



Environment, Food and Rural Affairs Committee: Flood Inquiry – IFoA Response

The Institute and Faculty of Actuaries (IFoA) is a royal chartered, not-for-profit, professional body. We represent and regulate over 32,000 actuaries worldwide, and oversee their education at all stages of qualification and development throughout their careers.

Key points

Our response focuses largely on insurance aspects of flood policy, including the insurance industry scheme, 'Flood Re'.

Recent events over late 2019/ early 2020 have helped demonstrate the importance of appropriate risk management of flooding in England.

We are unsure whether open data on flood in the UK is as comprehensive/ readily available as it could be. After a flood event, it is not necessarily straightforward to find out how many properties have been flooded, nor approximately where these properties are. We believe there is a role for agencies to collaborate in the development of open, granular data on flooding. This could lead to more accurate risk reflective flood insurance pricing.

Flood Re will provide breathing space for government to work towards a risk-reflective market, and has set in place plans to encourage this. However, it alone cannot ensure these plans are successful: this will rest on the ability of central and local government, planners and homeowners to control flood risk in a more practical and sustainable way, and how effectively the inevitable weather changes associated with climate change are managed. This includes a focus on resilient repairs, which may go beyond insurers' immediate obligations.

Central and local government will need to ensure planning guidelines are adhered to, to avoid new developments in areas of high flooding risk, despite the competing need to meet demand for housing.

Beijing

Edinburgh

Hong Kong

London (registered office)

Oxford

Singapore

14F China World Office 1 · 1 Jianwai Avenue · Beijing · China 100004 · Tel: +86 (10) 6535 0248

Level 2 · Exchange Crescent · 7 Conference Square · Edinburgh · EH3 8RA · Tel: +44 (0) 131 240 1300

1803 Tower One · Lippo Centre · 89 Queensway · Hong Kong · Tel: +852 2147 9418

7th Floor · Holborn Gate · 326-330 High Holborn · London · WC1V 7PP · Tel: +44 (0) 20 7632 2100

1st Floor · Park Central · 40/41 Park End Street · Oxford · OX1 1JD · Tel: +44 (0) 1865 268 200

163 Tras Street · #07-05 Lian Huat Building · Singapore 079024 · Tel: +65 6906 0889

1. The Institute and Faculty of Actuaries (IFoA) welcomes the opportunity to respond to the Environment, Food and Rural Affairs Committee's Inquiry into flooding. As noted in the introduction to the Inquiry, recent events over late 2019/ early 2020 have helped demonstrate the importance of appropriate risk management of flooding in England.
2. Members of the IFoA are employed in a number of fields including general insurance, where they play a key role in pricing, data analysis, modelling and risk mitigation/ management. Through this work, our members have a unique insight into the UK flood insurance industry. Our response therefore focuses largely on insurance aspects of flood policy, including the insurance industry scheme, 'Flood Re'.
3. It is important to note that, as for any IFoA inquiry/ consultation response, we have considered the issues from the perspective of the public interest.
4. We would be delighted to meet with the Committee to discuss our response in more detail. In particular, we would be happy to provide formal supplementary oral evidence, if helpful.
5. We have answered a subset of the Inquiry questions below, restricting our answers to areas where we have specific points to raise.

Q2. What lessons can be learned from the recent floods about the way Government and local authorities respond to flooding events?

6. We are unsure whether open data on flood in the UK is as comprehensive/ readily available as it could be. After a flood event, it is not necessarily straightforward to find out how many properties have been flooded, nor approximately where these properties are. This contrasts with crime data which is very granular, released on a monthly basis, and with street-level information provided on a wide range of crimes. We therefore believe there is a role for agencies such as the fire brigade, police, Environment Agency, Association of British Insurers and central/ local government to collaborate in the development of open, granular data on flooding.
7. In 2019 the London Fire Brigade attended more flooding incident call-outs (6,792) than domestic fire call-outs (5,262).¹ Whilst many of the instances of flood will not be natural flooding, the London Fire Brigade is clearly collecting flood incident data which could form part of the primary datasets, as well as data from insurance companies and other agencies.
8. Over time, flood risk modelling has become increasingly sophisticated with insurers developing flood models showing flood risk information at postcode level, and in more recent years at individual property level. More accurate risk reflective flood insurance pricing could be achieved with more comprehensive data applied to such enhanced flood models.
9. Greater availability of flood data could also enable developers to create tools and apps that would support a variety of flood initiatives. It would also enable academic research to be undertaken.

Q3. Given the challenge posed by climate change, what should be the Government's aims and priorities in national flood risk policy, and what level of investment will be required in future in order to achieve this?

10. Any national flood risk policy should be based on managing the impacts of changing weather patterns caused by climate change over the short, medium and (in particular) the long term. The

¹ Source: <https://data.london.gov.uk/dataset/lfb-financial-and-performance-reporting-2019-20>, P27

long-term nature of the policy will however mean that it will be necessary to conduct periodic reviews of the assumptions about the changing climate, to ensure the objectives and measures on flood remain achievable.

11. Central and local Governments' flood risk policy should be informed by undertaking robust, scientifically informed scenario analysis, to understand the likely increase in frequency and severity of extreme events that may lead to flooding.
12. This analysis should identify both property damage risks but also wider risks e.g. impacts on agriculture and pollution. The identification of mitigating actions including investigating use of and financing of nature-based solutions that meet other goals (e.g. biodiversity/ climate) will also be important.
13. In setting a national flood policy, the following interventions could be considered:
 - a moratorium on new planning permission on anywhere that has flooded in the last 50 years, with a reassessment of local government requirements and incentives to zone flood-prone areas for development;
 - embedding new building requirements to be resilient to a 4C degree warming by 2100;
 - publicise plans for insurance post Flood Re (*see response to Q6 below*).
 - including the escalation of flood damage as a contingent fiscal risk for HMT to be responsible in managing;
 - developing ways to embed social justice and food security alongside financial damage in prioritisation of flood mitigations.

Q6. 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?

14. Growing demand for housing has caused housing developers to continue building on flood plains, causing increased surface water runoff and placing additional pressure on infrastructure. This places new and existing homes at higher risk and has caused more homes to experience flood damage in recent years. This has all had serious implications for the UK flood insurance market. The damage caused by flood water can be disruptive and costly for those affected, and many individuals, families and businesses rely on insurance to help cover the costs of repairing a home after a major flood event.

Flood Re

15. A key consideration in the role of insurance in flood policy relates to Flood Re. As the Committee may be aware, Flood Re is a scheme funded by a levy on insurers that reinsures their customers' flood risk, allowing them to offer flood insurance to those homes at risk at a more affordable price. One of the most important aspects of Flood Re is that it provides time for insurers, central/ local government and homeowners to address deficiencies in planning policy, invest in flood defences and improve the resilience of housing stock.
16. The scheme is intended to be operational for 25 years until 2039, during which time there will be a role for central and local government, the insurance industry, environmental organisations, housing providers and homeowners in tackling flood risk. After this 25 year period, the Flood Re scheme assumes that improvements in flood resilience, as well as more sophisticated and readily available flood data will leave the insurance industry in a position to offer more affordable cover in a risk-reflective free market.

17. As well as providing a period of breathing space for industry and policymakers, Flood Re also intends to provide a point of focus for the next 25 years, to continue the debate about addressing the root of the environmental and planning issues. But the inescapable realities of climate change, coupled with a seeming lack of a long-term approach to investment in flood defence measures means that the success of these ambitious plans is far from guaranteed.
18. Properties built since 2009 are not eligible for Flood Re, which in theory should introduce pressure on planners to fully consider flood risk before new homes are built. However there remains a challenge in ensuring that a new property's flood risk is properly communicated both to the buyer and the insurance industry, so that both parties can avoid any shocks further down the line. Furthermore, Flood Re's scope also excludes business premises, large blocks of flats and reimbursement of resilient repairs (see below). Thus, the extent of exclusions from Flood Re's could leave too many (vulnerable) individuals and businesses 'at the mercy' of the open market on flood insurance.
19. Flood Re offers a risk solution to insurers who have the risk appetite to insure properties in high flood risk areas but does not compel insurers to write such risks. This raises the question of whether there are still significant domestic properties that find affordable insurance covering flood difficult to source.
20. In addition, Flood Re's eligibility tool (on their website) gives the impression that if you are eligible then the scheme will cover you/you have access to the scheme; the reality however is that ceding your property to Flood Re is a decision for an insurer. This raises a further question on whether the operation of Flood Re is properly understood by the public and the media; some commentators give the impression that Flood Re covers all flood claims, and is thus the full solution to flood risk.
21. Flood Re aims to phase out the annual levy on insurers gradually, while attempting to maintain premium threshold levels, through the following combination of factors:
 - reduction in the risk of flooding;
 - reduction in the cost of flooding;
 - increased competition in the insurance market.
22. However, it remains to be seen whether these steps will be effective in achieving the target result. Whilst Flood Re will provide the aforementioned breathing space for government to work towards a risk-reflective market, and has set in place plans to encourage this, it alone cannot ensure these plans are successful. Flood Re's long term success will rest on the ability of central and local government, planners and homeowners to control flood risk in a more practical and sustainable way, and how effectively the inevitable weather changes associated with climate change are managed.

Resilience

23. Incorporating resistance and resilience measures into repairs after a flood, is an important way to help ensure homeowners can avoid the adverse impacts of any future flood event. Choosing to use resilient repair techniques is within the control of the insurance company providing the repair, but is a decision to be made jointly by the insurer and the homeowner.
24. To date there is mixed evidence as to individuals' appetites towards these sorts of repairs, and little incentive for either party to opt for resilient repairs, despite the seemingly obvious benefits. This problem is heavily linked with individuals' understanding and interpretation of their home's risk of flooding again in future. If someone underestimates their future flood risk, even after having been flooded in the past, they may be tempted to take a chance and hope they will not be flooded again,

forgoing resilience measures for the sake of aesthetics or upfront costs. Anecdotal evidence suggests that this is a factor in people opting for or against these measures.

25. More broadly, insurers will be aware that the higher cost of resilient repairs could result in increased premiums. It is understandable that a lack of enthusiasm for these methods would be exacerbated by the idea that they would push the cost of insurance up for all customers. This could be offset by the reduction in claims on resilient households, but it would take time for this change to manifest itself.
26. Flood Re also does not currently reimburse insurers for costs greater than the standard reinstatement after a flood, so insurers do not typically pay for costs greater than the standard reinstatement cost. Any changes to this practice is likely to further increase costs because insurers have to treat non-ceded Flood Re customers the same as Flood Re customers. Whilst this would encourage more resilient repairs, it would increase costs for insurers and ultimately all policyholders.
27. We would encourage greater debate at a national level about this payoff, which acknowledges the increased risk of flooding, and the various impacts this could have on individual households, both in terms of their risk profile and their insurance premiums. The highly competitive nature of the contemporary insurance industry means that that legislation and regulation would be required to compel insurers to go above and beyond their immediate obligations when it comes to resilient repairs.
28. Insurance is generally on a property by property basis. Consideration could be given to whether there is a role for a consortium of insurers to co-insure flood prone communities with the support of Flood Re, so that resilience to flooding could be approached by insurers on a community basis rather than a property by property basis.

Insurer Flood Communications

29. A further point relating to insurance is that there may be scope for some insurers to provide more support to policyholders in relation to flood warning and information. For example, there are Apps available which provide information in real time on river levels adjacent to homes. However, policyholders could find it useful to receive warnings such as imminent rising water levels, direct from their insurer.

Policy Planning and Strategy

30. Planning guidelines are also a crucial factor in helping to protect owners of new housing from flooding and understanding the risks they may face. Central and local government will need to ensure planning guidelines are adhered to, to avoid new developments in areas of high flooding risk, despite the competing need to meet demand for housing.
31. More broadly, a workable, proactive, long-term strategy for dealing with flood risk needs to be executed before in time for Flood Re's transition plan to be a success for industry and customers. This means dealing with the root causes of flooding, and implementing a strategy that recognises the changing nature of flood events and the potential further impact of more frequent and extreme weather events. Achieving an affordable market based on risk-reflective insurance pricing by 2039 is only likely to succeed if the risks themselves change. Where the risk remains high, this will be reflected in household insurance premiums and action at all levels will be essential if customers are to benefit from an affordable insurance market after 2039. As implied above, the interaction of changing weather patterns and flood risk will impact insurance long beyond the termination of Flood Re.

Note that aspects of flood planning/ strategy are also included in our answer to Q3 above.

Should you want to discuss any of the points raised please contact Steven Graham, Technical Policy Manager (steven.graham@actuaries.org.uk) in the first instance.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'John Taylor', with a long, sweeping horizontal stroke extending to the right.

John Taylor

President, Institute and Faculty of Actuaries