

A review of the opportunities and challenges relating to surface water management

Briefing

Despite surface water flooding being the most common flood risk in England¹, a survey of flood Risk Management Authorities (RMAs) in England shows it remains the Cinderella of flooding sources. Events such as the flash flooding in London in July 2021 bear witness to the risks of intense downpours hitting urban areas. Climate change and the growing coverage of impermeable surfaces mean these risks are increasing.

Surface water management in England is not consistently coordinated or supported and funding often doesn't get to where it's needed most. We're recommending that Government, specifically Defra and the Environment Agency in its strategic overview role for all sources of flooding, should improve engagement and leadership to tackle persistent challenges being faced by RMAs.

Research scope and approach

CIWEM was commissioned by the Association of SuDS Authorities (ASA), Local Government Flood and Coastal Erosion Risk Management Technical Advisors Group Water (LG FCERM TAG) and the London Drainage Engineers Group (LODEG) to investigate the current situation. An electronic survey distributed to RMAs, supplemented by focus groups with local government RMAs and water companies was undertaken in the summer and autumn of 2022, examining:

- How effectively RMAs are able to cooperate and collaborate in managing surface water flood risk;
- the accessibility of funding to enable them to deliver necessary surface water flood risk management schemes, and
- the capacity and skills at their disposal to enable this.

Findings

Surface water flood risk is commonly managed by small teams frustrated by unclear duties and remit, complicated funding processes, fragmented data and a lack of capacity and skills.

The survey provides a snapshot of the views of the RMA respondents, rather than the full RMA community. The majority of survey respondents were from Lead Local Flood Authorities at unitary authority level and county level. Despite the extent and range of risk to be managed, the majority of RMAs had three or less full time equivalent employees discharging the risk management responsibility. This was lower for those working in unitary authorities.

These small teams have to deal with a large volume of development proposals requiring scrutiny and planner-engagement on surface water drainage and also need to manage existing flood risks. The survey

¹ [Reducing the risks of surface water flooding](#). National Infrastructure Commission, 2022

suggested only a third (34%) of RMAs had a full complement of staff to deliver surface water management responsibilities and nearly three-quarters (74%) of RMAs found it challenging to fill vacancies.

They must work collaboratively with other relevant authorities when findings suggest the detail of exact areas of responsibility between these authorities can be poorly defined or understood. Just over a third (35%) of respondents suggested that approaches to support inter-RMA cooperation and collaboration were currently effective, or very effective.

Moreover, it is reported that data is often fragmented, and authorities must work within a local funding landscape which does not effectively enable the management of surface water flood risks, despite the quantum of flood risk management funding for other flood sources being significant. Just over half of the respondents (52%) said they had an allocated (ring fenced) budget for surface water management. However, less than half (41%) of these (21% of all respondents) have long-term certainty on their budgets for managing surface water.

The impact on flood risk and the wider environment of rainfall on and runoff from impermeable surfaces is being increasingly recognised and reflected in policy change, such as the decision to commence Schedule 3 of the Flood and Water Management Act (on sustainable drainage) and on tackling storm overflow discharges from combined sewer networks.

The recognition of surface water management challenges is crucial to achieving necessary progress on climate resilience and pollution reduction. This should put the management of surface water in towns and cities onto a higher priority level in the face of climate change and urbanisation. However, RMAs will require even more collaboration, data sharing, supportive funding frameworks and skilled people to ensure that they deliver policy outcomes effectively and efficiently.

Despite previous surface water management reviews and action plans² pointing to these challenges, there is still a need to improve clarity of responsibility and legal duties, data sharing and transparency, cooperation and collaboration, and skills and capacity within and between RMAs – particularly local authorities. This is critical to addressing the lack of progress in adapting to the effects of climate change repeatedly shown by the Climate Change Committee in its regular reports³ to Parliament. Our findings support many of those made by the NIC and earlier surface water management reviews. More concerted action is now needed.

Priority recommendations

On the basis of our findings we make 19 specific recommendations for action on the part of government, the Environment Agency, Ofwat, Regional Flood and Coastal Committees, RMAs themselves, as well as professional bodies. These are detailed in the summary and main reports of this research but may be summarised as:

- 1) **Government to show greater leadership on surface water management.** This should include clarifying the Environment Agency's Strategic Overview role and what it means for surface water management in the context of the original intent of the Flood and Water Management Act 2010.
- 2) **Government should ensure that sufficient funding is provided to surface water management schemes.** This should both ensure the split between funding for the management of all sources of flooding is reflective of risk. Additionally, it should ensure the balance between funding for capital

² [Surface water management: a government update](#). Defra, 2021

³ [2021 Progress report to Parliament](#). Climate Change Committee, 2021

schemes and ongoing maintenance reflects the importance of ongoing maintenance for continued resilience.

Government should also review funding application processes to reduce the resource burdens on RMAs in developing business cases for schemes, many of which are small.

Finally, government should consider whether designation of funds to local authorities for surface water schemes would be a more efficient and effective approach than the current mechanism requiring bids to the Environment Agency and Regional Flood and Coastal Committees.

- 3) **Government, Environment Agency and other RMAs to improve engagement.** This should include approaches to better communicate and engage with all RMA groups on national FCERM initiatives. RMAs should share named contacts for the management of surface water at all RMAs to improve engagement, cooperation and collaboration.
- 4) **RMAs, professional bodies and universities should review the skills needs for effective surface water management.** This should consider the existence and need for improved quality, accredited training for those managing surface water (covering flood risk, water quality, storm overflows). Consideration should also be given to how apprenticeships and vocational training may be better deployed to improve capacity within RMAs.
- 5) **Government should clarify and consolidate surface water management regulations, standards and plans.** This should reduce complexity, increase understanding of responsibility and drive collaboration. The number of different plans and drivers has increased over the years but have not addressed this problem.

The different reporting requirements and reporting processes involved add burden to RMAs and hamper the ability to understand flood risks, find opportunities to collaborate and achieve efficiencies. So, in most cases surface water management activities are still siloed, or unintentionally duplicated.

- 6) **Government to improve approaches to the collection and sharing of data and development of asset registers.** Despite legal requirements to share data as set out in the Flood and Water Management Act 2010, this is still an area of frustration across RMAs which has seen little improvement. Data fragmentation and a lack of sharing persist.

Likewise, whilst there are also legal requirements for RMAs to compile asset registers, guidance on good practice approaches is sparse perpetuating the fragmentation of data and information risking misrepresentation of the number and condition of assets. The Environment Agency has developed an Asset Information Management System. It should ensure this is optimised equally for surface water management assets as for other flood risk management assets. Likewise, Defra has promised further guidance on registers by the end of 2023. It is important this is delivered.

Full supporting documents may be found at:

[Surface Water Management: A review of the opportunities and challenges - CIWEM](#)