

# Flooding, risk and flood insurance

## Overview

The Government's Water Bill, currently in front of the public bill committee, introduces a new flood insurance scheme – called Flood Re – that should protect the millions of British households at risk of flooding. Friends of the Earth is very concerned that the Government has explicitly **excluded** consideration of existing and future climate change impacts from the design of the scheme. This risks:

- Many more households facing unaffordably high flood insurance premiums in future;
- Unacceptably high costs to households and the economy from flood and water damage.

The **costs of flooding** to Britain's economy is already considerable. The economic losses from the July 2007 floods were estimated to be £3.2bn.<sup>1</sup> Flooding on July 20<sup>th</sup>, 2007 in Gloucestershire alone are estimated to have cost the county £50 million<sup>2</sup>. Figures published by the ABI show that the cost of flood damage since 2000 has leapt by 200% on the previous decade.<sup>3</sup>

Projections clearly shows that **climate change is set to dramatically increase flood risk**. The Government's own figures show that over the next 15 years alone, a million more people could be put at significant risk of floods because of climate change.<sup>4</sup> The best insurance policy we have against increased flooding is first to tackle the pollutants causing runaway global warming. But Britain also needs to be prepared against climate change impacts already in the pipeline, with flooding foremost amongst these.

### **This means the Government, and MPs, need to:**

- Find more money for flood defences – rather than presiding over a real-terms cut during this Parliament;
- Amend Flood Re to ensure the evidence of increased flood risks generated by climate change are explicitly factored into the scheme;
- Put in place a fair, affordable and lasting system of flood insurance that protects *all* households from an increasing level of flood risk as climate change worsens.

### **This briefing is divided into three sections:**

1. An overview of how climate change is affecting flood risk in Britain;
2. An analysis of the Government's Impact Assessment for Flood Re;
3. A critique of the Government's proposed flood insurance ('Flood Re') clauses recently published for inclusion in the Water Bill, with proposed amendments.

## 1. Flooding and climate change

Around 5.2 million households are currently at risk of flooding in Britain including 2.4 million exposed to coastal and river flooding, with 3.8 million threatened by surface water floods. Of these, around 370,000 properties are currently at *significant* risk of flooding from rivers or the sea, meaning that they stand a 1 in 75 chance of being flooded.

Estimates of how many homes are at *significant* risk of surface water flooding have not yet been made by the Government – the Environment Agency is obliged by EU Directive to publish new maps showing surface water flooding before the end of 2013, but recently

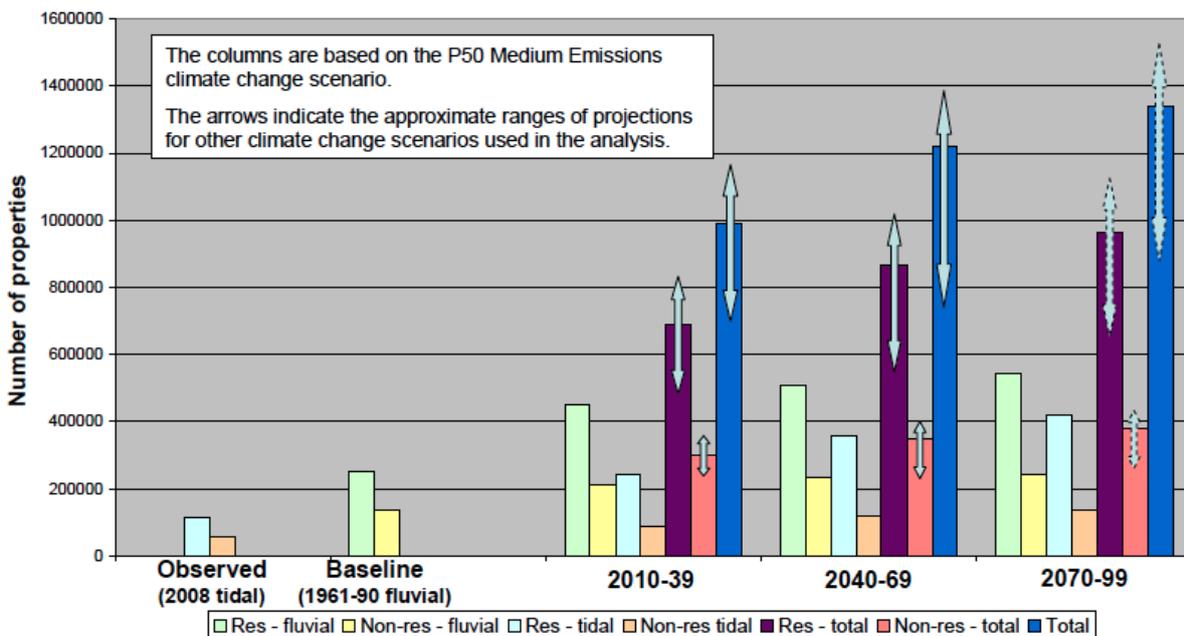
delayed publication, for unknown reasons. It is to be hoped they are published soon to aid scrutiny.

Flood risk is not static. Inappropriate development in the flood plain driven by a deregulated planning system is one factor. Friends of the Earth uncovered earlier this year that 4000 properties have been given planning permission in flood-risk areas between 2008-2013, explicitly against Environment Agency advice<sup>5</sup>. And, as Defra’s Climate Change Risk Assessment (CCRA) states, **“floods and coastal erosion are already serious risks in the UK, and they are projected to increase as a result of climate change.”**

Specifically, the CCRA gives the following projections for how many properties in England and Wales will be at *significant* risk of flooding in future, factoring in climate change:

- During the 2020s – between 475,000 and 825,000 homes
- During the 2050s – between 525,000 and 1 million homes
- During the 2080s – between 695,000 and 1.085 million homes

But these figures don’t account for population growth – which **could push the total at significant flood risk by 2050 to 1.5 million homes, and 2 million by 2080.**<sup>6</sup>



**Chart 1: Number of properties at significant risk of river or tidal flooding over time.**  
Source: Defra, CCRA, 2012.

## 2. Analysis of Flood Re Impact Assessment

Defra’s Impact Assessments (IA) for Flood Re fail completely to factor climate change, and the changing baseline of risk, into provisions for future flood insurance.

The Consultation stage IA (May 2013)<sup>7</sup> for Flood Re only mentioned climate change once, stating: “The analysis of the ‘do nothing’ scenario assumes that flood risk remains the same over time. It does not... take account of changing flood risk due to deterioration of existing

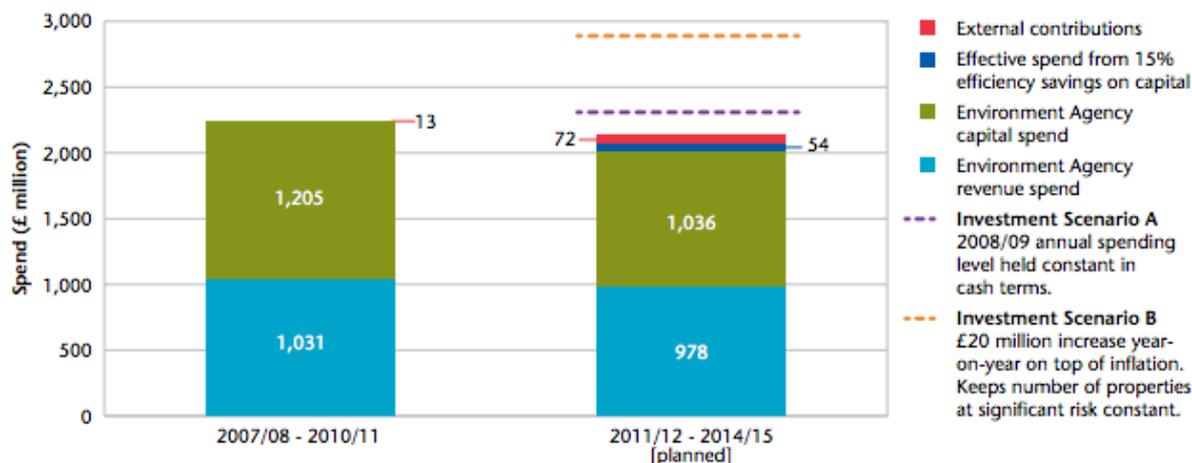
flood defences, climate change or development in flood risk areas.” In other words, the Government’s baseline scenario assumes climate change is not happening, in the face of all the evidence.

Defra’s final IA (November 2013)<sup>8</sup>, claims early on that it now “takes account of... the potential impacts of climate change”. But there is no serious analysis or evidence, simply a reiteration that “the baseline scenario assumes that flood risk remains the same over time”, and still does not factor in climate change.

Why? It appears that **Defra have made three unreasonable assumptions:**

- Defra claims “there is too much uncertainty around [the] figures” for future climate impacts on flooding, and so “they should not be used for policy purposes”. This is odd, as the figures being drawn on are Defra’s own – taken from the department’s huge, £3.5m Climate Change Risk Assessment (CCRA)<sup>9</sup>. The CCRA makes plain the confidence intervals it ascribes to its different projections, but this makes them more robust – it does not render them useless for policy formulation. The dynamic nature of the risk, and the fact it is increasing, is plain enough. **Dismissing the Climate Change Risk Assessment’s figures fails to appraise basic systemic risk.**
- Defra states that “the government’s intention is to phase out the [Flood Re] policy over time”, inferring that even if climate change causes more homes to become at risk of flooding, this will not contribute to spiralling insurance costs. **What this in fact means is that extra homes put at flood risk will simply not be covered by the insurance scheme.**
- Finally, Defra claims “as a working hypothesis” that “the effects of climate change and investments in flood defences are broadly offsetting.” **It is demonstrably not the case that current investments in flood defences are at a sufficient level to offset the effects of climate change on flooding.** The Foresight Programme and Environment Agency both recommend that flood defence spending needs to rise by £20million, year-on-year and on top of inflation out to 2030, just to keep pace with climate change.<sup>10</sup> Yet the Coalition has presided over a real-terms cut to flood defence spending.<sup>11</sup>

The graph below is taken from the Adaptation Sub-Committee’s Progress Report from June 2012, and shows historic and current levels of flood defence spending.<sup>12</sup> Missing from the graph is the £120m of new flood defence spending announced in November 2012<sup>13</sup>; but even factoring this in, the Coalition has still presided over a real-terms cut in spending. Moreover, current spending remains far below what the Environment Agency recommends in order to keep the number of properties at risk constant (represented in the graph by the orange dotted line).



**Chart 2: Past, planned and required levels of flood defence spending.** Source: ASC Progress Report 2012.

### 3. Critique of Flood Re clauses

Friends of the Earth raises the following concerns over the clauses. The numbering system used here relates to the numbers for the new clauses published on 29<sup>th</sup> November 2013.

**NC3 (New Clause 3):** Makes provisions for a levy to fund the flood insurance scheme, but leaves it to secondary legislation to define the amount that will be levied. The amount of money required to insure households will clearly be greater once climate change is factored in, as opposed to simply assuming that the baseline of risk remains static. There should be clear parliamentary oversight and an independent monitor of the levies to fund the flood insurance scheme.

**NC4:** Sets out how the current arrangements will “transition to risk-reflective pricing of flood insurance over time”. Essentially this means that, after the Flood Re insurance deal expires around 2039 (see below), households then at higher risk of flooding will have to pay far more for flood insurance. Yet as Defra’s CCRA shows, climate change will also have increased flood risk significantly by this point. It is unclear whether the Government is purposefully committing future generations of Britons to unaffordable flood insurance premiums, at a future date when climate change will be making flooding much worse. If the Government is seeking to deter the purchase and building of homes in flood-risk areas, it should do so through strengthening the planning system, and ensuring the advice of the Environment Agency is always heeded by developers and Local Authorities have the power to refuse inappropriate development in flood risk areas.

**NC8:** Allows the Environment Secretary to set a target number of registered households to be covered against a set definition of flood risk. This is a crucial clause that will define the number of households who will be covered under Flood Re. In the initial Memorandum of Understanding between the Government and the insurance industry over Flood Re, mention is made of the “ABI’s best estimate” that around 500,000 households are expected to be included in the scheme.<sup>14</sup> But as discussed earlier, Defra’s Climate Change Risk Assessment suggests as many as 825,000 homes could be at significant flood risk during the 2020s. It is therefore crucial that climate risks are

properly factored in to Flood Re and the scheme be made responsive to a shifting baseline of risk. This could be done in a number of ways, such as:

- For a duty to be placed on the Secretary of State take into account the latest evidence on households at flood risk.
- For a duty to be placed on the Secretary of State to require the advice of the Committee on Climate Change’s Adaptation Sub-Committee in determining this target number, in order for climate change to be factored in to the definition of flood risk.
- For the Secretary of State to be obliged to review this target number regularly, to take account of changes in flood risk as climate change progresses. A sensible review schedule would be each time the UK Climate Change Risk Assessment is updated, every five years.

**NC11:** Enables homes built after a certain date to be excluded from insurance cover under Flood Re. The date is not defined in the clause, but is to be set in secondary legislation; the original MoU over Flood Re stated that properties built since January 2009 would be excluded from the scheme.<sup>15</sup> Once again, a better and fairer way to deter inappropriate development is through the planning system. There is no financial incentive for developers to stop building in floodplains – once they have sold the properties they have no further involvement and it is the householder who is left with the risk and the cost. This is an example of how a market does not deliver what is best for households in Britain, and why planning is so important to get the right development in the right place.

**NC20:** Establishes that the Flood Re insurance scheme will expire 25 years after the date it is passed on – so if passed next year, the scheme would end in 2039. After this, flood insurance provisions would revert to a ‘risk-reflective’, free market system, as related above (see NC4). Given that climate change impacts are set to increase the Government is failing to take responsibility as a *government* to protect households in Britain.

## Contact

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## References

<sup>1</sup> Environment Agency, 2010, *The costs of the summer 2007 floods in England*, Cranfield University on behalf of the Environment Agency, Project SC070039/R1.

<sup>2</sup> <http://www.floodprobe.eu/partner/assets/documents/Floodprobe-Factsheet-casestudy-gloucester.pdf>

<sup>3</sup> ABI, <https://www.abi.org.uk/News/News-releases/2010/11/Massive-rise-in-Britains-flood-damage-bill-highlights-the-need-for-more-help-for-flood-vulnerable-communities-says-the-ABI>

<sup>4</sup> Defra, Climate Change Risk Assessment, 2012

<sup>5</sup> Reported in the Telegraph, ‘Thousands of homes built against EA advice “uninsurable”’, 1<sup>st</sup> July 2013, <http://www.telegraph.co.uk/earth/hands-off-our-land/10149300/Thousands-of-homes-built-against-EA-advice-uninsurable.html>.

<sup>6</sup> Defra, Climate Change Risk Assessment, 2012. Full report and appendices here: <http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=15747&FromSearch=Y&Publisher=1&SearchText=climate%20change%20risk%20&SortString=ProjectCod>

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<sup>7</sup> Defra, Impact Assessment, *Managing the future financial risk of flooding*, May 2013.

<sup>8</sup> Defra, Impact Assessment, *Managing the future financial risk of flooding*, November 2013.

<http://www.parliament.uk/documents/impact-assessments/IA13-27.pdf>

<sup>9</sup> Defra, CCRA 2012.

<sup>10</sup> Government Foresight Programme, *Future flooding*, 2008,

[http://www.bis.gov.uk/assets/foresight/docs/flood-and-coastal-defence/executive\\_summary.pdf](http://www.bis.gov.uk/assets/foresight/docs/flood-and-coastal-defence/executive_summary.pdf);

Environment Agency, *Investing for the future*, 2009, <http://a0768b4a8a31e106d8b0-50dc802554eb38a24458b98ff72d550b.r19.cf3.rackcdn.com/geho0609bqdf-e-e.pdf>

<sup>11</sup> Friends of the Earth correspondence with Defra press office, November 2013; CCC Adaptation Sub-Committee, Progress Report June 2012; House of Commons Library briefing, Flood defence spending in England, March 2013, <http://www.parliament.uk/briefing-papers/SN05755.pdf>.

<sup>12</sup> CCC Adaptation Sub-Committee, Progress Report June 2012,

[http://archive.theccc.org.uk/aws/ASC/CCC\\_ASC\\_2012\\_bookmarked\\_2.pdf](http://archive.theccc.org.uk/aws/ASC/CCC_ASC_2012_bookmarked_2.pdf) - graph on p.41.

<sup>13</sup> Government press release, 1<sup>st</sup> November 2012, <https://www.gov.uk/government/news/120-million-boost-to-flood-defences-will-protect-homes-and-businesses-and-help-drive-growth--121>

<sup>14</sup> Flood Re Proposal: Memorandum of Understanding, June 2013,

[https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CDEQFjAA&url=https%3A%2F%2Fconsult.defra.gov.uk%2Fflooding%2Ffloodinsurance%2Fsupporting\\_documents%2F20130626%2520Flood%2520Insurance%2520MOU%2520June%25202013%2520unprotected.pdf&ei=4M-fUqvSII2Y1AXtuoHAAg&usq=AFQjCNFCwVcZXCRKoLOIRo6zCD8b5xJ8qQ&sig2=xt\\_imhWH0bOcrfx3KQIQ&bvm=bv.57155469,d.d2k&cad=rja](https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CDEQFjAA&url=https%3A%2F%2Fconsult.defra.gov.uk%2Fflooding%2Ffloodinsurance%2Fsupporting_documents%2F20130626%2520Flood%2520Insurance%2520MOU%2520June%25202013%2520unprotected.pdf&ei=4M-fUqvSII2Y1AXtuoHAAg&usq=AFQjCNFCwVcZXCRKoLOIRo6zCD8b5xJ8qQ&sig2=xt_imhWH0bOcrfx3KQIQ&bvm=bv.57155469,d.d2k&cad=rja)

<sup>15</sup> MoU, June 2013.