

## **Environment, Food and Rural Affairs Select Committee Post-legislative scrutiny: Flood and Water Management Act 2010**

### **Background to CIWEM**

CIWEM is the leading independent Chartered professional body for water and environmental professionals, promoting excellence within the sector. The Institution provides independent comment on a wide range of issues related to water and environmental management, environmental resilience and sustainable development.

CIWEM welcomes the opportunity to respond to the Environment, Food and Rural Affairs Select Committee on its post legislative scrutiny of the Flood and Water Management Act 2010. This response focusses on the question around the alternative approaches to commencing the sustainable drainage measures of the Act reporting the findings of our recent research in this area.

### **Summary**

In England the law and statutory policies relating to sustainable drainage have remained static since the Flood and Water Management Act 2010<sup>i</sup> (FWMA). The Government chose not to commence Schedule 3 of the Act to avoid what it perceived to be a surfeit of bureaucracy, unfortunately this has created a void of effective policy. We continue to consider that Schedule 3 would most effectively deliver the nation's needs in relation to sustainable drainage and effective management of surface water flood risk. However, we recognise that the underlying political appetite for doing so is unlikely to have changed. In view of this we have worked to develop alternative proposals which address the shortcomings of the current approach.

CIWEM has recently published research alongside WWT and supported by 15 other organisations into the quality of sustainable drainage systems in England under the alternative planning led approach. CIWEM considers intervention at the national scale is needed to increase the uptake of SuDS and resolve issues around their management. These interventions are detailed within our evidence, the full report on our research and findings can be found at [www.ciwem.org/suds](http://www.ciwem.org/suds).

We consider that significantly greater effort should be invested in delivering sustainable drainage and green infrastructure both in new and existing developments than is currently the case. With so many more homes planned for the next few years, we have a real opportunity to ensure that everyone can benefit from the protection and amenity offered by sustainable drainage systems (SuDS).

### **Written evidence**

#### **The effectiveness of Defra's alternative approaches to commencing sustainable drainage systems measures set out in Schedule 3 of the Flood and Water Management Act**

Surface water flooding is a growing problem, intensified by urbanisation and changing weather patterns delivering more intense rain storms. An estimated three million properties are already at risk of surface water flooding in the UK, and unlike other sources of flooding which may be more predictable, it can affect many other properties which are not identified on flood risk maps.

Following the devastating flooding in July 2007, the Pitt Review recommended introducing a consenting scheme for sustainable drainage systems in new development and the removal of the automatic right to connect to public sewer systems. This was devised as a way to address the issue of drains and sewers being overwhelmed by excess surface water. Ofwat estimates that about half of average annual flooding incidents are a result of the capacity of the drainage system being exceeded.

Schedule 3 of the FWMA 2010 proposed the establishment of a SuDS approving body (SAB) within each lead local flood authority (LLFA). The SAB would have the primary responsibility for approving SuDS related drainage systems prior to construction. However the Government announced in December 2014 that the SuDS provisions in the Act would not be introduced. A revised approach was announced based on 'strengthening' the planning system (through the National Planning Policy Framework), to create an 'expectation' that major planning applications (i.e. those of ten dwellings or more) would include SuDS.

However the changes fail to address the fundamental barriers to the uptake of SuDS highlighted by the Pitt Review:

- Developers retain their automatic right to connect new homes to the public sewerage system, with no regard given to their capacity.
- It leaves the biggest challenge for LLFAs in the responsibility for the ongoing maintenance of SuDS systems. If SuDS are not maintained, particularly by private management companies, they will fail to operate, pose a flood risk and their multiple benefits will be lost. Without the creation of SABs there is no agreement on who will pay for and perform maintenance on proposed SuDS. This is currently decided on a case-by-case basis, with the SuDS removed from the plans if no agreement can be reached.
- Had SABs been created they would have had to consult with a number of bodies, including the Environment Agency, any relevant internal drainage board and sewerage company when considering an application.
- Without statutory SuDS standards there is no hierarchy of acceptable discharge solutions (with infiltration to the ground the most preferred option). A traditional underground oversized pipe and tank solution would actually meet the non-statutory national standards for SuDS at present which do not tackle water quality or improve amenity.

As a result of the policy change there is no ongoing monitoring at a national level of the uptake of SuDS, nor of the effectiveness of final designs in managing run-off from new developments. Analysis for the Adaptation Sub Committee<sup>ii</sup> of 111 planning applications in areas of flood risk, found only 45 per cent of the plans reviewed made a reference to the term 'sustainable drainage'.

### **CIWEM considers intervention at the national scale is needed to increase the uptake of SuDS and resolve issues around their management.**

CIWEM recently conducted research supported by a number of professional bodies and organisations<sup>iii</sup>. Our evidence indicates that the vast majority involved in delivering SuDS consider current policy is ineffective with many new homes built without the full benefit of SuDS:

1. At the majority of sites, the costs and particularly the benefits of implementing SuDS are not being assessed.

2. Physical site constraints are frequently cited as reasons to 'opt-out' of delivering SuDS in new housing and commercial developments, when the range of options available means this is commonly unjustified.
3. In many areas planning authorities do not have the capacity to judge the merits of applications properly, leading to more opt-outs than necessary on the grounds of price and practicality as many go unchallenged.
4. Where SuDS have been delivered, they often miss opportunities to provide multiple benefits as they follow the very narrow official standards that presently exist.
5. The adoption and future maintenance of SuDS are the greatest barrier that needs resolving.

In its post legislative scrutiny Defra notes<sup>iv</sup>: *"Stakeholders raised a number of concerns around proposals for implementing Schedule 3, including that housing supply could be negatively impacted."*

In our experience developers and house builders are not opposed to implementing SuDS they just require a strong policy to do so. Our research found 70 per cent of respondents that are involved in SuDS implementation do not think current planning policies sufficiently encourage SuDS.

We found that the inclusion of SuDS was not identified as a particular cause of delay to development. Where delays occur, they are actually often the result of uncertainty over the on-going maintenance of the systems, rather than construction of the SuDS themselves. We therefore consider that providing certainty on 'adoption' of SuDS would help to speed up the planning process.

Whilst policy requires the use of SuDS in major development and to be given a priority in flood risk areas, developers may 'opt out' of the requirement on the basis of practicability and affordability. The current planning policy allows for too great an opportunity to 'opt out'. We find that arguments for not delivering SuDS on the basis of site constraints (the most frequently cited reason) and costs may be overstated as the range of options available means it is nearly always possible to incorporate some measures. Our findings suggest that with good planning there may be no additional requirement for land or that the additional land needed for SuDS can be small and affordable.

In terms of costs, new research for the Welsh Government has shown that SuDS cost less than conventional drainage at all scales for both capital costs and maintenance costs. It finds that on average, the use of SuDS could save Wales over £9,000 per new home in capital costs alone. Where amenity is improved this can also add to increased property prices.

Current planning policy misses the opportunity to integrate SuDS into minor developments (between 1 and 9 dwellings) which make up over 90 per cent of planning applications.<sup>v</sup> Defra's own impact assessment for the original implementation of the FWMA found that if planning policy targeted minor development it would have much stronger benefits around reducing surface water flooding, as a good proportion of this will be infill development which would otherwise connect to heavily-constrained urban drainage systems.

The current policy also does not address the impact of urban creep from developments which do not require planning permission (permitted development), nor does it deal with retrofitting SuDS into existing developments.

Local authorities are able to produce their own supplementary guidance but experience tends to vary across the country with some authorities producing and strictly implementing their own adopted guidance and others achieving the bare minimum. This can make it considerably more difficult for developers and consultants that work across different parts of the country; a more consistent national approach could alleviate this.

Defra notes it has published non-statutory technical standards<sup>vi</sup> *for the design, maintenance and operation of sustainable drainage systems to drain surface water*. The standards are intended to ensure that SuDS match green field run-off rates for new build developments but do not mention any requirement to implement the wider benefits of SuDS. They are likely to encourage more hard, 'grey' solutions; the standards can actually be implemented with conventional drainage as they only focus on volume control, rather than quality, amenity or biodiversity. They are dominated by attention to the quantity of water attenuated because it is calculable, whereas water quality, amenity and biodiversity are ignored perhaps because they are less easy to quantify. In this way, the standards neglect the key aspects of SuDS, multi-functional and cost-sharing benefits and their important role in successful place-making.

Only eight per cent of respondents to our survey believed that the current non-statutory SuDS standards are driving installation of high quality and effective SuDS in England. And, as the standards are non-statutory they have no legal basis and cannot be enforced.

CIWEM considers new standards should be developed aimed at optimising opportunities to achieve amenity, biodiversity and water quality benefits as well as flood risk reduction. The Welsh non-statutory SuDS standards which are in line with the CIRIA SuDS Manual would be a good model to consider, although we would prefer them to be on a statutory basis. In the context of the Government's stated ambitions to leave the natural environment in England in a better state than we found it, achieving such multiple benefits are vital.

CIWEM identified the greatest single barrier to improve widespread update of SuDS is securing a mechanism of adoption. We accept that the Government is unwilling to unleash the bureaucracy proposed in the *Flood and Water Management Act*, such as SuDS Approval Boards. But we propose that if there were stricter policy and better SuDS standards in place, then ultimately uncertainty and inconsistency would be reduced and the SuDS that organisations were asked to adopt would be better designed and built and the mechanisms to ensure maintenance could be made more robust and effective.

The new standards should be produced to reflect the needs of the adopting authority so that they can establish an approval process and adopt with confidence. They should also be easily understood and followed by developers and their consultants.

The latest work by Water UK, to develop guidance as to what SuDS assets water companies may be able to adopt under existing regulations is welcome. The government should support this work and act to resolve barriers to local authorities being able to adopt the remainder and consider issues around adopting orphan SuDS.

There are policy options available that would integrate quality SuDS into new homes and developments without delay to house-building. We propose that:

1. Discharge of surface water to the sewer system should be conditional on the inclusion first of high-quality SuDS in new developments.
2. A clear decision must be taken with regard to the adoption and allocation of maintenance responsibilities for SuDS. This should have a clear and established mechanism for raising funds to ensure the continued effective maintenance and eventual replacement of all SuDS they adopt.
3. New standards are developed aimed at optimising opportunity to achieve amenity, biodiversity and water quality benefits as well as flood risk reduction. These should reflect the needs of the adopting authority so that they can set out an approval process and adopt with confidence.

4. The Government should undertake a follow-up review of the barriers to retrofitting SuDS in existing developments and make proposals on how retrofitting might be incentivised.

These four recommendations are supported by the Wildfowl and Wetlands Trust (WWT), Royal Town Planning Institute (RTPI), Royal Institute of British Architects (RIBA), Institution of Civil Engineers (ICE), Institution of Environmental Sciences (IES), Landscape Institute, University of Exeter Centre for Water Systems, Susdrain, Future Water Association, Association of Drainage Authorities (ADA), Cornwall Community Flood Forum, the Construction Industry Council Champion for Flood Mitigation and Resilience, Royal Society for the Protection of Birds (RSPB), WWF, the Angling Trust, Buglife and Salmon and Trout Conservation UK.

A policy that demands SuDS to be considered from the outset would ensure that they are well designed and implemented, delivering cost savings and so much more: Amenity, biodiversity and water quantity and quality benefits. These all combine to contribute to cost effective developments, places and communities that deliver higher levels of health, productivity and vitality.

The Defra and DCLG review of sustainable drainage through the planning system needs to seriously look at changing planning policy and updating standards. Currently it seems to be limited to a box ticking exercise to comply with the requirement set out in the Housing and Planning Act 2016. We would like to see a public consultation on its proposals and the findings to be made publically available.

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- i Blake and Morgan. 2015. Housebuilders and developers will welcome sustainable drainage ruling. [Blog](#)
  - ii AMEC. 2014. Survey of a sample of development applications within flood risk areas. [Final report](#) for the Committee on Climate Change Adaptation Sub Committee
  - iii CIWEM. 2017. A Place for SuDS? [www.ciwem.org/suds](http://www.ciwem.org/suds)
  - iv Defra post legislative scrutiny
  - v Defra. 2011. Commencement of the Flood and Water Management Act 2010, Schedule 3 for Sustainable Drainage – Impact Assessment. London: Defra.
  - vi Defra. 2015. Sustainable drainage systems: non-statutory technical standards