

Improving Surface Water Drainage

Consultation to accompany proposals set out in the Government's Water Strategy, *Future Water*

Introduction

The HBF is particularly keen to respond to a consultation on "Improving Surface Water Drainage" as, with the Government's objective of building 3 million new homes by 2016 it is important that all stakeholders adopt a sustainable approach to the management of surface water in relation to new development. This can be achieved by planning for the future as illustrated in PPS25 and by ensuring that relevant organisations adhere to their present and future obligations as contained in primary legislation. All of these matters are issues the HBF has identified to Government through a number of responses to various consultations.

It is worth noting at this early stage in our response that in many areas in the management of surface water the principles are readily accepted by all stakeholders, but the practical application appears to elude all parties. This is an important point as it will affect the long term strategy for any changes that will be required in legislation where guidance must be made mandatory.

An issue we would also highlight is the need to ensure that design and construction of associated infrastructure to accommodate the management of surface water has to be "fit for purpose" and cost effective. Developers need to be free to use various options to facilitate this objective using a combination of sewers and SUDS (mindful of the outfall criteria but not prescriptive in its adoption of a hierarchical system).

Much of our commentary on this consultation is a repetition of our comments in response to the Pitt Review's interim report and echoes our response to the APPG on Water's recent Inquiry. It is regrettable that the title refers to 'drainage' rather than 'management' as it is clear that it is a holistic approach to the UK's water system that is required.

The current situation

The most disappointing aspect of this long-awaited consultation is that it fails to acknowledge that many of the problems that the UK is now experiencing are directly attributable to the lack

of adequate maintenance and investment by the water industry over the past two decades and the failure of the regulator to address the issues arising. Obviously, as privatised profitmaking companies the Water and Sewerage Companies now have a primary duty to make money for their shareholders but nonetheless measures that could have improved the UK's water services have not been taken.

Housebuilders have been responsible for considerable betterment in an era of minimal investment by the water industry. As well as providing additional surface water storage, our redevelopment of Brownfield sites has considerably reduced the runoff rates (often uncontrolled in their previous use). In addition the industry has paid some £1.25 million in so-called infrastructure charges and it is most frustrating that it is so difficult to gain any information about where these monies have been spent.

Before addressing the points in this consultation we would want to make reference to a report *The summer 2007 floods in England & Wales - a hydrological appraisal* by the Centre for Ecology and Hydrology which concludes that the summer flooding of 2007 was an extreme event and specifically states that they were **not** an indication of climate change and should **not** be a reason to review drainage designs. It complements a recent paper published in the *International Journal of Climatology* late in 2007 which found that trends over the last 30-40 years could be identified, but that there was little compelling evidence over the long term to suggest that flood magnitude is increasing. We are extremely concerned therefore that the events of 2007 should not be seen as a driver for significant change in the approach to surface water management when it is clear that such events are improbable. A longer-term sustainable strategy for surface water management is more important than a hasty reaction to an extreme event.

The right to connect

We would express particular disquiet with that section of the consultation which seeks to address the issue of the "right to connect" under Section 106 of the Water Industry Act. The principles in this piece of legislation (read in conjunction with Section 94) are clear and manageable under the assumption that WaSC will provide the necessary infrastructure for the "right to connect" to take place. The current problem is that WaSC **do not** provide the infrastructure so we now find ourselves in the invidious position where developers are being blamed for possible flooding problems because WaSC have not made the appropriate investment in the surface water infrastructure. It appears that the only practical way forward is to make the surface water discharge. This was the approach that HBF worked with CLG to adopt in PPS25. So the question is: where has all of the investment been allocated in the Price Review by WaSC to provide surface water sewers to drain the roofs and yards of

each plot on new developments? From our industry's perspective this is a major question that continues to remain unanswered by the WaSC and Ofwat.

We do not believe that removing the right to connect to surface water sewers would stop flooding. There is already a hierarchy via PPS25 and Building Regulations that promotes the use of SuDS elements but even were the issues of adoption and maintenance addressed, many sites, particularly on Brownfield land, can only be drained by piped systems and to allow WAScs to refuse this option would prevent many Brownfield sites from being redeveloped. This would have a devastating effect on the Government's targets for new house building.

To summarise our response to the three areas of this consultation: Surface Water Managements Plans could incorporate the PPS25 Flood Risk Assessment processes and offer a sensible planned approach to water management; resolution of the long-running lack of adequate adoption and maintenance mechanisms for SuDS might allow developers to implement them more widely than they can at present but it is absolutely essential for the Government's housing targets that the right to connect to surface water sewers is retained. PPS25 already ensures that this is not the first choice option and this seems an eminently sensible approach.

Responsible bodies

In the 1970s the Local Authorities were in many cases the drainage authority and their staff had expertise (and records) to enable efficient management of surface water (and sewage). This system operated (well) for several decades but was gradually eroded following the privatisation of the water industry. It is not reasonable to suggest that LAs should now take back this function when they no longer have the staff or the records to be able to fulfil this function. There also seems little point in separating water and sewerage functions and creating further fragmentation. Indeed a recommendation of the Davidson report was that simplification was a way to better regulation.

We are also extremely concerned by recent attempts by WASCs to use the planning process to abdicate their responsibility to drain their area, particularly when developers are paying infrastructure charges to cover additional costs.

There are also anomalies in that WASCs will accept Greenfield runoff rates plus attenuation for climate change but the EA does not. Likewise the design for 1:30 year or 1:100 year events where neither party will compromise. It is essential that there is a strategic approach to surface water management, possibly based on areas round certain water courses. There is also an issue in that the definition of an 'outfall' is preventing the use of SuDS because of restrictions imposed by WASCs.

Costs

There still seems to be a preoccupation with the hypothetical costs of maintaining SuDS and if compared with the current lack of spending on infrastructure this is a valid point. However it could be argued that if a proper level of investment had been retained in the past the difference between what should have been spent and what might be required for SuDs is not that great. Householders already have an element of their water charge allocated to surface water drainage and there seems no reason why this process could not continue. There seems to be a general assumption made by WaSC that SUDS will be expensive to adopt. This is far from the truth and as stated above should be funded by the WaSC not having to provide surface water infrastructure under Section 94 of the Act. The funding of SUDS therefore is more than achievable through existing revenue streams.

Maintenance

The argument that swales are "open space" rather than drainage is not really an issue since sites with low enough density to allow them to be constructed would almost certainly have a mechanism for maintaining the open space so this could be effective for its dual function. There are companies that offer a SuDS/landscape management service and recent fears related to land ownership do not appear to have been an obstacle in Scotland so perhaps these concerns are overestimated.

Conclusion

It is clear that there is often confusion over what is sustainable versus what is adoptable and what is desperately needed is clear guidance on surface water management that includes a variety of options to include the option of connection to an existing sewer where that is the most sustainable option. It is imperative that a sensible and scientific approach is taken to managing surface water in the long-term rather than an immediate over-reaction to what was clearly an unprecedented combination of circumstances last summer.

Consultation questions

Q.1 Are Surface Water Management Plans the right solution to co-ordinate surface water drainage? How do they fit with current responsibilities? How else might a strategic approach to surface water flood risk management be achieved?

Possibly. PPS25 already requires RFRAs, SFRAs and FRAs. There is no point in

adding an additional tier of regulation. The key issues affecting surface water management in the UK are the fragmentation of the management, inefficiencies in that management and the lack of an appropriate system for adopting and maintaining SuDS. A tier of regulation for England will not address the national problems. Perhaps the assimilation of RSFRAs etc into SWMPs would be a way forward (with the proviso that SWMP is already an abbreviation for other legislation). However it should be noted that there is also an issue of who is deemed a 'competent authority' to meet the terms of EU Directives – there is already a potential problem in that the EA manages some aspects of water but the WASCs manage others.

Q.2 Could the principles set out in Surface Water Management Plans be delivered through a voluntary arrangement? Or should producing such plans be a requirement in critical drainage areas?

Possibly. There seems no reason why the mechanism for producing RFRAs etc could not produce SWMP (water not waste). However there is a view that regional plans may fail to take into account the complexity of the national water system. Indeed it has been suggested that the EA has failed to manage the river systems adequately and that even an approach based on a main watercourse may still fail to address events further up or down stream. To require such plans in 'critical drainage areas' but not elsewhere risks perpetuating the current problems.

Q.3 If the principles of Surface Water Management Plans were a voluntary code of practice, how could we ensure that drainage stakeholders engage in the process?

Enforce existing legislation.

Q.4 If production of Surface Water Management Plans were required in critical drainage areas, what would be the best way to ensure this took place?

They could be prepared by the same bodies that are currently expected to produce RFRAs and SFRAs subject to the availability of suitably qualified personnel; however it is clear that more research is needed to be able to provide accurate

appraisals ...

Q.5 Do you think that local authorities are the appropriate body to take the lead on producing a Surface Water Management Plan?

No. LAs no longer have in-house expertise in drainage management – they already have to compile SFRA/RFRAs and are now expected to enforce PPS25. Will additional resources be made available or will planning fees rise again? And how long will this process take?

Q.6 Do local authorities have the appropriate levers to bring about effective participation in preparing Surface Water Management Plans by stakeholders? What more might be required to give local authorities a central role in coordinating surface water drainage?

Yes. They are already imposing requirements through planning pursuant to PPS25. However, if they were to take a central role in surface water drainage they would need adequate resources to employ staff with expertise in that area or pay consultants.

Q.7 In two-tier authorities what should be the respective roles of district councils and county councils in developing and implementing Surface Water Management *Plans?*

They would have to be the responsibility of the County Councils to ensure a wide enough approach. The uptake of unitary status would impede this.

Q.8 What role do you see water companies playing in the Surface Water Management Plan process? What would need to change in order for them to play their part in producing and implementing a Surface Water Management Plan?

Water companies in theory could compile the plans. It is unfortunate that so many of the LA records have been lost over the years and that the WASC's records are

so sparse since this means that expensive and time-consuming surveys would now need to be done to analyse the networks. The fact that the existing regulatory framework does little to ensure adequate surface water management is perhaps more to do with the role of the regulator than any shortfall in legislation. There has been a (gradual) shift in the attitude of some water companies but generally the reluctance to adopt SuDS systems relates more to a fear of incurring additional maintenance costs at a time when they are already concerned about the cost implications of the adoption of private sewers than to any real ambiguity about the legal status of SuDS elements.

Q.9 Do you agree that the Environment Agency would be well placed to play an advisory and/or regulatory role in producing and implementing Surface Water Management Plans? Are existing powers and duties sufficient to achieve this role? Are there other organisations that could provide the quality assurance role?

In theory yes but the EA is already struggling to fulfil its role with considerable variation among its employees' interpretations of legislation/guidance. If adequately funded and publicly accountable the EA could offer a national body to manage surface water drainage. However, the historic separation of surface and foul water systems was deemed to be inefficient and it is not clear to what extent this suggests that the regional drainage boards were less effective than a national body could be. It would also seem to be a regressive step to separate the supply of water from its disposal – there are concerns that lower water usage would have an impact on surface water disposal so it would surely be unwise to separate the two?

Are we looking at a national grid for water?

Q.10 Should Internal Drainage Boards assume active leadership in producing Surface Water Management Plans in areas where they have an interest? What would be the main opportunities and barriers to such an approach?

No. The question is to what extent surface water management can or should be dealt with on a regional basis, given its implications for the rest of the country.

Q.11 Do you have any specific comments on the role that other operating authorities could play in Surface Water Management Plans? Where are synergies

with existing responsibilities? What about the barriers?

There are too many different bodies with different degrees of responsibility for surface water management. It is clear that this fragmented approach cannot continue into a future where climate change is identified as a potential for deterioration. While some of the parties are non-profit-making and others are commercial enterprises there will always be a conflict of objectives which will not facilitate efficient management. At present our industry is struggling to construct sustainable developments in the face of certain bodies' reluctance to move away from "traditional" piped systems.

Q.12 Do you think that the costs and benefits outlined in the Impact Assessment (Annex B) are reasonable estimates? Do you have further information to help refine the estimates?

Probably not. There is always a problem with estimating costs for new systems. And any benefits are similarly difficult to quantify. It is not clear how much the (very necessary) research would cost (or who would pay for it). It has to be cheaper for WASCs to manage surface water than to set up a whole new body or to add additional tiers to existing bodies.

Q.13 To what extent can spatial planning resolve surface water flooding problems? Can it adequately address existing problems as well as emerging issues from new development?

The whole point of spatial planning is that it should take a wider view of development – if current systems are failing (and the Pitt Review suggests otherwise) perhaps there is a need to review the overall purpose of the planning process.

Q.14 What else might a Surface Water Management Plan include? What technical barriers still need to be overcome?

We see nothing that should not already be included in RFRAs or DFRAs. The

barriers to more sustainable drainage systems remain the definitions of what constitutes 'adoptable' and there need to be national standards (for the UK not just England) to address this. There is also a rather blasé assumption about the state of current records – these are in fact woefully inadequate and any comprehensive analysis would be expensive and time-consuming – this needs to be understood before decisions are taken.

Q.15 Should Surface Water Management Plans be the mechanism for delivering the Flood Risk Management Plans required by the EC Floods Directive (for surface water)?

Yes. And the 'competent authority' must be identified.

Q.16 How best should the costs of producing Surface Water Management Plans be distributed among the key stakeholders? Are there alternative funding options that could be pursued?

Surface water management should be addressed by PPS25 and already funded by Ofwat allocations, householder water rates and Infrastructure charges – without an accurate picture of how these sums have been spent since privatisation it is difficult to argue that there is a need for additional/alternative funding. How much do WASCs currently spend on planning for flood defences/mitigation?

Q.17 How should implementation of the Surface Water Management Plan be monitored? Should there be some degree of scrutiny in the process?

Apart from insisting that a plan be produced it is difficult to see how it could be monitored for accuracy and effectiveness given that the only test would be a reduction/diminution in flooding events – difficult to quantify, given the difficulties in predicting such events and therefore of identifying if they would have occurred/been worse without the plans.

Q.18 How might we ensure that such drainage partnerships are sustained? Part 3: Sustainable Drainage Systems (SUDS)

Previous partnerships between LAS and WASCs were dissolved by the latter as a cost-cutting exercise – see replies to Q11.

Q.19 Do you have any comments on the costs and benefits identified in the partial Impact Assessment?

Yes. It is not clear how the costs and benefits have been identified given the lack of any measurement of the impact of SuDS or any definitions of the design of any of the elements. We would argue that money has not been spent on infrastructure maintenance and development so any additional costs would reflect this lack of expenditure rather than any intrinsic affordability issue.

Q.20 Do you agree that the property owner should have responsibility for property level SUDS features? If you have answered 'no', please provide reasons and indicate who you think should bear such responsibility.

Yes. It is already the case that many property owners are responsible for their soakaways. The situation for SuDS should match that for sewers with the proviso that the perceived need to transfer private sewers is probably an exaggeration.

Q.21 Do you have any comments on mechanisms by which property-level SUDS features can be efficiently regulated so that they remain effective?

Yes. It is unlikely that there could be any sanction for a private householder unless it could be proven that their failure to maintain a property-level SuDs element had adversely affected other properties/public assets. It is an offense to put certain materials into public sewers but no householder has ever been prosecuted because of the impossibility of proof. The only way to regulate property-level SuDS is for them to be maintained by a public body. However, we have been constructing new homes with soakaways for some years now (regulated under the Building Act 1984 and consequent regulations) and it does not appear to present a major risk to the sewerage system so why should other elements offer any greater risk? There are issues round the degree of maintenance a private householder can be expected to take on and it is likely that the most successful SuDS schemes will be those that are

adopted.

Q.22 Do you agree that the options in Annex A should be discarded in favour of the three options set out? If you have answered 'no', please list in order of preference those options within Annex A that you feel should continue to be evaluated and, if possible, provide reasons.

Not entirely – we are not altogether in agreement with the conclusions though we acknowledge the obstacles in each case. Further discussion is required.

Q.23 Do you consider that local authorities are the most appropriate party to take responsibility for adoption and management of SUDS? Please give your reasons.

No. As explained above they do not have the expertise. There is also the issue of a non-profit-making public body interacting with commercial enterprises and to what extent funding is available to facilitate adequate management.

Q.24 If this option were to be implemented, which tier of local authority do you feel is the most appropriate one to take on the responsibility for the adoption and management of SUDS in two-tier areas, i.e. districts or counties?

Counties.

Q.25 Would placing this responsibility on local authorities add to or detract from local authorities' overall effectiveness in place-shaping and ensuring high quality service delivery in its area?

Yes. LAs are already struggling to meet their obligations in many areas. Without additional resources additional responsibilities can only make matters worse.

Q.26 To what extent do local authorities have in place the skills and capacity that are needed for this work, and over what period of time would it be realistic to gain these skills and capacity?

They do not. The time to gain these skills and capacity would be directly related to the level of resources made available to them and would not be achievable in the timescale required.

Q.27 Do you consider that sewerage undertakers are the most appropriate party to take responsibility for adoption and management of SUDS? Please give your reasons.

In theory, yes. They are already dealing with surface water disposal (albeit less effectively than is desirable and with insufficient accountability) and they are therefore the most logical bodies to adopt and manage SuDS. However it is clear that with the future burden of maintaining private sewers, as commercial enterprises they would not voluntarily take on additional responsibilities for innovative technology. It is also not clear that they have the will to co-operate nationally.

Q.28 To what extent do sewerage undertakers have in place the skills and capacity that are needed for this work, and over what period of time would it be realistic for them to gain these skills and capacity?

They already have the capacity to deal with surface water. There are concerns that SuDS elements do in some (not all) cases involve unknowns but this would be the case for anybody taking on this responsibility. There have been sufficient case studies for engineers to understand more fully the implications of SuDS elements and there seems no reason why the WASCs could not gain skills and capacity to deal with what is, after all, merely an alternative aspect of the surface water disposal that they are already, in theory, managing.

Q.29 Do you consider that new specialist drainage undertakings or companies are the most appropriate party to take on responsibility for the adoption and management of SUDS?

No. See replies to Q28.

Q.30 If such an approach were to be followed, please identify how you feel such an organisation might best be established and how it might be structured by selecting one of the models in paragraph 3.52 and providing further details or by stating "other" and providing supporting details.

It should not be considered. As stated earlier, further fragmentation is undesirable.

Q.31 Do you think it would be necessary to specify which configuration should apply or could this be determined area by area? If so, by whom?

See reply to Q30

Q.32 Do you consider that it would be a satisfactory outcome if there were to be different organisations with the responsibility for the adoption and management of SUDS in different areas?

No. It is essential to have consistency across the country and a systematic approach to surface water management.

Q.33 Do you consider that it would be effective and workable for there to be locally agreed solutions (with an identified default organisation) for the organisation most appropriate to take on responsibility for the adoption and management of SUDS?

No. See reply to Q32.

Q.34 What are your comments and views on the above good practice principles and their role in ensuring that SUDS can be implemented in redevelopment schemes and can contribute effectively to making existing sewerage systems more sustainable?

There is no real issue with the principles of good practice but we would object to the setting of discharge limits for Brownfield sites where in most cases the new development would intrinsically reduce the run-off by comparison with the previous

use. It is also essential that there is an understanding that different SuDS elements are suitable in different circumstances and that there are cases where the most sustainable solution would be to pipe the water elsewhere.

Q.35 Are there any other principles you feel might usefully be applied?

No.

Q.36 Do you feel that the principles should be provided as good practice guidance or should they have stronger status? If you feel the latter please indicate how you feel this might ideally be achieved.

Good practice guidance that is universally accepted and applied would be ideal. Unfortunately it has been difficult to persuade WASCs to adopt similar standards as they each wish to impose their own design criteria. It would therefore be necessary that any such guidance be enforced, if not by the regulator then by means of legislation.

Q.37 How important is it that the responsibilities for the adoption and management of SUDS should rest with the same organisation to which the responsibility for Surface Water Management Plans is allocated and why?

It would be desirable for all aspects of surface water management to be the responsibility of one body. Since much of the existing surface water system is inextricably linked to the existing foul sewerage system there seems to be an irrefutable argument that the same body should also manage foul sewerage. In which case do we need a single national WASC or can there continue to be the separate companies regulated by Ofwat?

Q.38 To what extent do you consider that each of the options proposed and SUDS techniques in general could impede new development or the amount of development that could be accommodated within a given area?

The key issue that impedes new development is the availability of land with implementable planning permission. It is clear that some SuDS elements require more space so the issue of density becomes a key element in the decision-making process. There seems to be an assumption that it is the capacity of the sewers that limit the number of new dwellings whereas in fact it is the availability of land. With the drive for more sustainable, age-friendly housing it is clear that requirements for SuDS will increase the pressure for less dense development. Or more flats. In the event that the right to connect is removed in conjunction with inadequate mechanisms for SuDS adoption and maintenance there would be a large number of sites that would no longer be viable for development. Given the shortage of available land and the Government's ambitious targets for house building there could be a significant drop in the number of new housing developments. It is essential that this is not viewed as an outcome to be achieved by dubious arguments about flood risk. It should also be understood that building in areas liable to flood carries a risk that must be assessed – if the risk is deemed unacceptable then development cannot take place in that area. There is no point in assuming that developers will still build but be able to guarantee that property will either never flood or would dry out quickly – these are not realistic outcomes for the private housing sector.

Q.39 Are there any forms of development that might need to have some flexibility over whether all elements of SUDS (both source control and public SUDS) are employed in the surface water infrastructure? If so, what criteria could be used to judge such situations and how should the adverse environmental impacts of new developments without SUDS be mitigated?

Yes. All developments will need flexibility – different SuDS elements are suitable for different geological and geographical sites and different types of development are more appropriate than others for certain layouts and design – a large site with flats and landscaping might be suitable for balancing ponds – a dense inner city site with privately sold houses would have no room – in some cases it is difficult even to install the soakaways required under the Building Regulations. It should not be assumed that the absence of SuDS will automatically have adverse environmental impacts – if adequate surface water management systems are in place it should be possible to drain areas effectively and sustainably.

Q.40 What legislative issues would need to be resolved to facilitate the wider uptake of SUDS?

There is a view among WASCs that the legislation relates only to pipes and therefore any drainage system that involves other elements cannot lawfully be adopted. There is also a view (in the EA and others) that a management company's existence cannot be guaranteed in perpetuity so they cannot be entrusted with SuDS maintenance as there would be an issue in the event that this body ceased to exist. Given that there are increasingly variations in the approach of different authorities/EA officials/WASCS around the country, neither of these views seems immutable. However, it would undeniably facilitate the take up of SuDS if both these issues could be satisfactorily resolved on a national basis. Unfortunately as this consultation refers only to England it is difficult to see this happening.

Q.41 Do you agree that the ability automatically to connect surface water drainage from premises under section 106 of the Water Industry Act 1991 should be amended? If you do not, please give your reasons.

No. Absolutely not. In any case there is no "automatically" about it since PPS25, Building Regulations and accepted practice demand that that a hierarchy of options is assessed and the connection to a public sewer is either a last resort or a fall-back position where SuDS proposals are rejected or unable to be implemented. Unless there is a guaranteed route for SuDS adoptions it is essential that there be the option to connect otherwise it will be impossible to develop certain sites because it will not be possible to drain them. It is currently a statutory requirement for the WASC to effectually drain their area – if surface water is to be excluded from the sewers there will have to be a viable alternative. And there would be no further justification for 'Infrastructure charges' to developers.

Q.42 How realistic do you consider this option to be? Please give reasons for your answer and any alternative option you think should be considered.

Not at all. See reply to Q41. In any case PPS25 essentially ensures that this is a last resort option and it would be even less used if the issues of adoptability for

SuDS could be addressed. There has to be a mechanism for draining new developments otherwise large areas of Brownfield land will remain undevelopable.

Q.43 Do you consider that having a conditional ability to connect is more appropriate than option 1? Please give your reasons for your answer.

Given that Option 1 is totally inappropriate and a conditional ability is in essence the current situation, yes. Assuming that the conditions are appropriate - see reply to Q41.

Q.44 Do you agree with the circumstances set out in paragraph 4.19 where connection should not be allowed? Please give your reasons for your answer(s) and, if you wish, suggest other circumstances you also think should apply.

No. There should not be a blanket ban on connections for the reasons already given. If sites cannot be drained they cannot be developed. A historic lack of adequate management cannot be an argument against new development and there is no reason to assume that a properly planned development would have an adverse impact...

Q.45 Should connecting surface water drainage from premises to existing public surface water sewers also be controlled? Please give your reasons for your answer.

It is already controlled. And again there may be circumstances in which connection to a public sewer is the most appropriate solution which does not mean to say that other options cannot be considered.

Q.46 The partial Impact Assessment at Annex C suggests that the options can be put in a hierarchy of effectiveness. Do you agree with the order? Please give your reasons for your answer.

No. Please read the replies to all the other questions.

Q.47 Which option or options do you think should be taken forward? Please give your reasons for your answer.

None of them. Please read the replies to the other questions.

Q.48 We invite respondents to provide any wider evidence they consider relevant of the costs and benefits of amending the current ability automatically to connect surface water drainage from premises and comment on the assumptions in Annex C. In doing so respondents are invited to weigh costs against environmental and societal benefits such as reductions in diffuse pollution and in flood damage.

The main cost of removing the right to connect would be the loss of land available to develop which would be viable in present conditions and for which SuDS elements could be included. Without a right to connect many sites would not be considered for development.

It is difficult to cite meaningful figures in evidence for SuDS elements being more or less costly than piped systems as there is so much variety across the country and so little evidence given the poor take up because of the adoption and maintenance issues. The costs of maintaining e.g. balancing ponds may well be more onerous that maintaining pipes (though not necessarily their installation) but we do not know what the costs have been for infrastructure upgrading since 2001 so it is difficult to make comparisons. Similarly while the costs of flood damage are considerable, whether they are outweighed by the costs for the maintenance of SuDS systems in the time between the floods would be impossible to guess. There is an argument that environmental and social costs cannot be assessed in monetary terms however they remain to be paid.

Q.49 Could the Government's aims be met other than by legislative change, such as through guidance to the water and sewerage companies and Ofwat on the circumstances in which connection might be considered prejudicial to the operation of the public sewerage system? Please give reasons for your answer.

In theory, yes. Though history suggests otherwise. It is extremely unlikely that any such guidance would be universally accepted and without a more assertive role for

the regulator the situation would remain much as it is now without legislative change.

Q.50 Could the Government's aims set out at paragraph 4.15 be achieved by means of financial incentives alone? Please give your reasons for your answer.

No. There is a prevalent myth that the main factor impeding the implementation of more sustainable surface water management is cost. While it is clear that fear of additional costs with no additional funding is not encouraging innovation, it is also clear that financial incentives alone will not address this reluctance.

Conclusion

This consultation is proposing radical changes to the way surface water is drained (not managed) with no adequate reason for such proposals. The interim report on the summer flooding does not constitute sufficient grounds for requiring change. The historic lack of adequate surface water management in the UK does need to be addressed and we would suggest that adequate enforcement of existing legislation could accomplish this if there is sufficient will to consider the options. With regard to the take-up of SuDS we can only reiterate as we have so often before that without a clear mechanism for adoption and maintenance our industry cannot make surface water drainage more sustainable on our own.

D F Mitchell Technical Director