

Further written evidence submitted by Water UK (FLO0113)

Dear Chair,

Further correspondence: Flooding Inquiry evidence session, 22nd October

Thank you for inviting Water UK to give oral evidence as part of your committee's ongoing inquiry into flooding. At the hearing, I promised to write to the committee in relation to a question from Ms Sheryll Murray MP about ways to improve methods of surface water management, aside from Sustainable Drainage Systems (SuDS).

Surface water management, wherever possible, should follow natural processes and rainfall should be kept out of the public sewer as far as is practicable. Doing this reduces the pressure on existing sewer infrastructure, reduces the need to pour concrete unnecessarily, and cuts the volume of surface water which is unnecessarily treated at sewage works or can result in storm overflow spills.

As I highlighted in the hearing, collaboration between all organisations with flood risk responsibilities in the development and implementation of Drainage and Wastewater Management Plans (DWMPs) will be crucial to ensuring better flood risk management across the board. However, DWMPs as set out under the Environment Bill represent a missed opportunity to deliver a collaborative management of flood risk and the impacts of climate change.

This is because the Environment Bill only places a duty to cooperate on water companies, when there are, in reality, many other flood risk management authorities who also have a big role to play.

For example, the Environment Agency, local authorities (as Lead Local Flood Authority and the body responsible for highways drainage), Internal Drainage Boards, and riparian owners all have their own areas of responsibility in managing flood risk, while Regional Flood and Coastal Committees also play an important role. Experience tells us those other stakeholders will not consistently engage in the development of DWMPs, which risks seeing them designed by water companies in isolation. The result will be inadequate accounting for flood risk that lies beyond the immediate remit of the water industry.

We are therefore calling for an amendment to the Environment Bill to ensure that all flood risk management authorities have a duty to cooperate and share information in a timely manner to support the preparation of DWMPs, the main analysis for which would still be led by water companies. Please see attached annex for more. Working with the Environment Agency and other stakeholders, we have produced an accessible guide to the benefits of working together to produce DWMPs ([here](#)). This includes case studies highlighting the benefits that can be achieved through multi-risk management authority collaboration, for example in constructing wetlands to reduce flooding in Enfield.

Aside from DWMPs and SuDS, there are a number of other ways to improve surface water management:

- **Community engagement and improved communications**

Flooding is a complex topic, with many causes and multiple stakeholders with varying responsibilities which are difficult to readily communicate to the general public. Therefore, informative, clear and simple communications for communities have a key role in helping reduce flood risk. However, these efforts vary across different areas of the UK depending on the Lead Local Flood Authority. Some good examples of community engagement and communication that we are aware of include Northamptonshire County Council's [Flood Toolkit](#) and The Greater Manchester Flood Risk Partnership's [Flood Hub](#).

- **Addressing surface water misconnections from housing development**

The misconnection of surface water drainage to the foul sewer can cause serious problems. In heavy rainfall, misconnections result in surface water entering foul or combined sewers, and can cause flooding internal to a property or result in spills from storm overflows. This is because excess water is entering the foul sewer for which it was not designed.

In order to reduce the likelihood of this happening, local planning authorities should carry out more rigorous assessments of drainage connections to ensure that the drainage arrangements meet those outlined within approved planning permissions. Similarly, water companies should be empowered to take corrective retrospective action against developers who do not meet their planning consents. This would ensure correct surface water management and lessen the distress of internal flooding to homeowners who are too often unaware of the misconnection issue.

- **Multi-use spaces**

Multi-use spaces, also known as multifunctional infrastructure, help to mitigate flood risk whilst serving another purpose, such as social or leisure amenity. For example, a basketball court, which is lower than the surrounding land, may lower flood risk by holding surface water during large storm events, whilst fulfilling its sporting purpose for the local community the majority of the time. These are not commonplace in the UK, and the planning system does not help facilitate and promote their delivery owing to uncertainties around adoption and maintenance responsibilities. However, such multi-functional drainage options, alongside SuDS, can have an important role to play in cutting overall flood risk.

- **Rainwater harvesting**

As is possible with SuDS, rainwater harvesting captures surface water for reuse in the home, such as to flush toilets. Removing this surface water from the drains improves water efficiency (by reducing demand on clean water supplies) and reduces flood risk through its retention and reuse in the home. Combining SuDS and rainwater harvesting measures, through Integrated Water Management techniques can help to reduce the impact of new and existing development on the environment and make homes more resilient to a changing climate.

- **Property Flood Resilience**

Where it is not possible to protect homes from surface water flooding through the installation of SuDS or traditional flood risk management infrastructure, property flood resilience measures can be used to make homes less susceptible to flooding using a range of affordable products. This can include flood doors, air brick covers and water resistance products which are fitted within the home, and non-return valves that can be fitted in the sewer.

- **Natural Flood Management**

Finally, as was discussed in the hearing, natural flood management (NFM), as part of a catchment-based approach to water resource management, has a key role in managing flood risk. NFM involves four key mechanisms – increasing temporary storage of flood water; increasing roughness of watercourses to ‘slow the flow’; increasing losses from evaporation or groundwater infiltration; and reducing flows downstream by desynchronising tributaries. We see NFM is a key tool in the reduction of flood risk and support its wider adoption.

I trust this provides the information sought in answer to outstanding question. Should you have any further questions, please do not hesitate to get in touch.

Yours sincerely,

Rob Wesley
Head of Policy

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Improving flood risk management: Drainage and Wastewater Management Plans

We strongly support putting Drainage and Wastewater Management Plans on to a statutory footing. The water industry already prepares these and was a driving force behind their original creation. However, within the Bill, there are two key issues which need to be amended:

1. The Bill confusingly refers to ‘Drainage and Sewerage Management Plans’, despite Defra and the industry jointly working on ‘Drainage and Wastewater Management Plans’ for many years, and companies already publishing plans with that name. This is not a minor point because the terms ‘sewerage’ and ‘wastewater’ are not interchangeable: sewerage has a narrower meaning that excludes many sources of contamination entering rivers – sources that are the responsibility of bodies we need to collaborate with us on producing drainage plans if they are to be successful. The Bill should be amended to ensure that:

- **The terminology ‘wastewater’ is used throughout the legislation rather than ‘sewerage’, as previously agreed by Government and all other stakeholders when these provisions were being developed.** If necessary, adding an appropriate definition for the term ‘wastewater’.

2. Relatedly, the bill only places obligations on water companies for something they are already doing. This does not reflect the scale of the challenge from climate change, and that drainage is universally recognised to be a shared responsibility, with other organisations also responsible for managing surface water. As written, the plans will exclude significant bodies involved in drainage and eliminate much of the potential benefits that customers, society and the environment could otherwise gain.

While water companies will lead the production of DWMPs - and are already committing significant resources in carrying out this role - it is a fundamental feature of drainage and wastewater planning that water companies cannot do this in isolation, because drainage is shared with other ‘risk management authorities’ (RMAs) as defined in the Flood and Water Management Act 2010. There are, for example, large numbers of drainage assets that are not under the ownership of water companies, the management of which needs to be integrated into DWMPs.

This has been recognised by the National Infrastructure Commission in their [recommendation](#) that ‘water companies and local authorities should work together to publish joint plans to manage surface water flood risk by 2022’.

Therefore, we need to see within the Environment Bill:

- As a minimum, **all other flood risk management authorities should have a duty to co-operate** in the production of DWMPs. This could be given statutory force by, for example,

expanding the definition of 'flood risk management function' in section 4 of the Flood and Water Management Act 2010, and making other risk management authorities statutory consultees for DWMPs.

- There should also be the ability to require other flood risk management authorities to provide information needed for the production of DWMPs.
- We also recommend that it would be beneficial for Regional Flood and Coastal Committees to be statutory consultees for DWMPs. Consideration of how provisions apply to these additional bodies is needed.

Suggested Amendments:

94A

- *Clause 76, page 68, line 3 Leave out 'sewerage' and insert 'wastewater'*
- *Clause 76, page 68, line 5 Leave out 'sewerage' and insert 'wastewater'*
- *Clause 76, page 68, line 6 Leave out 'sewerage' and insert 'wastewater'*
- *Clause 76, page 68, line 8 Leave out 'sewerage' and insert 'wastewater'*
- *Clause 76, page 68, line 10 Leave out 'sewerage' and insert 'wastewater'*
- *Clause 76, page 68, line 26 Leave out 'sewerage' and insert 'wastewater'*
- *Clause 76, page 68, line 41 Leave out 'sewerage' and insert 'wastewater'*
- *Clause 76, page 68, line 43 Leave out 'sewerage' and insert 'wastewater'*

94B

- *Clause 76, page 69, line 13 Leave out 'sewerage' and insert 'wastewater'*

94C

- *Clause 76, page 69, line 41 Leave out 'sewerage' and insert 'wastewater'*
- *Clause 76, page 69, line 44 Leave out 'sewerage' and insert 'wastewater'*
- *Clause 76, page 70, line 2 After 'licensee' insert 'or risk management authority, where risk management authority has the same meaning as in Part 1 Section 6 of the Flood and Water Management Act 2010'*

94E

- *Clause 76, page 71, line 13 Leave out 'sewerage' and insert 'wastewater'*
- *Clause 76, page 73, line 29 Insert*

*'In the Flood and Water Management Act 2010, after section 4 (2) (f) insert –
(g) a function under section 94A of the Water Industry Act 1991'*