Flood Re response to Ofwat's Creating tomorrow, together: consulting on our methodology for PR24

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FLOODRE

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Flood Re welcomes the opportunity to respond to Ofwat's *Creating tomorrow, together: consulting on our methodology for PR24*.

Flood Re is a joint government and industry re-insurance scheme established in April 2016 to increase the availability and affordability of flood insurance to high flood risk properties across the UK. Flood Re was set up to exist for 25 years and will **exit the market in 2039,** therefore **planning for current and future flood risk is critical to safeguard home insurance availability and affordability** in flood risk areas.

Flood Re does not cover new developments built after 2009. Therefore, **new developments should not be built in areas of high flood risk, and where this is unavoidable, they should integrate flood prevention and resilience measures from the design phase**. This could include solutions like Property Flood Resilient (PFR) adaptation or Sustainable Drainage (SuDS). These measures would help protect new developments from potential flood damage and, unaffordable insurance, and declining mortgage availability (and/or property value) as flood risk rises.

Ofwat as a regulator should seek to facilitate and incentivise such flood resilient best practices.

Our response will focus on Ofwat's four strategic ambitions for PR24 to help address the key challenges facing the sector.

These ambitions are:
1. increasing focus on the **long term**;
2. delivering greater **environmental and social value**;
3. reflecting a **clear understanding of customers and communities**; and
4. driving improvements through **efficiency** and **innovation**.

Ensuring physical resilience in times of crisis: emergency as the new normal[1]

1) Surface water flood risk is growing and is often exacerbated by new developments

Looking forward, **the Bank of England Climate Biennial Exploratory Scenario (CBES)[2]** asked insurers and banks to assess the impact of climate change on their assets for the next 30 years using three scenarios. The CBES scenarios are not forecasts of the most likely future outcomes. Instead, they are **plausible**

[1] *Climate Endgame: Exploring catastrophic climate change scenarios*, Luke Kemp, Chi Xu, Joanna Depledge, Kristie L. Ebi, Goodwin Gibbins, Timothy A. Kohler, Johan Rockström, Marten Scheffer, Hans Joachim Schellnhuber, Will Steffen and Timothy M. Lenton, PNSA, MIT, August 2022

[2] Bank of England CBES Chart 4.12, May 2022

representations of what might happen based on different future paths of climate policies, technological developments, and consumer behaviour, aimed at limiting the rise in global temperatures.

The three scenarios considered were named: Early Action, Late Action and No Additional Action (NAA). The NAA scenario explores the physical risks that would begin to materialise if governments around the world fail to enact any policy responses to global warming. Under an NAA Scenario, insurers projected a **rise in average annualised losses of around 50% on UK exposures.** The **impact on general insurers' liabilities in terms of average annual losses** has shown that **surface water risk (inland flooding) will become the highest growing and most costly peril.**

According to the Environmental Agency, over **3 million properties[3] in England are at risk of surface water flooding**, and this number will grow as climate change causes more frequent rainfall. However, solutions exist where rainwater can be managed so that it does not run over the surface and overwhelm drains and cause damage in peoples' homes. Currently, **the issue is often not given enough consideration during the planning process, or the level of risk is underestimated**. Consequently, **many new developments are adding to surface water flood risk and putting pressure on existing sewage infrastructure**. Furthermore, additional benefits that could be provided by solutions such as **sustainable drainage systems (SuDS)** (amenity space, biodiversity gains) go unrealized. **Ofwat should consider incentives for developers to promote the greater adoption of SuDS.** A useful corollary to consider is the nutrient neutrality regulation enforced by Natural England which requires developers to control their run-offs; developers found that SuDS were an effective tool in this regard.[4]

2) Implementing solutions and enforcement

Integrated water management approaches are essential. Droughts can exacerbate subsequent flooding as dry ground is not as absorbent, increasing surface water run-off risk. Therefore, **efficient water management during droughts can lower flood risk[5]**. Specifically, in the event of a drought, where drinking water is prioritised, farming and industry water use is stopped or limited; hence the farmers may resort to mega-basins[6] which dry out groundwater tables and further exacerbates ground impermeability.

The **Right to Connect exacerbates surface water flood risk** because sewage infrastructure cannot manage the increased stress new development puts on existing infrastructure in the face of risking storm water. Flood Re welcomes campaigns such as Connect Right, and the use of appropriate sanctions when connections are made without adequate flood risk provision.

3) Data to improve flood modelling and reduce risk

Flood Re welcomes the efforts on efficiency and storm overflows[7]. Ofwat should be instrumental in making critical data available for flood modelling. Surface water flooding is complex to model which can lead to an underestimation of the risk. **Ofwat should ensure standards of protection (SoP) offered by sewerage systems are made readily available to share by water companies**.

[3] Surface Water risk figure, Speech by Sir James Bevan KCMG, Chief Executive EA, CIWEM Surface Water Management Conference, October 2018
[4] Natural England, Nutrient Neutrality, March 2022
[5], Strategic Drought Risk Management, Paul Sayers, 2016
[6] French mega-basins project defended by agriculture minister 'worries' EU Commission, Euractiv media, 2021
[7] River water quality and storm overflows: a systems approach, CIWEM, 2022

Understanding the benefits and costs of innovation, a priority exercise

Innovation can be costly and its acceleration to market can be overestimated in economic scenarios[8]. Innovation thus needs to be prioritised in terms of feasibility and impact. Other factors to consider are the domino/cascade effects and whole life costs; for example, desalination includes energy OPEX costs. There are no silver bullets and education can go a long way.

Ofwat should facilitate and incentivise low-cost, easily implementable short-term innovations as the priority, coupled with long term transformations anticipating future risks.

1) Medium to long-term transformation considering upcoming water shortages, shifting away from considering the value of water solely as an asset but as a common good

- **Nature based solutions** offer two opportunities. Firstly, the opportunity to harness private capital financing to offset customer costs. Secondly, they offer beautiful solutions which can create greater environmental and social value. As WWT showed in their latest report, flood resilience can be achieved through multi-benefit approaches such as urban wetlands.[9] **The Taskforce on Nature-related Financial Disclosures (TNFD)** offers an opportunity to steer private investment for nature capital financing.
- **CIWEM pointed to soil and regenerative agriculture,** about 37% of the storage capacity for water in the UK is currently held in our soils.[10]
- **Scaling up greywater recycling systems at the local community level, will create a new market** which will offer a safe and cost-friendly option for domestic households[11]. As WSP points out, greywater systems are complementary to rainwater and sewerage systems and avoid saturation.[12]

[8] The Guardian article, August 2022
[9] WWT, Creating Urban Wetlands for Wellbeing A Route Map, 2022
[10] Are sponge soils the key to future UK climate resilience? Alastair Chisholm, CIWEM, August 2022
[11] The Guardian article, Greywater systems: can they really reduce your bills? 2014
[12] WSP, Recycled water article, 2022