p 13

103. There is evidence that Flood Re has successfully improved the affordability of flood insurance, but that raising awareness of this is still a challenge.[223] The National Flood Forum noted concern that "the poorest in society are still not able to afford policies", as well as that some sectors of the population do not access insurance "because of the difficulties of obtaining it if they are at high risk, because of previous experiences of being rejected, because they have other priorities or because of cultural approaches".[224] The Government's July 2020 policy statement states that it will work with Flood Re and the insurance industry to "explore whether it would be beneficial for insurers to share more information with customers about their flood risk—encouraging everyone to take responsibility to encourage greater uptake".[225]

104. Following the flooding in November 2019, the Government said there were "reports of people not having sufficient insurance cover" and announced a review of the issue.[226] The review was led by former ABI Chair Amanda Blanc, and included a "deep dive case-study" of the Doncaster area.[227] Ms Blanc noted that the review was one of the first opportunities to look at the adequacy of insurance cover in practice since the introduction of Flood Re.[228] Upon publication of the report in November 2020, Ms Blanc said she was "concerned to discover that although the majority of Doncaster residents had sensibly protected themselves with insurance, some of these policyholders had been sold cover which specifically excluded flood risk".[229] The report said that "future national surveys into the coverage of insurance" should take into account "the extent to which buildings or contents insurance excluded flood risk".[230]

105. **It is essential that the Government works with Flood Re and the insurance industry to identify and address continuing obstacles to the uptake of insurance among people at risk from flooding.** ***The Government should set out what further research will be undertaken, building on the Blanc review of insurance in Doncaster, to better understand and address barriers to uptake of household flood insurance cover.***

106. Flood Re covers only residential properties. They, and the ABI, have said that "overall, the insurance industry is not aware of a systemic, widespread failure of market provision for flood insurance for small businesses", and that designing a Flood Re-type scheme for businesses would be extremely complex due to "the sheer variety of businesses, and types of business property".[231] The continued blanket exclusion of businesses was also defended in oral evidence by Defra official David Cooper, who told us that "we need to be careful of wider householders paying for the cover that businesses might need where they are profit-making companies".[232]

223 Q101
224 The National Flood Forum (FLO0045)
225 HM Government, Flood and coastal erosion risk management Policy Statement (July 2020), p 31
226 "£1 million funding boost for South Yorkshire flood charity", Ministry of Housing, Communities and Local Government and Department for Environment, Food and Rural Affairs press release, 27 December 2019
227 Independent Review of Flood Insurance in Doncaster (5 November 2020), pp 12, 49
228 Independent Review of Flood Insurance in Doncaster (5 November 2020), p 4
229 "Independent review of flood insurance published", Department for Environment, Food and Rural Affairs press release, 5 November 2020
230 Independent Review of Flood Insurance in Doncaster (5 November 2020), p 6
231 Huw Evans and Andy Bord to Neil Parish MP, Rachel Reeves MP and Philip Dunne MP, 12 March 2020
232 Q187

107. Nonetheless, there remains concern in some quarters about insurance coverage for small and medium sized businesses. The British Insurance Brokers' Association (BIBA) has launched a commercial insurance scheme which aims to "significantly improve" the ability of SMEs and property owners to find flood insurance, which the Secretary of State highlighted to us.[233] However, BIBA's own evidence to our inquiry nevertheless said that risk-reflective pricing is "less easily applied" to SMEs and micro-SMEs, and there were suggestions from stakeholders that "they may be unaffordable for some small businesses".[234] BIBA expressed concern at the lack of an equivalent to the 23-year Flood Re transition, in order to "smooth" the shift to risk-reflective flood insurance pricing for SMEs.[235] The Blanc review of flood insurance cover in Doncaster, while declining to draw general conclusions about insurance for businesses due to the small sample size, noted that "in the light of the way the economy is likely to evolve post [covid-19], with more homes acting as business premises, there is a good case for reviewing the needs of these businesses and any gap in insurance, in greater depth".[236]

108. **We understand the Government's argument that businesses are in a different position compared to households in respect of flood insurance cover. However, we are concerned about the position of small and medium-sized enterprises, which do not benefit from any Government-backed initiative, equivalent to Flood Re, that would smooth the transition to risk-reflective pricing. Access to affordable insurance cover is crucial for improving flood resilience, and the Government must ensure that small and medium-sized businesses are not disadvantaged in this regard. *The Government should work with industry and stakeholders to establish, as a matter of urgency, additional measures, beyond guidance and signposting, to support small and medium-sized businesses to access affordable flood insurance cover.***

233 BIBA, 'Flood Insurance', accessed 26 January 2021; Department for Environment, Food and Rural Affairs (FLO0116)

234 The British insurance Brokers' Association (BIBA) (FLO0050)

235 The British insurance Brokers' Association (BIBA) (FLO0050)

236 Independent Review of Flood Insurance in Doncaster (5 November 2020), p 47

4 Managing water

Surface water

109. Surface water flooding happens when rainfall overwhelms local drainage capacity. The quality of data about surface water flood risk, and a lack of clarity on responsibility for drainage, are long-running issues. The Climate Change Committee said in 2019 that "inadequate progress has been made" on managing increasing surface water flood risk, noting that "the plans that do exist do not consider different climate change scenarios", and that there are no plans which ensure that new development does not increase overall vulnerability to surface water flooding.[237] CIWEM told us that funding had recently been made available to model surface water risk, but this was "based on improving national mapping with set thresholds, rather than understanding how catchments behave and identifying the level of local risk".[238] We also heard suggestions that a lack of maintenance or upgrading of drainage infrastructure may be exacerbating flooding risks from surface and foul water.[239]

110. A key obstacle to effectively addressing surface water flood risk is a lack of data on the capacity of drainage systems, and whether they can safely take additional volume.[240] The NIC's James Richardson told us that data on drainage assets is owned by local authorities and water companies, and that better data being made available would allow bodies such as the NIC to make recommendations for future solutions.[241] The Government's Surface Water Management Action Plan, published in July 2018, includes a number of actions around sharing data on surface water.[242] The Government's July 2020 flooding policy statement committed to publishing a progress update on the Surface Water Management Action Plan by spring 2021.[243]

111. **It is essential that work is done to improve understanding of the scale of surface water flood risk at a national and local level. In particular, we are concerned to hear evidence of surface and foul water flooding caused or exacerbated by the failure to adequately maintain drainage systems. It is difficult to determine the scale of this risk due to the lack of centralised information on the capacity of sewer systems.** ***The Government should quantify the surface water element of its overall ambition for flood resilience. In its update on the Surface Water Management Action Plan, it should also explain how it will improve the collection and sharing of data on drainage and sewerage capacity.***

Working with water companies

112. We have heard recommendations for deeper co-operation between water companies and other risk management authorities. Doncaster Council called for "stronger leadership across the RMAs to engender the partnership approach ethos of the 2010 Flood & Water Management Act", going beyond the relationship between the Environment Agency and

237 Adaptation Committee of the Committee on Climate Change (CCC) (FLOO0018)
238 Chartered Institution of Water and Environmental Management (FLO0104)
239 Caterham Flood Action Group (FLO0013); Cllr Dr Erica Lewis (FLO0100)
240 Q116
241 Q117
242 Department for Environment, Food and Rural Affairs, Surface Water Management: An Action Plan (July 2018)
243 HM Government, Flood and coastal erosion risk management Policy Statement (July 2020), p 23

local authorities to include local water companies and Internal Drainage Boards.[244] The National Infrastructure Commission recommended in 2018 that "water companies and local authorities should work together to publish joint plans to manage surface water flood risk".[245] The Environment Bill currently before Parliament would place a statutory duty on sewerage undertakers to produce Drainage and Sewerage Management Plans (DSMPs).[246] Defra told us that DSMPs would "provide a consistent basis for planning across the water sector, enabling companies to target investment on drainage and wastewater more effectively".[247]

113. Water companies have already been working toward producing "Drainage and Wastewater Management Plans" (DWMPs), and Water UK told us that the Bill's introduction of DSMPs therefore "only places obligations on water companies to do something they are in fact already doing", and do not reflect that "drainage is a shared responsibility".[248] Defra's evidence to our inquiry acknowledged that the development of DSMPs would "require engagement and involvement from other Flood Risk Management Authorities".[249] Hampshire County Council likewise said that drainage planning presents an opportunity to "align the high-level strategic plans of all RMAs and partnership organisations", providing "strategic direction for all organisations with water management responsibilities".[250]

114. One specific example of potential synergies between flood risk and water resource management is the use of reservoirs in floodwater storage. Several submissions called for water companies to make greater use of reservoirs as part of integrated water management, and this was also raised in our roundtable discussion with flood risk community groups.[251] Environment Agency Chief Executive Sir James Bevan told us that the EA has an arrangement with Northumbrian Water relating to the Kielder Water reservoir, and that "we are talking to other water companies about whether we can replicate that arrangement elsewhere".[252]

115. **Water and sewerage companies have an important role to play in managing flood risk and we welcome moves to put drainage planning by companies on a statutory footing. It will be necessary for other Risk Management Authorities and owners of drainage assets to be involved in preparing and maintaining these plans. *The Government should explain how the statutory provisions for water company Drainage and Sewerage Management Plans will ensure appropriate co-operation and consultation with other Risk Management Authorities and owners of drainage assets.***

Sustainable drainage systems (SuDS) and the automatic right to connect

116. One way in which surface water risks in new developments can be managed is through the use of sustainable drainage systems (SuDS). These are designed to control

244 Doncaster Council (FLO0075)
245 National Infrastructure Commission, National Infrastructure Assessment (July 2018), p 92
246 Environment Bill, Clause 78 [Bill 220 (2019–21)]
247 Department for Environment, Food and Rural Affairs (FLO0042), para 1.9
248 Water UK (FLO0056) para 4.2. Water UK has also highlighted the distinction between "Sewerage" and "Wastewater", and has called for the Bill to use the latter. See Water UK, 'Environment Bill: Amendments to Improve the Water Environment', accessed 26 January 2021
249 Department for Environment, Food and Rural Affairs (FLO0042), para 1.9
250 Hampshire County Council (FLO0024)
251 The Keswick Flood Action Group (FLO0038); West Yorkshire Combined Authority (FLO0052); see also Annex.
252 Q5

run-off close to where it falls and to mimic natural drainage as closely as possible. Practical examples include soakaways (draining water through permeable surfaces into the ground) and ponds (draining water into a surface water body). SuDS can also provide other environmental benefits, such as reducing water pollution and improving amenity and biodiversity.[253]

117. Many of the submissions we received supported the use of SuDS where appropriate. Water UK's Rob Wesley said that "we should aim to have as little as possible and ideally no more surface water entering sewers than at present".[254] However, Water UK told us in its written evidence that the current "more or less absolute right" of new developments to connect surface water to the public sewer contradicts the Government's policy aim of encouraging SuDS.[255] This right exists under Section 106 of the Water Industry Act 1991, and individual water companies have also advocated its modification due to concerns about the capacity of the public sewer system to take surface water.[256]

118. The automatic right to connect would have been removed by Schedule 3 of the Flood and Water Management Act 2010. Under Schedule 3, all construction work which has "drainage implications" would need approval from the local authority (as a "SuDS approval body") that its drainage system met national standards for sustainable drainage before connecting to the public sewer.[257] The Schedule came into effect in Wales, following commencement by Welsh Ministers, in January 2019, but it has never been commenced in relation to England.[258]

119. For England, the UK Government has instead focussed on using national planning policy to further the installation of SuDS. The current National Planning Policy Framework states that all major developments, and all development in flood risk areas, should only be allowed if it incorporates sustainable drainage systems, "unless there is clear evidence that this would be inappropriate".[259] The previous EFRA Committee, in its 2017 report on *Post-legislative scrutiny of the Flood and Water Management Act*, concluded that "we are not persuaded that it is currently essential to commence Schedule 3".[260] However, it recommended that the Government "strengthens planning approaches to require SuDS schemes to be installed in all developments of more than one property", and that if progress in improving the SuDS regime was insufficient, it would be appropriate for a successor Committee "to consider recommending commencement of Schedule 3 measures".[261]

120. Several submitters to our inquiry said that Schedule 3 should now be commenced for England, including the Climate Change Committee's Adaptation Committee.[262] Water UK's Rob Wesley said that ten years of the Government taking a different approach "cannot

253 Susdrain, 'SuDS components' and 'Sustainable drainage', accessed 26 January 2021
254 Q114
255 Water UK (FLO0056)
256 Anglian Water Services (FLO0047); United Utilities (FLO0064)
257 Flood and Water Management Act 2010, Schedule 3
258 The Flood and Water Management Act 2010 (Commencement No. 2) (Wales) Order 2018. The Schedule was commenced for the purpose of making subordinate legislation (in Wales) in May 2018, and for all remaining purposes in January 2019.
259 National Planning Policy Framework, CP 52, February 2019, paras 163–165
260 Environment, Food and Rural Affairs Committee, Sixth report of session 2016–17, Post-legislative scrutiny: Flood and Water Management Act 2010 (April 2017) HC 990, para 19
261 Environment, Food and Rural Affairs Committee, Sixth report of session 2016–17, Post-legislative scrutiny: Flood and Water Management Act 2010 (April 2017) HC 990, paras 19, 39
262 Adaptation Committee of the Committee on Climate Change (CCC) (FLO0018)

be regarded as a particularly successful ten years".[263] Water UK told us in written evidence that "the scheme of the legislation is still seen by our members to be the right approach for the country", although it cautioned that "the detail would need to be reconsidered", and Rob Wesley also said that if the Government was "not minded" to commence Schedule 3, it could at least remove the automatic right to connect, and "introduce mandatory adoption […] to give confidence that SuDS will both be built and be built to appropriate standards".[264]

121. An independent review of surface water management conducted by David Jenkins was published in August 2020.[265] It recommended that "the case be re-examined for bringing into effect Schedule 3 of the Flood and Water Management Act of 2010, or some equivalent mandatory arrangements".[266] The review also recommended that Defra "re-examine the working of Section 106" of the Water Industry Act, to ensure that the sewerage system is not "subjected to unnecessary flood risk through the connection of surface water drainage".[267] The LGA said that it had not called for Schedule 3 to be commenced because of the potential new burden but, it would "consider this issue again" in the light of the Jenkins review.[268]

122. The Secretary of State told us the Government had taken the view that Schedule 3 "does not help that much, in that it creates a whole new load of processes and regulatory procedures in addition to what is there".[269] He said that "the current system is working reasonably well".[270] David Cooper, Deputy Director of Flood and Coastal Erosion Risk Management at Defra, likewise told us that the planning system is "driving outcomes in terms of better surface water management and SuDS", referring to a 2018 review which found that "90% of planning applications had SUDS in them".[271] However, it is not clear that these SuDS features are of high quality and provide additional environmental benefits. Professor Richard Dawson, of the Climate Change Committee's Adaptation Committee, told us that current data on SuDS is "very coarse level", so that "we have a rough idea of the percentage of new developments that have SuDS", but not necessarily whether they are "just, say, plastic tanks underground or whether they are actually multifunctional green space SuDS that provide additional co-benefits to the public realm".[272]

123. **While the uptake of sustainable drainage systems has improved in recent years, we are concerned that the installation of high-quality SuDS features delivering multiple environmental benefits may still be insufficiently incentivised. The evidence we have received clearly shows that the non-statutory approach to promoting SuDS, coupled with the persistence of the automatic right to connect surface water drainage to the public sewer, is not working. The Government has not adequately explained why it**

263 Q144
264 Water UK (FLO0056); Q144
265 Department for Environment, Food & Rural Affairs, 'Report of a review of the arrangements for determining responsibility for surface water and drainage assets' (May 2020). The report was published on GOV.UK on 26 August 2020.
266 Department for Environment, Food & Rural Affairs, 'Report of a review of the arrangements for determining responsibility for surface water and drainage assets' (May 2020), p 8
267 Department for Environment, Food & Rural Affairs, 'Report of a review of the arrangements for determining responsibility for surface water and drainage assets' (May 2020), p 8
268 Local Government Association (FLO00105)
269 Q209
270 Q208
271 Q211
272 Q115

believes the commencement of Schedule 3 of the Flood and Water Management Act 2010, which is widely supported, is the wrong approach, and we consider that the case should be re-examined. ***The Government, as part of its ambitious plans to manage flood risk, should commit to ending the automatic right to connect to the public sewer, and consult on measures to improve the uptake of high-quality SuDS features. This consultation must include a legislative option, commencing Schedule 3 of the Flood and Water Management Act 2010 or making equivalent statutory provision, along with a commitment to further consultation with local authorities on any new burdens arising from this.***

124. In addition to SuDS for new developments, we also received evidence about retrofitting of SuDS in existing properties, and potential for integrated water management approaches such as rainwater harvesting. Water UK told us that rainwater harvesting improves water efficiency and reduces flood risk.[273] The NFU also noted that "simple measures such as grey water recycling and water butts can all help".[274] Blueprint for Water's Ali Morse told us that, in the future, there will be an increasing need to look at rainwater harvesting in the context of pressures on water resources.[275] She also highlighted the potential for water companies' Drainage and Wastewater Management Plans to prioritise locations for the retrofitting of SuDS in existing developments.[276]

125. ***The Government should explain how it will promote the retrofitting of SuDS and an integrated approach to water management through measures such as rainwater harvesting.***

Natural flood management

126. There has been much focus in recent years on measures collectively termed Natural Flood Management (NFM). The Secretary of State said in February 2020 that "our new, independent agricultural system will give farmers a big part to play, by encouraging land management that supports flood management".[277] These seek to reduce the risk of flooding by harnessing natural processes. Examples of NFM measures include:

- Creating ponds to increase temporary storage capacity during a flood.
- Building "leaky woody dams" in watercourses to "slow the flow" and reduce flood peaks.
- Improving soil structure to increase infiltration of water and reduce run-off.
- Restoring floodplains so that excess water in river channels can spill out.[278]

In addition to their role in managing flood risk, NFM measures can often provide various other environmental benefits, such as improving biodiversity through habitat restoration, as well as mitigating the impacts of insufficient rainfall by supporting the "recharge" of aquifers.[279]

273 Water UK (FLO0113)
274 The National Farmers Union (FLO0025) para 46
275 Qq 147, 156
276 Q147
277 "Plans for future greener farming", speech by Rt Hon George Eustice MP, 26 February 2020
278 Natural mitigation of flood risk, POSTnote 623, Parliamentary Office of Science and Technology, May 2020
279 Natural mitigation of flood risk, POSTnote 623, Parliamentary Office of Science and Technology, May 2020; Ali Morse, Acting Chair of Blueprint for Water (FLO0069)

127. It has been stressed to us that NFM ought to be considered alongside other measures, as part of a catchment-wide approach. CIWEM told us that NFM has a "key role" to play in managing "lower intensity and higher frequency" flooding, but that it will not be effective on its own against extreme floods.[280] Inappropriate use of NFM interventions could even exacerbate flooding, with academics at the University of Hull telling us that measures could "synchronis[e]" flood peaks from different tributaries to a watercourse if not properly deployed.[281] The NFU said that "NFM must sit within a robustly evidenced catchment-wide flood mitigation plan", accounting for local environmental and economic conditions.[282]

128. While much of the evidence we received supported the use of NFM measures where appropriate, there is a question over whether NFM measures to be delivered by farmers would better be funded from the FCERM programme, or under the new Environmental Land Management (ELM) scheme which proposes to pay land managers for delivering a range of "public goods". Most of the evidence for our inquiry was submitted before the Government published an update on ELM in November 2020.[283] The NFU argued that the funding for ELM "will be limited, given the many demands", and that schemes with NFM as the "sole outcome" should continue to be funded through the FCERM budget.[284] NFU Environment Forum member Richard Bramley also told us that "if you start to pull in a lot of funding that would normally have come from a flooding background and start to dump that on to ELMs, you risk there being quite a shortfall".[285] However, the NFU did acknowledge that "short-term, more ephemeral measures" like soil management would be suited to certain components of ELM.[286] CIWEM told us that long-term measures should be funded from the FCERM budget "to ensure their long-term viability".[287]

129. There are various other environmental policies and initiatives which have potential synergies with flood risk management and catchment planning. CIWEM suggested that catchment partnerships under the existing Catchment Based Approach are "an effective way to ensure a joined-up view of water and land use with water catchments", involving farmers, risk management authorities, conservation NGOs, businesses and a range of other partners.[288] Ali Morse highlighted the Nature Recovery Network outlined in the 25 Year Environment Plan, which aims at providing "500,000 hectares of additional wildlife habitat", as helping to ensure that flood risk measures are not "conceived and undertaken in isolation" but are planned in the context of wider catchment management.[289] Other potentially relevant policies include the upcoming Tree and Peat Strategies.[290]

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280 The Chartered Institution of Water and Environmental Management (FLO0104) para 55
281 Dr Kate Smith (Researcher at Energy and Environment Institute, University of Hull) (FLO0043)
282 The National Farmers Union (FLO0091) para 6
283 Department for Environment, Food and Rural Affairs, The Path to Sustainable Farming: An Agricultural Transition Plan 2021 to 2024 (November 2020)
284 The National Farmers Union (FLO0091) para 7
285 Q141
286 The National Farmers Union (FLO0091) para 51
287 The Chartered Institution of Water and Environmental Management (FLO0104) para 52
288 The Chartered Institution of Water and Environmental Management (FLO0104) para 53
289 Ali Morse, Acting Chair of Blueprint for Water (FLO0069); HM Government, A Green Future: Our 25 Year Plan to Improve the Environment (January 2018), p 58
290 Department for Environment, Food and Rural Affairs, England Tree Strategy (June 2020); "Coverage on government's progress to ban peat burning", Department for Environment, Food and Rural Affairs press release, 21 September 2020

130. The Secretary of State echoed the calls for a catchment-based approach, telling us that "if you are going to pay farmers to flood you have to have the right sites that work for that catchment".[291] When we asked how landowners within a catchment could be brought together within ELM (which will be a voluntary scheme), the Secretary of State explained that, through Local Nature Recovery (the second component of ELM), the Government is "looking at ways to encourage and incentivise collaboration between farmers" but also noted that, in the case of flooding, "it would have to be linked to a catchment management plan that the Environment Agency would ultimately have to have a view on".[292]

131. **Working with natural processes is an important part of a holistic approach to flood risk management. There are several initiatives that could serve as delivery vehicles for natural flood management, including the new Environmental Land Management scheme, and a catchment-based approach requires join-up between these policies to ensure that natural flood management interventions are appropriately targeted and incentivised.** ***We recommend that the Government should scale up natural flood management, whilst ensuring that the measures are appropriate to local conditions and form part of a catchment-based approach. The new Environmental Land Management scheme provides an opportunity to do this.***

132. It is clear that initiatives to increase the uptake of natural flood management measures will depend on farmers and land managers having confidence that they will be effectively supported. The NFU told us that Risk Management Authorities' work with farmers and landowners should ensure "early engagement, safeguarding productive farmland, reasonable annualised or event-based payments, and long-term strategic planning", and that incentives need to go "beyond the simple calculation of income forgone given the public goods that will be delivered".[293] Aside from the upfront capital investment, there are also questions about ongoing maintenance of, and liability for, NFM schemes. The NFU told us that existing schemes like Countryside Stewardship provided no cover for liability, so that if an NFM feature were to fail and flood risk downstream were increased, the liability would fall to the farmer as the riparian landowner.[294] The EA's John Curtin also acknowledged the questions around maintenance, and said that ELM provides "a vehicle to pay for the maintenance of these natural solutions".[295]

133. We also received some evidence that the confidence of farmers in entering into environmental schemes may have been dented by previous experience. Following the flooding over the winter of 2019–20, the NFU told us that it had challenged the Government over a decision to exclude land deemed to be washlands (areas of land adjacent to rivers which flood at times when river levels are high) from the Farming Recovery Fund (which provides assistance with certain uninsurable repair costs).[296] Richard Bramley said that "withdraw[ing] payment for public good at the first opportunity" would "completely and utterly undermin[e] the direction of travel" of a payment for public goods policy.[297]

291 Q204
292 Q206
293 The National Farmers Union (FLO0091) para 53
294 The National Farmers Union (FLO0091) para 23
295 Q34
296 Q132; The National Farmers Union (FLO0091) para 12
297 Q132

134. **The Government has been clear that paying farmers for measures such as floodwater storage forms a key part of its plans. Any measures which call on farmers and land managers to allow their land to be used in this way must ensure proper recognition for the public goods provided.** ***The Government should ensure that natural flood management schemes will involve farmers and land managers at every stage of identifying, designing and implementing a scheme. The Government should also ensure that land managers are paid appropriately for the public goods provided, and that financial assistance and technical advice for long-term maintenance are provided. Any scheme must also include clarity on liability should a flood occur.***

5 Engaging with people

135. The previous Committee's interim report into *Coastal flooding and erosion, and adaptation to climate change* in November 2019 called on the EA and the Government to explain how they will ensure meaningful long-term engagement with affected communities on the implications of changes to the coast and how it is defended.[298] Our current inquiry suggests that challenges in ensuring that local communities feel engaged in decisions about flood risk management cover all forms of flooding.

136. The evidence we have received suggests that the issue is often not an absence of consultation, but a lack of confidence that consultations will make any difference. The National Flood Forum told us that existing plans reflect "a patronising and paternalistic attitude that then results in consultation once plans have been decided".[299] Instead, the NFF argued that "people and communities should be automatically considered as equal partners in flood risk management".[300] Several local flood action groups mentioned that they had provided evidence for numerous reports/consultations, with one saying "yet nothing much has changed".[301]

137. The National Flood Forum told us that working with communities is usually seen as a cost, not an investment that leads to positive outcomes.[302] Chief Executive Paul Cobbing said that flood action groups are "consistently ignored" even when they have input from planners or hydrologists.[303] The Committee's roundtable with flood risk communities in October highlighted that effective engagement, as well as improving confidence in risk management authorities and buy-in for key decisions, could bring real practical benefits due to the knowledge and networks of local residents. These benefits include providing local knowledge of drainage issues to planning authorities, and sometimes being able to deliver flood resilience measures at much reduced cost.[304]

138. It was not just community groups arguing that meaningful engagement adds real value to flood risk schemes. The NFU told us that "local rural communities have much knowledge to contribute to help target investment in maintenance of flood risk assets and watercourses in anticipation of problems".[305] Ali Morse of Blueprint for Water said that engagement with local communities on natural flood management schemes often "results in a better scheme than was originally proposed", but she stressed that any funding mechanism to promote NFM must allow time for this engagement to happen.[306] We also consider the benefit of local input into flood maps and planning decisions in Chapter 3 of this Report.

139. The benefits of establishing and resourcing local Flood Action Groups (FLAGs), and engaging with the National Flood Forum to which many FLAGs are affiliated, have also been recognised by risk management authorities. Worcestershire County Council

298 Environment, Food and Rural Affairs Committee, First Report of Session 2019, Coastal flooding and erosion, and adaptation to climate change: Interim Report, HC 56, para 17
299 The National Flood Forum (FLO0045)
300 The National Flood Forum (FLO0045)
301 The Keswick Flood Action Group (FLO0038); The Caterham Flood Action Group (FLO0013)
302 The National Flood Forum (FLO0045)
303 Q92
304 See Annex.
305 The National Farmers Union (FLO0091) para 73
306 Q165

told us that the NFF provides "a unique and ideal independent conduit between RMAs and communities" and called for greater emphasis and resource to supporting the creation and maintenance of FLAGs.[307] The NFF told us that there are no funding streams for community support, and that voluntary sector grant funding schemes "fail to recognise that many communities need facilitated support" in order to apply for funds and engage positively with RMAs.[308]

140. We also heard some evidence suggesting that more effective engagement could be facilitated by institutional or procedural changes. As mentioned in Chapter 1, the National Trust highlighted that Catchment Partnerships could "play a greater role in helping to engage communities with flood risk management".[309] Telford and Wrekin Council told us that reducing burdens on local authorities to carry out large-scale consultations would allow for resources to be "better targeted to the right communities and stakeholders".[310]

141. The Secretary of State told us that community engagement with the Environment Agency and local authorities is "better than perhaps some people would caricature it".[311] The Environment Agency also told us that risk management authorities are "working ever more closely with local communities to involve them in decision making", but recognised that there is more to do, including "developing RMA skills and capabilities needed to better support communities to adapt to future flooding".[312] It also noted that organisations such as the National Flood Forum and Action for Rural Communities in England work closely with communities, but that the work they are able to do is often limited by their funding.[313]

142. **We have listened with great concern to evidence that local communities feel disengaged and ignored in decisions relevant to flood risk. It is clear that, where risk management authorities do engage with local people, this engagement is often not perceived as meaningful or impactful. Communities must not be treated as groups who have things done to them, but as vital delivery partners in the Government's approach to building resilience. While involving people in decisions that affect their lives is an end in itself, we have also been impressed by the evidence from Flood Action Groups about the positive practical benefits that meaningful engagement with local people can bring. In pursuing its ambition for flood resilience, the Government must ensure that the benefits of meaningful engagement are maximised.** ***The Government should work with the voluntary sector to develop guidance for all risk management and planning authorities on how to meaningfully engage with local people.***

143. ***The Government should review the institutional arrangements for community engagement in flood risk management, to identify best practice and opportunities for more effective approaches. The Government should also commit to ensuring that risk management authorities are resourced and supported to carry out meaningful engagement, including making funding available to the voluntary sector to build capacity in other organisations.***

307 Worcestershire County Council (FLO0029)
308 The National Flood Forum (FLO0045) para 2.13
309 The National Trust (FLO0089) para 2.2
310 Telford & Wrekin Council (FLO00008) para 5.4
311 Q219
312 The Environment Agency (FLO0037) para 5.10
313 The Environment Agency (FLO0037) para 5.9

Conclusions and recommendations

Meeting the challenge

1. We welcome the doubling of investment in flood defences announced at Budget 2020, amounting to £5.2 billion over the next six years. It is vital that measures to address the growing, long-term, flood and coastal risk in the face of climate change are adequately resourced. The Government should therefore keep the level of investment under constant review, with reference to the Environment Agency's long-term investment scenarios. *The Government should commit to ensuring that funding for flood and coastal erosion risk management will keep pace with climate science and modelling of flood and coastal risk, both during the 2021–27 programme and beyond.* (Paragraph 12)

2. We welcome the steps taken thus far to improve the partnership funding formula, to better take account of climate change and the wider impacts of flooding. However, it is disappointing that the Government's call for evidence on further changes to the formula has only just been launched, and will not close until the eve of the next investment programme starting in April 2021. We believe there is more work to be done to ensure that flood capital investment protects people and property without favouring certain areas or disproportionately focussing on certain types of flooding. When considering cost-benefit analyses, natural capital should also be a factor that is taken into consideration. *The Government should ensure that any further steps to address shortcomings of the flood funding formula, following the current call for evidence, are communicated and implemented as quickly as possible.* (Paragraph 16)

3. We share the concern of our predecessor Committee about the apparent stalling of private sector contributions under the partnership funding model. The recent National Audit Office report shows the Government faces an uphill struggle to reverse the decline in private sector contributions. We welcome the steps the Government is taking to encourage more private contributions, including reviewing guidance on corporation tax relief. However, we note with concern that the Environment Agency has said it will be challenging to secure the partnership funding needed to deliver the outcomes of the next multi-year capital investment. (Paragraph 22)

4. While we acknowledge the great value of partnership contributions from public sources, it is obvious that private sector investment is too low (as the Government has implicitly accepted), and this could contribute to uncertainty about whether schemes will be deliverable. *The Government should explain how it will monitor whether the level of partnership funding, including private sector contributions, is jeopardising the outcomes of the multi-year capital investment programme.* (Paragraph 23)

5. *The Environment Agency should facilitate this by keeping a record of schemes that are unable to proceed due to being unable to secure adequate partnership contributions, including a quantification of the losses in flood resilience that result.* (Paragraph 24)

6. It is critical that the considerable outlay of public money through the Government's £5.2 billion capital investment in flood defences is not wasted through a failure to adequately resource the maintenance of new and existing assets. We are concerned

by the evidence we have received about existing shortcomings in asset maintenance, and this situation will only be exacerbated by the twin pressures of climate change and increased capital funding if the Government does not act. We recognise the Government's stated commitment to ongoing maintenance, but a step change is needed. *The Government should put in place a long-term resource budget settlement for flood and coastal erosion risk management, that is aligned with the increased multi-year capital investment programme, so that the Environment Agency and others are able to effectively plan and maintain the network of flood and coastal risk assets.* (Paragraph 29)

7. The Government's refusal to set a national standard for resilience to flooding means there is uncertainty about the level of its ambition. We would expect the Government to show leadership in the face of severe and growing risk by setting out its long-term objective. We are not convinced by the Government's rationale for rejecting the National Infrastructure Commission's recommendation of a nationwide standard for flood resilience. Such a standard could address limitations of cost-benefit approaches to allocating funding, and would improve public confidence in the Government's approach to creating a country better protected and better prepared for flooding. The Government believes that national standards would be a "lowest common denominator", but it is surely right for the Government to take a political decision on what its policies are meant to achieve. *The Government should clearly set out the level of resilience that its interventions, including future capital investment and the actions in its July 2020 policy statement, are intended to deliver in the long term. This should be aligned to climate projections, and should include qualitative and quantitative objectives for what a nation resilient to flooding looks like. The Government should seriously re-examine the case for expressing this as a national standard for flood resilience, as recommended by the National Infrastructure Commission.* (Paragraph 35)

8. Climate change poses a grave threat to the flood resilience of communities, with the Climate Change Committee warning that warming of 4°C or more implies inevitable increases in flood risk even in the most ambitious adaptation scenarios considered. The Government needs to be frank about the level of risk it is prepared to accept in extreme climate change scenarios, and those likely to be affected need to know now. *The Government should explain how a reasonable worst-case scenario for increased flood and coastal risk due to climate change would impact upon its national objective for flood resilience, and what this would mean for funding and decisions about whether to protect any given place.* (Paragraph 36)

9. We welcome the focus on protecting not just homes, but also other properties. It is crucial that the success or otherwise of flood risk management interventions is closely monitored, in order to demonstrate progress toward strategic objectives and ensure value for money. We are particularly concerned that the Environment Agency has no plans to monitor progress on the number of properties that will be better protected in the next capital investment programme. *The Government should provide further detail on its intentions for a "national set of indicators", including how they will monitor progress toward a defined objective for flood resilience, and address shortcomings of the "homes/properties better protected" metric.* (Paragraph 39)

10. The Government must provide leadership to ensure that the division of flood risk responsibilities among various organisations does not result in local communities experiencing a less efficient and responsive approach to flood risk management than if all responsibilities were brought under one roof. We cautiously welcome the Government's commitment to reform flood risk planning, but it must effectively address the concerns we have heard about lack of integration, and not simply place unnecessary new bureaucracy or burdens on risk management authorities. *The Government should provide further detail on its plans to reform local flood risk planning, including which bodies will be expected to lead and co-operate, and how these plans will relate to existing plans and a cross-Government approach to climate adaptation. The Government should draw on best practice from Shoreline Management Plans and Catchment Partnerships in this process. The Government should also ensure that local authorities and other partners receive any additional funding required for this work.* (Paragraph 44)

11. The responsibility of riparian owners to maintain watercourses so as not to increase flood risk to others is well established in common law. Obviously, individuals must first know whether they are riparian owners, and their responsibilities, if they are to be expected to discharge them. Risk management authorities also need to be properly enabled and resourced to identify and communicate the right management approaches for riparian assets, and enforce maintenance where necessary. *The Government's review of statutory responsibilities for asset maintenance should include reviewing the powers and resources of risk management authorities to communicate appropriate riparian management options, and effectively enforce responsibilities by riparian owners.* (Paragraph 48)

12. Local authorities will be a key delivery partner for the Government's new flooding policies, so we are very concerned by evidence of inconsistency and shortcomings in capacity. While it is for local authorities to take local decisions, central Government must ensure that they are properly resourced to implement their existing functions and the Government's new flooding policies. We note that the Government has recognised the need to review funding for local government statutory flood risk functions, and it is essential that this review is completed in good time especially given the wider financial pressures local authorities are facing. *The Government should set out details on the scope and timescale of its planned review of funding for local government flood risk functions. The Government should ensure that local authorities have dedicated resources to effectively deliver existing flood risk management functions and any new roles, and that their needs are continually monitored to avoid future shortfalls.* (Paragraph 53)

Lessons from the 2019–20 flooding

13. We recognise and pay tribute to the substantial effort undertaken by all emergency responders, as well as local communities and the armed services, in responding to the severe flooding over the autumn and winter of 2019–20. However, we are concerned by ongoing indications of resourcing issues for those bodies undertaking the vital work of helping protect lives and livelihoods in the immediate wake of a flood. As the Secretary of State has rightly acknowledged the increasing frequency of severe flooding events, it is not right to expect these organisations to operate at

the limit of their capacity. *The Government should engage with all bodies involved in flooding incident response to review their capacity to deal with more frequent severe flooding. The review should ensure that local co-ordination is effective and all partners are properly resourced to meet future challenges.* (Paragraph 58)

14. It is welcome that the Government has now put in place a package of support measures for households and businesses impacted by severe flooding. While it is right that local authorities will usually be best placed to deliver these measures in their areas, it is concerning that some appear to have been left ill-prepared to deal with expectations being set by high-profile announcements from central Government. The eligibility criteria for these schemes have also created at least the impression of unfairness. The use of a single threshold of 25 or more flooded houses, across local authority areas of different sizes, also raises questions of fairness. *The review of the Flood Recovery Framework and the property flood resilience grant scheme should include an evaluation of the timeliness and adequacy of communication from central Government to local authorities, as well as whether the scheme ought to include an additional element of reimbursement for administrative costs. The Government should also ensure that the eligibility criteria for these schemes are clearly communicated, and fairly reflect the differences between local authority areas, including size. The operation of the Bellwin scheme in relation to flood events should also be reviewed as part of this work.* (Paragraph 64)

15. Our engagement with local communities at risk of flooding has highlighted the significant long-term challenges that result from a flood. In particular, the mental health impacts of flooding have been vividly described to us. This includes both the initial trauma of having one's home flooded, and the resultant anxiety whenever severe weather approaches. There is a lack of support for long-term recovery after a flood, once the immediate response phase has passed. We agree with the Government that support should be delivered in the most effective way, often by local government or voluntary groups. In establishing the Flood Recovery Framework the Government has, rightly, accepted that it has a responsibility to support communities struck by severe flooding. It should not forget them when the flood waters recede. We look forward to further detail from the Government on how it will engage with local partners to make sure that these communities are properly supported. (Paragraph 68)

16. *The Government should supplement its July 2020 policy statement with an additional action plan, developed with local partners, for the long-term physical, economic, and psychological recovery of communities impacted by flooding. This should include a clear explanation of which national and local actors should be responsible for key aspects of flood recovery support, how they will be supported and resourced, and a plan to monitor delivery against a set of recovery indicators. The Government's commitment to support the voluntary sector should include funding to help charities respond to flooding and build capacity in other organisations.* (Paragraph 69)

Development and flood risk

17. It is widely recognised that inappropriate development in areas at risk from flooding represents a serious threat to flood resilience, particularly as the scale of the risk is

likely to increase with climate change. Defra must do more to integrate its approach to flood resilience across the whole of Government, and this must include greater interaction between planning policy and approaches to managing flood risk. *The Government should explain how its proposals for planning reform will contribute to better flood resilience outcomes than the current planning system. It should also explain how leadership will be provided within Government so that flood risk and planning policies are integrated within a coherent approach to climate adaptation.* (Paragraph 73)

18. We are concerned that the words on flood risk in national planning policy still do not always translate into actions. We are encouraged by the Government's proposal that planning applications approved against flood risk advice could in future be subject to call-in by the Secretary of State. *The Government should provide further detail on its proposals for cases in which flood risk advice on planning applications is not followed. The remit of the Environment Agency as a statutory consultee should be expanded to include areas of future risk owing to climate change.* (Paragraph 79)

19. While we welcome the commitment to consider improving transparency for flood risk advice, the Government must ensure that any development which still goes ahead against advice is clearly communicated to prospective homebuyers. *The Government should ensure that information on development against flood risk advice is published in a clear and accessible form.* (Paragraph 80)

20. It is clear that planning and risk management authorities must be empowered and resourced to effectively monitor and enforce the fulfilment of planning conditions in areas at risk of flooding. *The Government should urgently review whether planning conditions to mitigate flood risk are being fulfilled. The Government should then bring forward proposals to address any limitations in the powers and resources available to appropriate authorities for the enforcement of planning conditions.* (Paragraph 81)

21. We welcome the Government's commitment to act upon our recommendations regarding the cumulative impact on flood risk of smaller developments. While we recognise that national planning policy does refer to cumulative impacts, this has clearly not allayed concerns that these impacts are not given due regard when planning decisions are made. *The Government should, as part of its review of planning policy for flood risk, establish to what extent flood risk is increased by the lack of scrutiny given to the cumulative impacts of smaller and permitted development.* (Paragraph 85)

22. We are very concerned that local planning authorities lack the skills base and resources to effectively factor the impacts of climate change into development decisions. While plans and individual decisions are rightly made at a local level, it is the duty of Government to provide leadership to local authorities facing potentially significant increases in future flood risk. *The Government should commit to ensuring that all local planning authorities have the powers, resources and information to effectively factor current and future flood risk into local plans, Strategic Flood Risk Assessments and individual decisions, including properly trained dedicated staff. The Environment Agency should work closely with such staff to improve strategic co-ordination around local plans. The Government should urgently undertake, and publish the findings of, a review of current capacity in local planning authorities to perform this function.* (Paragraph 89)

23. The engagement of communities in the development of local plans is already inadequate, and the proposed reforms to the planning system must not compound this problem. Greater community involvement in planning decisions in many areas at flood risk would have the twin benefits of building trust and contributing valuable technical knowledge about drainage issues. *The Government should develop national guidance on incorporating local knowledge of flood risk into planning decisions, the development of local plans and the preparation of strategic and site-specific Flood Risk Assessments.* (Paragraph 92)

24. We recognise the concerns of several stakeholders about site-specific Flood Risk Assessments, and the Government should use its reform of the planning system as an opportunity to investigate this issue further. *The Government's standardisation of technical supporting information should include an evaluation of the current arrangements for the preparation and content of site-specific Flood Risk Assessments, and whether these adequately contribute to flood resilience objectives and public confidence.* (Paragraph 94)

25. A step change is needed in promoting the uptake of appropriate property flood resilience measures. It is important that reforms to Flood Re to incentivise PFR form part of wider work aimed at encouraging people to improve the flood resilience of their own property. We welcome the Government's call for evidence on ways to accelerate PFR uptake, and the findings of our inquiry should inform this work. *Following its current call for evidence, the Government should publish an action plan of new measures to deliver a significant increase in the uptake of property flood resilience, including identifying where more evidence is needed on which measures will be most appropriate and effective. The Government should consult on amending building regulations to ensure an ambitious level of flood resilience in new build and reinstatement works. The Government should also consider developing a consistent national funding stream for PFR measures.* (Paragraph 101)

26. It is essential that the Government works with Flood Re and the insurance industry to identify and address continuing obstacles to the uptake of insurance among people at risk from flooding. *The Government should set out what further research will be undertaken, building on the Blanc review of insurance in Doncaster, to better understand and address barriers to uptake of household flood insurance cover.* (Paragraph 105)

27. We understand the Government's argument that businesses are in a different position compared to households in respect of flood insurance cover. However, we are concerned about the position of small and medium-sized enterprises, which do not benefit from any Government-backed initiative, equivalent to Flood Re, that would smooth the transition to risk-reflective pricing. Access to affordable insurance cover is crucial for improving flood resilience, and the Government must ensure that small and medium-sized businesses are not disadvantaged in this regard. *The Government should work with industry and stakeholders to establish, as a matter of urgency, additional measures, beyond guidance and signposting, to support small and medium-sized businesses to access affordable flood insurance cover.* (Paragraph 108)

Managing water

28. It is essential that work is done to improve understanding of the scale of surface water flood risk at a national and local level. In particular, we are concerned to hear evidence of surface and foul water flooding caused or exacerbated by the failure to adequately maintain drainage systems. It is difficult to determine the scale of this risk due to the lack of centralised information on the capacity of sewer systems. *The Government should quantify the surface water element of its overall ambition for flood resilience. In its update on the Surface Water Management Action Plan, it should also explain how it will improve the collection and sharing of data on drainage and sewerage capacity.* (Paragraph 111)

29. Water and sewerage companies have an important role to play in managing flood risk and we welcome moves to put drainage planning by companies on a statutory footing. It will be necessary for other Risk Management Authorities and owners of drainage assets to be involved in preparing and maintaining these plans. *The Government should explain how the statutory provisions for water company Drainage and Sewerage Management Plans will ensure appropriate co-operation and consultation with other Risk Management Authorities and owners of drainage assets.* (Paragraph 115)

30. While the uptake of sustainable drainage systems has improved in recent years, we are concerned that the installation of high-quality SuDS features delivering multiple environmental benefits may still be insufficiently incentivised. The evidence we have received clearly shows that the non-statutory approach to promoting SuDS, coupled with the persistence of the automatic right to connect surface water drainage to the public sewer, is not working. The Government has not adequately explained why it believes the commencement of Schedule 3 of the Flood and Water Management Act 2010, which is widely supported, is the wrong approach, and we consider that the case should be re-examined. *The Government, as part of its ambitious plans to manage flood risk, should commit to ending the automatic right to connect to the public sewer, and consult on measures to improve the uptake of high-quality SuDS features. This consultation must include a legislative option, commencing Schedule 3 of the Flood and Water Management Act 2010 or making equivalent statutory provision, along with a commitment to further consultation with local authorities on any new burdens arising from this.* (Paragraph 123)

31. *The Government should explain how it will promote the retrofitting of SuDS and an integrated approach to water management through measures such as rainwater harvesting.* (Paragraph 125)

32. Working with natural processes is an important part of a holistic approach to flood risk management. There are several initiatives that could serve as delivery vehicles for natural flood management, including the new Environmental Land Management scheme, and a catchment-based approach requires join-up between these policies to ensure that natural flood management interventions are appropriately targeted and incentivised. *We recommend that the Government should scale up natural flood management, whilst ensuring that the measures are appropriate to local conditions and form part of a catchment-based approach. The new Environmental Land Management scheme provides an opportunity to do this.* (Paragraph 131)

33. The Government has been clear that paying farmers for measures such as floodwater storage forms a key part of its plans. Any measures which call on farmers and land managers to allow their land to be used in this way must ensure proper recognition for the public goods provided. *The Government should ensure that natural flood management schemes will involve farmers and land managers at every stage of identifying, designing and implementing a scheme. The Government should also ensure that land managers are paid appropriately for the public goods provided, and that financial assistance and technical advice for long-term maintenance are provided. Any scheme must also include clarity on liability should a flood occur.* (Paragraph 134)

Engaging with people

34. We have listened with great concern to evidence that local communities feel disengaged and ignored in decisions relevant to flood risk. It is clear that, where risk management authorities do engage with local people, this engagement is often not perceived as meaningful or impactful. Communities must not be treated as groups who have things done to them, but as vital delivery partners in the Government's approach to building resilience. While involving people in decisions that affect their lives is an end in itself, we have also been impressed by the evidence from Flood Action Groups about the positive practical benefits that meaningful engagement with local people can bring. In pursuing its ambition for flood resilience, the Government must ensure that the benefits of meaningful engagement are maximised. *The Government should work with the voluntary sector to develop guidance for all risk management and planning authorities on how to meaningfully engage with local people.* (Paragraph 142)

35. *The Government should review the institutional arrangements for community engagement in flood risk management, to identify best practice and opportunities for more effective approaches. The Government should also commit to ensuring that risk management authorities are resourced and supported to carry out meaningful engagement, including making funding available to the voluntary sector to build capacity in other organisations.* (Paragraph 143)

Annex: Report of roundtable discussion with flood risk community groups

1. This is a report of the informal virtual "roundtable" discussion hosted by the Environment, Food and Rural Affairs Committee with local community groups in areas at risk of flooding.

2. The discussion was co-facilitated by the National Flood Forum and took place on Thursday 8 October 2020. It formed part of the Committee's inquiry into flooding. This report sets out the background to the roundtable and a summary of the discussion.

Figure 1: A still from the virtual roundtable showing some of the participants. This still was shared on the Committee's Twitter feed.

The virtual roundtable

3. The virtual roundtable took place on the morning of Thursday 8 October 2020. It was co-facilitated by the National Flood Forum, a charity supporting flood risk communities, with numerous affiliated local residents' groups. The roundtable was held virtually, given the ongoing covid-19 pandemic and the geographical diversity of the participants.

4. Attendees at the roundtable were:

- Julie Blackburn (Caterham Flood Action Group)
- Sue Butler (Brompton Flood Prevention Group)
- Jim Chalmers (Appleby Emergency Response Group)
- Andrew Egerton (South Lancaster Flood Action Group)
- David Goff (Collier Street Parish Council)

- Bob Haddon (Shifnal Flood Partnership Group)
- Lynne Jones (Keswick Flood Action Group)
- Maggie Mason (North East Kendal Flood Action Group)
- Andrew Ronnan (Whalley and Billington Flood Action Group)
- Paul Cobbing (National Flood Forum)
- Heather Shepherd (National Flood Forum)

5. The following Members of the Committee participated in the roundtable:

- Neil Parish
- Ian Byrne
- Geraint Davies
- Dave Doogan
- Barry Gardiner
- Dr Neil Hudson
- Mrs Sheryll Murray

6. The roundtable divided into two discussion groups, who then came back together at the end of the event to share their conclusions.

Summary of discussions

7. As the discussion was held in private comments are not attributed. This summary should therefore not be taken as indicating the expressed views of any given participant, but as giving an overall impression of the conversation.

8. The discussion broadly fell under four themes:

- Experiences of the 2019–20 floods
- Confidence in risk management authorities
- Development and flood risk
- Experience of engagement and consultation

9. Following the roundtable, the National Flood Forum also provided a supplementary piece of written evidence with key messages highlighted by a number of participants.[314] A number of flood action groups also made supplementary submissions which the Committee has also published.[315]

314 National Flood Forum (FLO0112)
315 See Environment, Food and Rural Affairs Committee, 'Flooding: All written evidence', accessed 2 February 2021

i. Experiences of the 2019–20 floods

10. There were some suggestions that the immediate operational response to the floods of the autumn and winter of 2019–20 was less well-organised than in previous years, with some issues around speediness and communication. Regional variation in experience was noted.

11. The importance of support for communities to recover, after the immediate period of flooding has passed, was emphasised. The impact this year of covid-19 was noted, including on the ability of authorities and insurers to contact those affected. The pandemic had also impacted the ability of people to return to flooded homes in a timely manner.

12. The mental health impacts of flooding were particularly emphasised, and some participants vividly described the fear and anxiety that living with flood risk can bring. The uncertainty brought by the coming winter, in the context of a second wave of covid-19, were noted.

ii. Confidence in risk management authorities

13. Concern was expressed at the perceived fragmentation of responsibilities for flooding among various bodies, and a lack of accountability regarding who is responsible for what.

14. Some participants expressed frustration at how long it can take to deliver local flood resilience measures. It was also suggested that flood action groups can sometimes deliver schemes faster and at much reduced cost compared with risk management authorities. It was felt that engagement with local communities should be seen as an investment, not a cost.

15. Riparian ownership was discussed, both the lack of understanding of responsibilities among owners, and a lack of enforcement of these responsibilities by local authorities.

16. It was felt that investment in maintenance of drainage infrastructure is inadequate, and that Ofwat may have a role to play in improving this. It was also suggested that reservoirs could play more of a role in managing flood risk.

iii. Development and flood risk

17. A greater role for local knowledge of flood risk in planning decisions was seen as important. It was also felt that the downstream impacts of development can be ignored in planning decisions.

18. Local groups can feel disempowered by the planning process, which several participants felt was ill-equipped to factor in flood risk and drainage implications in the face of other pressures and a lack of capacity and knowledge within planning authorities.

19. Participants highlighted problems with the delivery of sustainable drainage systems (SuDS) by developers, as well as with their long-term management and maintenance. Some suggested that the approach of SuDS Approval Bodies, envisaged in Schedule 3 of the Flood and Water Management Act 2010, would be an improvement.

20. It was felt that national planning policy does not facilitate the right decisions being made, for example by taking inadequate account of the cumulative effects of development. Some participants also expressed concern about the Government's proposals for reform of the planning system, and the implications for local voices being heard.

iv. Experience of engagement and consultation

21. Some participants felt that local relationships with risk management authorities are good, but that this is not the same as engagement which drives outcomes. There was also a feeling of fatigue with consultations and reports which do not lead to change.

22. Participants also emphasised that flood action groups themselves are made up of unpaid volunteers, and can drive change through their knowledge and experience of local flooding issues.

Formal minutes

TUESDAY 2 FEBRUARY 2021

Virtual meeting

Members present:

Neil Parish, in the Chair

Ian Byrne
Geraint Davies
Dave Doogan
Rosie Duffield
Barry Gardiner
Dr Neil Hudson
Robbie Moore
Mrs Sheryll Murray
Julian Sturdy

Flooding

Draft Report (*Flooding*), proposed by the Chair, brought up and read.

Ordered, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 143 read and agreed to.

Annex and Summary agreed to.

Resolved, That the Report be the Fourth Report of the Committee to the House.

Ordered, That the Chair make the Report to the House.

Ordered, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

[Adjourned till Tuesday 9 February at 2.30 p.m.

Witnesses

The following witnesses gave evidence. Transcripts can be viewed on the inquiry publications page of the Committee's website.

Tuesday 14 July 2020

Emma Howard Boyd, Chair, Environment Agency; **Sir James Bevan**, Chief Executive, Environment Agency; **John Curtin**, Executive Director of Flood and Coastal Risk Management, Environment Agency — Q1–54

Tuesday 01 September 2020

David Renard, Chair, Economy, Environment, Housing and Transport Board, Local Government Association; **Innes Thomson**, Chief Executive, Association of Drainage Authorities — Q55–87

Andy Bord, Chief Executive, Flood Re; **Hugh Ellis**, Policy Director, Town and Country Planning Association; **Paul Cobbing**, Chief Executive, National Flood Forum — Q88–104

Tuesday 20 October 2020

Richard Dawson, Adaptation Committee, Committee on Climate Change; **James Richardson**, Chief Economist, National Infrastructure Commission — Q105–128

Ali Morse, Acting Chair, Blueprint for Water; **Rob Wesley**, Head of Policy, Water UK; **Richard Bramley**, Environment Forum, National Farmers Union — Q129–167

Thursday 03 December 2020

George Eustice, Secretary of State, Department for Environment, Food and Rural Affairs; **Lord Greenhalgh**, Minister of State, Ministry of Housing, Communities and Local Government; **David Cooper**, Deputy Director, Flood and Coastal Erosion Risk Management, Department for Environment, Food and Rural Affairs — Q168–224

Published written evidence

The following written evidence was received and can be viewed on the inquiry publications page of the Committee's website.

FLO numbers are generated by the evidence processing system and so may not be complete.

1 ADA (Association of Drainage Authorities) (FLO0049)

2 Adaptation Committee of the Committee on Climate Change (CCC) (FLO0018)

3 Arla Foods UK (FLO0020)

4 AXA UK (FLO0026) and (FLO0103)

5 Anglian Water Services (FLO0047)

6 Association of British Insurers (FLO0032) and (FLO0092)

7 Barnes, Mr Paul and Harryman, Mr Keith (FLO0082)

8 Barry, Raymond (FLO0115)

9 Bell, Professor Sarah; Butler, Professor Adrian; Landstrom, Dr Catharina; and Mijic, Dr Ana (FLO0033)

10 Bevan, Linda (FLO0002)

11 Birkett, Joan (FLO0079)

12 Blackburn, Julie (FLO0109)

13 Bokhove, Professor Onno (FLO0074)

14 Bracken, Professor Louise; Heckels, Mr Neil; Johnson, Professor Karen; and Reaney, Dr Sim (FLO0087)

15 British Insurance Brokers' Association (BIBA) (FLO0050)

16 Brompton Flood Prevention Group (FLO0015)

17 Brown, Dr Sally (FLO0022)

18 Caterham Flood Action Group (FLO0013)

19 Chartered Institution of Water and Environmental Management (FLO0104)

20 Cheshire Mid-Mersey (CMM) (FLO0065)

21 Coastal Partnership East (CPE) (FLO0057)

22 Creegan, Mr. Darragh (FLO0010)

23 Cumbria Rivers Authority Governance Group. (FLO0102)

24 Curtis, Mr Bryan (FLO0044)

25 Department for Environment, Food and Rural Affairs (FLO0042) and (FLO0116)

26 Dhonau OBE, Ms Mary (FLO0031)

27 Doncaster Council (FLO0075)

28 Environment Agency (FLO0037)

29 Fire Brigades Union (FLO0004)

30 Firsby Group Parish Council (FLO0068)

31 Flood Control NI (FLO0066)

32 Flood Re (FLO0061), (FLO0097) and (FLO0106)

33 Floodplain Meadows Partnership (FLO0070)

34 Game & Wildlife Conservation Trust (FLO0040)

35 Gloucestershire Lead Local Flood Authority (FLO0036)

36 Grantham Research Institute on Climate Change and the Environment, LSE (FLO0085)

37 Greater Manchester Combined Authority (FLO0062)

38 Green, Professor Colin (FLO0051)

39 Hampshire County Council (FLO0024)

40 Institute and Faculty of Actuaries (FLO0059)

41 Institution of Environmental Sciences (IES) (FLO0016)

42 Jacobs, Steven (FLO0003)

43 Keswick Flood Action Group (FLO0038) and (FLO0110)

44 Lewis, Cllr Dr Erica (FLO0100)

45 Local Government Association (FLO0017), (FLO0088) and (FLO0105)

46 Local Government Association Coastal Special Interest Group (FLO0060)

47 London Borough of Sutton and Royal Borough of Kingston (FLO0076)

48 Markwick, John (FLO0005)

49 Mayo, Nancy (FLO0055)

50 Met Office (FLO0023)

51 Mineral Products Association (FLO0028)

52 Morse, Ali (Acting Chair of Blueprint for Water) (FLO0069)

53 National Farmers Union (FLO0025), (FLO0091) and (FLO0114)

54 National Flood Forum (FLO0045), (FLO0107) and (FLO0112)

55 National Infrastructure Commission (FLO0067)

56 National Trust (FLO0089)

57 Natural England (FLO0041)

58 North East Kendal Flood Action Group (FLO0048)

59 Policy Connect (FLO0084)

60 Priest, Dr Sally and Alexander, Dr Meghan (FLO0035)

61 Royal Institute of British Architects (FLO0083)

62 Sakai, Dr Paola (FLO0098)

63 Simmonds CBE MP, Mr David (FLO0095)

64 Smith, Dr Kate (FLO0043)

65 St Michael's-on-Wyre Flood Action Group (FLO0071)

66 Stocks, Nikki (FLO0054)

67 Strine Internal Drainage Board (FLO0001)

68 Telford & Wrekin Council (FLO0008)

69 The Blue Green Economy (FLO0086)

70 The British Association for Shooting and Conservation (FLO0021)

71 The Wildlife Trusts (FLO0101)

72 The Yorkshire Integrated Catchment Solutions Programme (iCASP) (FLO0019)

73 Town & Country Planning Association (FLO0039) and (FLO0080)

74 United Utilities (FLO0064)

75 Upper Calder Valley Renaissance (FLO0027)

76 UK Centre for Ecology & Hydrology (FLO0053)

77 Water UK (FLO0056) and (FLO0113)

78 West Yorkshire Combined Authority (FLO0052)

79 Westminster Sustainable Business Forum (FLO0012)

80 Whalley & Billington Flood Action Group (FLO0108)

81 Willis Towers Watson (FLO0034)

82 Witham Fourth District IDB (FLO0006)

83 Witham & Humber Drainage Boards (FLO0007)

84 Worcestershire County Council (FLO0029)

85 Yorkshire Water (FLO0058)

86 Zurich Insurance (FLO0046) and (FLO0090)

87 Hoddinott, Keith (FLO0111)

88 www.FloodEye.uk (FLO0094)

List of Reports from the Committee during the current Parliament

All publications from the Committee are available on the publications page of the Committee’s website.

Session 2019–21

Number	Title	Reference
1st	COVID-19 and food supply	HC 263
2nd	Pre-appointment hearing for the Chair-Designate of the Office for Environmental Protection (OEP)	HC 1042
3rd	The UK’s new immigration policy and the food supply chain	HC 231
4th	Flooding	HC 170
1st Special	Plastic food and drink packaging: Government Response to the Committee’s Sixteenth Report of Session 2017–19	HC 207
2nd Special	Beyond the Common Fisheries Policy: Scrutiny of the Fisheries Bill: Government Response to the Committee’s Eleventh Report of Session 2017–19	HC 208
3rd Special	An Update on Rural Connectivity: Government Response to the Committee’s Seventeenth Report of Session 2017–19	HC 228
4th Special	Coastal flooding and erosion, and adaptation to climate change: Interim Report: Government Response to the Committee’s First Report of Session 2019	HC 272
5th Special	Scrutiny of the Agriculture Bill: Government Response to the Committee’s Tenth Report of Session 2017–19	HC 273
6th Special	COVID-19 and food supply: Government Response to the Committee’s First Report	HC 841