Environment, Food & Rural Affairs Select Committee

Flooding Inquiry

Yorkshire Water response

May 2020

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Executive Summary
In November 2019 and February 2020, Yorkshire faced severe weather conditions not seen since the floods of 2007. These floods had a significant impact and did untold damage across the county, especially in West and South Yorkshire. In February, Yorkshire had to deal with three storms in quick succession, storm Ciara, storm Dennis and storm Jorge. Storms Ciara and Dennis caused excessive damage to Calderdale, West Yorkshire, which has a recent history of being severely impacted by flooding.

The UK faces two significant challenges over the coming years. The impact of climate change will likely see a rise in, and frequency of, extreme weather conditions such as flooding and droughts. Secondly, the post-Coronavirus recovery is a challenge no-one is familiar with.

Nonetheless this presents an opportunity for a green recovery – prioritising investment in flood resilience projects which will create jobs, benefit our environment, boost resilience and provide much needed confidence to businesses looking to invest. Taking a blue-green approach to flood resilience schemes through tree planting, peatland restoration and natural surface water management in the urban environment can bring wider benefits to society including greater access to green space, which boosts health and wellbeing.

Our response to the Committee's inquiry has six key recommendations:

1) **Accelerate investment in flood resilience.** Bringing forward investment would boost resilience, give businesses certainty for investment and provide wider benefits for society. Flooding and resilience projects should play a major role in post-Covid economic recovery.

2) **Ensure consistency and clarity over responsibilities for flooding.** Also, consistent messaging and communication is needed across flood planning and incident management. This includes external communication to communities and residents.
3) **Wider use of Natural Flood Management** as a key part of the solution to reduce runoff and flooding, which helps us to deal with the impact of climate change by offsetting carbon. This should be achieved through agricultural policy and incentives, like carbon markets. A new Environment Land Management Strategy is being consulted on by Defra with many proposed elements which cross-over into this area. It is imperative that the final strategy includes options for development and long-term maintenance of interventions which can reduce flood risk and improve water management.
4) **England should introduce a Sustainable Drainage Systems (SuDS) Approval Board** under the *Flood and Water Management Act* 2010, as seen in Wales in 2019. We also ask for the commencement of the part of the FWM Act 2010 that removes the right to connect surface water from new developments into our sewers.
5) **Community engagement is a key to changing people's mindsets.** Water companies, local and national government need to cooperate on this engagement and messaging to create real change (i.e. generating a cross sector response).
6) **Property Resilience and the role planning policy plays must be acknowledged** in relation to flood management and mitigation. We encourage the rollout of Property Resilience Certificates, which would let individuals know if their property is resilient to the short- and long-term impact of climate change.

Recent flood events have provided a stark illustration of the impact of climate change. It is vital that we take action immediately to improve our response to flooding. Acting now could also provide a route to a post-Covid green recovery.

Questions

1. Are the current national and local governance and co-ordination arrangements for flood and coastal risk management in England effective?

1.1. It is recognised at a national level that flood and coastal risk management could be more effective. Although Yorkshire Water has suffered from the effects of coastal erosion in our region, our submission to the Committee will focus on flood risk management and mitigation. The biggest constraint we see as a water and sewerage company to more effective flood risk management is the way in which *drainage* is managed through current legislation. A range of organisations possess multiple responsibilities and the complex interactions between different causes of flooding make it difficult to apportion risk and responsibility with certainty.

Another constraint is financing different parts of the water management system since each organisation with ownership of a section of the system has different regulatory environments and targets, and ways of calculating benefit and prioritizing investment. Additionally, water companies and the Environment Agency work on different investment cycles.

1.2. A key obstruction to more efficient and effective flood management is the inconsistency in managing water and floods across the Yorkshire region. Specific management arrangements and authorities differ depending on the governance area, which increases operational complexity. We acknowledge different regions can face unique challenges and the parties involved are representing the interests of the communities they serve, however the fragmented approach can lead to missed opportunities in the identification and adoption of best practice and at times frustration amongst parties who constantly must adapt to new operational models and expectations and lack clarity of their remits.

1.3. The second barrier of clouded or poor division of responsibilities is an outcome of the first one. Separate governance and coordination exist for flood mitigation planning as well as flooding incident management. The division of responsibility in each stage of flood management is unclear and inconsistent. Flood water should be treated as either 'everyone's water' and responsibility, or we need clear definitions of who owns and manages specific parts of the surface water management system, rivers and becks. The key to being able to manage flood risk more effectively in the future is a shared understanding of risks, responsibilities and coordinated investment, all of which needs to be supported by comparable quality data and coordinated regulation.

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

2.1. During the November 2019 and February 2020 floods, our crisis plan was escalated and put into operation at the earliest warning. We increased our available field team resources and upped staffing levels to ensure customers could access help if they needed it. We also ensured customers were kept up to date through media and social media channels.

2.2. What worked very well, was operational communications via the Local Resilience Forum (LRF). The LRF were well managed, chaired and attended by all parties, which lead to an exceptional response by all involved. This was seen particularly at Fishlake, Doncaster, and Snaith, near Goole, East Yorkshire.

2.3. Whilst operational communication was a strong point, engagement with the public continues to be a challenge. It is not clear to the public who is responsible for certain aspects of the response, which leads to confusion. This complicates the situation for all stakeholders involved in the immediate incident response.

2.4. During a flooding incident, one of the immediate priorities is vulnerable customers. Yorkshire Water have a Priority Service Register (PSR) which helps us identify customers who may be in a vulnerable situation in an incident. However, the *General Data Protection Regulation* (GDPR) 2018 and the *Data Protection Act* (2018) have put restrictions in place to sharing individuals' personal data across organisations. During an ongoing incident, these restrictions can often delay and subsequently impact our response to helping vulnerable customers. LRFs and the suppliers of vital service such as water or energy should possess access to such data during a major incident, in order to protect the society we serve and save lives.

Recommendation: Review the Civil Contingencies Act (2004) and the Data Protection Act (2018) to allow LRFs to access vital data at a time of a major incident.

3. 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?

3.1. There must be clear definitions that distinguish between the solution to climate change and the adaptation efforts to reduce the impact of climate change, in order to guide with investment. Moreover, the challenges posed by population and housing growth must also be acknowledged. Therefore, the government's aims and priorities should be considered through a catchment wide approach similar to the *Living with Water* scheme.

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Living with Water
Living with Water is a partnership scheme between Yorkshire Water, Hull City Council, East Riding of Yorkshire Council and the Environment Agency which is aimed at protecting those communities that have been, and continue to be, flooded in Hull. A crucial aspect of this partnership is the aspect of each party accepting equal responsibility for surface water management. Thus, in a flooding incident each partner works towards the same goal of reducing water level and removing surface water. Furthermore, everyone is clear of the role they play in this process due to consistent management.

3.2. For historical reasons, areas of high population density are often adjacent to waterways such as a stream or river. When these waterways become overwhelmed by the volume of water flowing from upstream the banks of the waterway may burst, resulting in nearby homes suffering flooding. To help reduce the risk, natural flood management processes should be incorporated into the stewardship of land upstream of areas at risk of flooding.

3.3. We believe such processes like peatland restoration, tree planting and the improvements in soil health and retention through farming practices, are more sustainable solutions than traditional grey infrastructure. Traditional flood defenses may protect property at one location but risk moving water downstream quickly and transferring the problem to another area. In contrast, catchment solutions slow the flow of water downstream, making flows more manageable. Catchment solutions are also more sustainable in that they emit fewer carbon emissions during construction and can be more easily scaled up over time as climate change increases the severity of rainfall, compared to continually building larger flood defenses or storage tanks. Some natural flood management processes also have a biproduct of removing carbon from the atmosphere, creating new community green space and boosting biodiversity.

3.4. Drainage and surface water connections to sewers is an ongoing, unresolved issue. This was one of the recommendations from the *Pitt Review* and the subsequent legislation, the *Flood and Water Management Act 2010.* If we are to place more surface water into our sewer network, we will increase the risk and cases of customer sewer flooding. We must commence the part of the FWM Act 2010 that removes the right to connect surface water from new developments into our sewers. Many watercourses are connected to the sewer network which gets overlooked in the way flooding is managed. In many areas the sewer network masks the real extent of surface water flooding because when it is overwhelmed by e.g. highway drainage, it hides the cause of the issue.

Recommendation: We strongly call for the removal of the automatic right to connect through the *Flood and Water Management Act*.

3.5. Some new properties are still given planning permission or are allocated on land defined as having a 1% or greater chance of flooding in any year. Whilst many of these properties may have mitigation as part of their design, new housing in flood prone areas increases the problem and the role planning policy plays needs to be considered. It must be recognised that some authorities, such as Hull, have no choice other than to build in areas of high flood

risk. However, in the case of Hull, there are very strict planning policies focusing on sustainable flood risk management and designed to guide developers with clear and consistent advice on how their developments can help contribute to managing surface water and reducing flood risk. Such an approach should be echoed across other high flood risk areas.

3.6. Utilising community resilience to a greater extent would allow for better adaptation. Currently discussions are held regarding a South Yorkshire flooding partnership aimed at reducing flooding along the Don river. Most of the water entering the Don will come from the Peak District, where Yorkshire Water, the National Trust and Sheffield City Council all own land. If we can improve land management practices together in the area, we may slow-the-flow of the Don during high rainfall. Furthermore, we work with planning authorities along the river to ask that new development includes processes which protect homes.

3.7. The Yorkshire Land Network brings together owners, managers, experts and users of land to discuss how land in Yorkshire could be managed for the benefit of the people, economy and environment. We work closely with other landowners across the region on issues relating to water quality, water attenuation, carbon capture and biodiversity. There is a consensus amongst land managers that these issues are important, even if they must be weighed against other considerations, like the financial viability of managing land. The Networks is also coordinating on Yorkshire carbon markets -project. Developing a market for carbon, biodiversity and ecosystem services is a way to fund investment in resilience through the businesses and authorities that will benefit from such services.

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

4.1. Yorkshire ranges from urban areas such as Hull and Sheffield, to mixed rural and urban areas like Calderdale and there are different reasons for why each area floods, and thus different solutions. This further complicates engagement with communities due to their differing needs and a variety of past flooding experiences. Flooding response do not have a "one size fit all" solution and adapting such approach can prove to do more damage than help.

4.2. It may be difficult to engage with communities as they can decide not to engage for a variety of reasons. Many people simply do not understand their flood risk, whilst others have been left disillusioned by what they see as a failure to deliver promised solutions. It is crucial to change the mindset of those communities that do not want to engage on this subject. Communities need reassurances that when engaging with agencies their contribution will be valued and seriously considered.

4.3. In addition to *Living with Water*, Yorkshire Water collaborated with the thinktank *Policy Connect* to publish a paper called *Bricks and Water*. It makes six recommendations which

could help involve individuals and communities in policy and decision-making. Community engagement is one issue agencies, Local Authorities and national Government can continually improve. During previous incident responses, many communities have felt they are only thought about after the incident. In order to build up a relationship and dialogue, a scheme should be put in place to understand communities' concerns and what ideas they may have to mitigate any damage caused by floods.

4.4. The new Drainage and Wastewater Management Plans could provide a vehicle for greater stakeholder and customer engagement in flood risk management. As part of the DWMP process, we expect to engage not only with major stakeholders such as the EA and Local Authorities but also with local groups and customers within our drainage catchments.

4.5. Another way of enabling communities to contribute may be to allow them a role in the decision-making process or allowing them to be able to 'vote' for schemes. However, the challenge will be to ensure fairness across a number of different groups and schemes when there is limited funding and schemes need to be prioritised. In such cases, a robust objective process is key to ensuring that risks are addressed in a priority/benefit order and not as a result of local pressure or recent events.

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

5.1. Drainage is a shared responsibility that requires coordinated action across a range of organisations nationally. Yet the Environment Bill does not reflect the scale of the challenge posed by climate change, or that drainage is a shared responsibility with other organisations. By limiting its ambition to the status quo, it misses an important opportunity to oblige those with responsibility for surface flooding to plan for it properly. As a bare minimum, the Bill should place a duty to cooperate on all drainage risk management authorities in the production of Drainage and 'Wastewater' (not just 'Sewage') Management Plans.

5.2. Increasing evidence exists showing that natural flood management can offer a contribution towards solving run off and flooding. However, it is not a solution if used in isolation from other mitigating measures, when it comes to changing the characteristics of flow off land. Yet the objective is about reducing peak hydrographs, by implementing a range of measures that slow the flow, such as landscape scale peatland restoration. Where appropriate, this can be complemented by targeted, strategic, engineered solutions such as using agricultural land as washland and flood storage.

5.3. As a result, we should not be asking *'how should future agricultural and environmental policies be focused and integrated with the Government's wider approach to flood risk'* but instead we should focus on how wider approaches to flood risk can be integrated with

Government's agricultural and environmental policies, because of the other associated benefits of biodiversity, water quality, and et cetera to recognise and reward land management changes that maximise other services. Generally, the Government policy should promote payment for ecosystem services, and it should recognise the multiple benefits that natural flood management schemes and processes can enable. If such schemes are implemented and executed properly, they will also deliver many of the government's objectives on biodiversity and climate change mitigation.

5.4. It is fundamental to start building farming and agricultural policy and guidance on how we farm. This would not just solve problems around flooding, but it would also help food production. Additionally, it is crucial for post Covid-19 economic recovery that we generate more opportunity to farmers to get further value from their land. A mechanism for land valuation must be created that realistically evaluates and measures how the land is used and how it contributes to the environment and economy. Any ELMS incentive schemes must support not only the delivery of interventions, but their long-term sustainability.

5.5. Furthermore, a joined-up plan for land use can help ensure we are making the most of it. There must also be a process of evidence-based decision making, which brings together the aspect of carbon, flood risk and biodiversity. Our recommendation is for Northern leaders to work with organisations with statutory responsibility for nature, and other organisations with a strategic interest in the health of the natural environment, to create a joint forum for discussion and, where appropriate, aligned decision-making and a strategic vision for nature in the North. Opportunities like the Yorkshire Land Network should be considered as potential vehicles for delivering large scale landscape change to promote resilience.

5.6. The Government should provide funding for the development of a spatial strategy for investment in nature in the North, including a mapping of the North's natural capital. Moreover, they should commit to providing substantial, long-term and devolved funding to put the Plan for Nature in the North into practice.

6. 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?

6.1. The National Planning Policy Framework (NPPF) makes clear that in drawing up Local Plans, Local Planning Authorities (LPAs) must ensure policies relating to climate change adaptation and risk mitigation are explicit. LPAs are expected to produce a Strategic Flood Risk Assessments to inform the location of development.

6.2. However, this is not always reflected when a development is proposed. Flood risk assessments generally have an emphasis on fluvial flooding and ignore land drainage which can have a significant risk to flooding downstream especially if the natural drainage systems within the subsoil are altered by the development. To avoid this, all developments other than those involving a change of use of a building should undergo a risk assessment/surface water management plan.

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6.3. In 2019, Wales installed Sustainable Drainage System (SuDS) Approval Boards under the Flood and Water Management Act 2010 to approve drainage systems on most new development. This has not been the case in England where councils became Lead Local Drainage Authorities, who in effect are just another consultee in the planning process. We encourage England to introduce a SuDS Approval board in order to resolve the issues in decision making processes. Furthermore, responsibility of housing developers should be enforced – from assessing the site, to building it, to resilience in the future.

6.4. With increased population growth, only certain areas of land are available to be built on. Thus, properties are being built on flood plains where surface water management is not optimised. There is the potential for setting a 'national standard' for flood resilience for properties to increase consistency, which should be made mandatory for all new developments. However, many houses at risk of flooding are not 'new' and it would be difficult to apply any such standard retrospectively. Furthermore, 'property resilience' becomes apparent over time. A property may be resilient and the time of built, but the impact of climate change and subsequent flood risk could impact the property's resilience to cope with flooding.

6.5. A coordinated approach on housing resilience across all the interested parties and regulators needs to be supported. There are still challenges around how much individual property owners are prepared to take responsibility. Alongside those houseowners who have struggled to get insurance after a flood event, there are others who make a conscious decision not to insure their homes. We would encourage the inclusion of Water Sensitive Urban Design (WSUD) concepts into the future iterations of planning and development guidance.

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