



THE WATER EFFICIENCY (WATEF) NETWORK

At the University of Brighton, funded by DEFRA

SURFACE WATER MANAGEMENT TECHNICAL COMMITTEE SURVEY NOTE

BACKGROUND

1. The Surface Water Management Technical Committee (SWMTC) first met on 6th February 2015, tasked by WATEF to map the approach of stakeholder organisations to surface water management.
2. The Committee recognises that surface water management is high on the national agenda, with current work including publication of national SuDS standards, and an updated SUSDRAIN Guide due to be published shortly following widespread consultation. The aim of the Committee is to avoid duplicating recent work, whilst identifying any outstanding issues that may merit further attention.
3. This remit is being tackled using this note to consult with as many stakeholders in surface water management as possible, including the non-exhaustive list **Attached**. All those contacted direct by the Committee are asked to cascade this note through their own relevant networks and to colleagues to provide the widest possible range of inputs in order to enable valid conclusions to be reached.
4. The results of this information-seeking consultation will be reported by the Committee Chairman, Professor Sue Charlesworth of Coventry University, at the WATEF Water Efficiency Conference 2015, which takes place at Exeter University from 5th to 7th August.
5. A summary of the results will also be provided to all contributors who provide their email address.

CONSULTATION METHOD

6. This consultation has two main components:
 - This consultation note, which briefly identifies a number of aspects of surface water management, and invites feedback
 - The quick on-line survey at <http://goo.gl/KxD419> which is the feedback mechanism for this consultation which closes on 30th June 2015
7. The consultation is being managed on behalf of the Committee by [consultants, Helicon Business Development Services Ltd.]

CONSULTATION ASPECTS

Aspects-1: Scope

8. "Surface Water Management" is often equated to the management of surface water arising from new urban developments, referred to as "SuDS" (sustainable drainage systems), to avoid increasing local and down-stream flood risks.
9. A broader view on surface water management might also take into account the need to manage water run-off in the rural landscape, to mitigate the flood risk this causes, and to also manage surface water to ensure security of supply and to meet other criteria such as water quality, amenity and biodiversity.
10. **Feedback:** The survey asks to which of these views you subscribe.

Aspect-2: Timeframes

11. Published Standards tend to be time-neutral, it being generally assumed that they are designed to deal with today's environmental conditions.
12. Published Organisational Plans deal with future time-frames, but often cover only the 5-to-10 year range.
13. **Feedback:** The survey asks whether longer-term (20 to 30 years, or more) strategic Standards and Plans are required (or already exist) to reflect anticipated evolutionary changes that are expected to affect surface water management

Aspects-3: Evolving Changes

14. Water-supplies are stated to be under varying degrees of stress in many parts of the UK, the worst affected region being the south-east of England. Conversely, well-publicised floods are a regular feature in many parts of the UK whenever extreme (very intense or protracted) rainfall events occur.
15. Respected national and international agencies are forecasting that the risks of both floods and droughts are likely to increase over the next 30-years due to climate-induced changes to rainfall patterns. Significant predicted population growth will also exacerbate both, due to the need for associated urban development and the increased demand for water.
16. **Feedback:** The survey asks whether you accept, reject or disregard these predictions in your work, and also asks whether they have been quantified in a way that justifies any associated strategic investment needed by your organisation to respond appropriately

Aspect-4: Capacity-building

17. Responding to current flood risks, and maintaining security of water supplies to meet current requirements, is an expensive and time-consuming process; current investment in this respect is aimed principally at addressing the current position.
18. Responding to predicted future increased risks will require an understanding of the likely economic, human and environmental impact should those risks come to pass, and strategic investment over strategic timescales to build up the additional capacity needed to mitigate those impacts.
19. **Feedback:** The survey asks whether you/your organisation is thinking in terms of long-term capacity-building in response to forecast increased risks.

Aspect-5: Integrated Management

20. Currently, the diverse distinct aspects of surface water management (flood avoidance, drought avoidance, quality, the environment etc) tend to be addressed separately, rather than collectively.
21. This serves as a barrier to the formulation of an over-arching water management strategy, potentially leading, in the worst examples, to narrowly focussed investment potentially improving the targeted aspect of surface water management, at the expense of another.
22. **Feedback:** The survey asks whether a more integrated approach to surface water management is desirable

Aspect-6: Geography

23. The surface water management requirements of localities vary widely throughout the UK, making national legislation and Codes poor tools for meeting local requirements.
24. Surface water management requirements also do not necessarily align particularly well with administrative boundaries, which means that both local and down-stream factors need to be considered within a particular administrative boundary.
25. **Feedback:** The survey asks whether surface water management issues need to be decided on a “river basin” approach, rather than through national legislation and codes.

Aspect-7: Administration

26. The administration of SuDS requirements, in particular, has gone through a turbulent period following the 2010 Flood & Water Management Act as, for example, a new national Standard has been produced, and a review undertaken of Housing Standards (leading to the demise of the water-related aspects of the Code for Sustainable Homes).

27. So far as can be determined at the time of this survey, the position is likely to be that there will be no national strategy for reducing mains-water demand, beyond the new-build requirements of Building Regulations. Insofar as reducing flood risks is concerned, oversight of the maintenance aspects of SuDS will be delegated to local Planning Authorities, with Flood Risk Management Authorities (FRMAs) becoming responsible for flood avoidance planning.

28. **Feedback:** The survey asks whether the administration of surface water management, at a river basin level, would be improved by re-mandating the FRMAs to take responsibility for all aspects of surface water management in their areas as, say, fully integrated “Surface Water Management Authorities”

Aspect-8 Water Re-use

29. The inclusion of water re-use, such as rainwater harvesting (RWH), in a development overlaps with SuDS to the extent that both might involve the storage of water, in the case of RWH for non-potable re-use, and in the case of SuDS for attenuated release. In the UK the practice has been for designers to regard SuDS and RWH as two separate systems, thus incurring the capital and maintenance costs of both. Best practice is to integrate the two, looking to reduce the combined cost to no more than SuDS alone might incur, when maintenance is taken into account. This approach is also considered to deliver water-quality benefits.

30. The new British non-statutory SuDS Standard does not include water re-use in its hierarchy of surface water management techniques; in contrast, the Welsh Government draft equivalent Standard lists water re-use as its preferred water management tool. It is anticipated that an updated CIRIA/Susdrain SuDS Guide will also include water re-use as a surface water management tool.

31. **Feedback:** The survey asks if you think there should be improved and integrated tools to allow exploitation of opportunities to reuse water within surface water management schemes.

Overall Feedback

The survey closes with the following:

- A question which invites respondents to line-up their personal responses with what they perceive to be the policies of the organisations for which they work
- A question which invites respondents to grade the aspects above in order of importance for follow-up study
- An opportunity to add any further thoughts on the subject of surface water management, not provided by the aspects listed above.

Attachment: Non-exhaustive List of Stakeholders

ATTACHMENT

NON-EXHAUSTIVE LIST OF STAKEHOLDERS

There are many stakeholders involved, or with a vested interest in organising the management of surface water to avoid future floods and stresses on water supplies for the general benefit, and to meet human and environmental needs; the table below shows the organisations who will be contacted direct in the course of this consultation.

All those contacted direct will also be asked to cascade the consultation through their own networks.

Non-exhaustive listing of stakeholder organisations to be contacted:

2B Landscape Consultancy	Living with Environmental Change
3e Consulting Engineers Ltd	Local Government Association
A.L.H. Environmental Services	Loughborough University
Aberyswyth University	Marshall's Mono Ltd
ACO Technologies plc	Mayer Brown Ltd
Alde and Ore Association	Martin J Harvey
Allen Pyke Association	Meon Building Designs
Albion Water	Micro Drainage Ltd
All Internal Drainage Boards	Middle Level Commissioners
All Local Authorities	Miller Homes Limited
All Flood Risk Management Authorities	Moors for the Future – Peak District National Park Authority
All Parliamentary Group on sewers and sewerage	Morgan Sindall
All Parliamentary Group on Water	Mott MacDonald Ltd
Amey	Mouchel
Anglian (Central) Regional Flood Defence Committee	National Consumer Federation
Anglian Water	National House Building Council
ARUP	Natural England
ASD Engineering	National Environmental Research Council
Association for Consultancy and Engineering	National Flood Forum
Association of Drainage Authorities	National Housing Federation
Association of Rivers Trusts	National Sewerage Association
Atkins Global	National Trust
Atkinson Peck Ltd	Northumberland Community Flooding Partnership
Barratt Northampton	Northumbrian Regional and Flood Defence Committee
Bedfordshire Highways	Northumbrian Water and Essex and Suffolk Water
Bellway Homes West Midlands	OFWAT
Black and Veatch	Opus Joynes Pike Ltd
Blueprint for water	Parliamentary Office of Science and Technology
Boston Mayflower Ltd	Peel Utilities Holdings Ltd
Bourne Stream Partnership	Pell Filschmann
Bovis Homes Ltd	Pennine Water Group – University of Sheffield
Brett Associates LLP	Peter Brett Associates
British Geological Society	Peter Kite Associates
British Hydrological Society	PFA Consulting Ltd
British Property Federation (BPF)	Pick Everard
British Waterways	Pipeline Industries Guild
Bristol Water	Plansescil Ltd
Broadland Agricultural Water Abstractors Group	
BSP Consulting	

Business in the Community Water Champions	Plastic Pipes Ltd
Callidus Transport and Engineering	Policy Consulting Network Limited
Cambridge Water	Portsmouth Water Ltd
Capita Symonds	Ponds for Cornwall
Cascade Consulting	Premier Water Solutions Ltd
Catchment Change Network	Ramboll UK
Chartered Institution of Water and Environmental Management	Regional Fisheries Ecology and Recreational Advisory Committee
Cholderton & District Water Company	Richard Jackson plc
City of London Planning	River Restoration Centre
Centre for Ecology and Hydrology	Robert Clark Associates Ltd
Colin Buchanan Ltd (SKM)	Rotherham MBC
Committee on Climate Change	Royal Institute of Chartered Surveyors
Commission for Architecture and the Built Environment (CABE)	Royal Borough of Windsor and Maidenhead
Construction Products Association	Royal Haskoning
Consumer Council for Water	Royal Town Planning Institute
Consumer Focus	RPS Planning and Development
Corylus Planning and Environment Group	Royal Society for the Protection of Birds (RSPB)
Costain Group Ltd	Scott Wilson Ltd
Country Land and Business Association	Sembcorp Bournemouth Water
Coventry University	Severn Trent Water
Crestwood Environmental Ltd	SKY-Garden Ltd
Croudace Homes Limited	Society of British Water & Waste Water Industries
E&M West Consulting Engineer	Solent Protection Council
Eden Young Associates Ltd	South Staffordshire Water
English Heritage	South West Water
Environment Agency	Southern Housing Group
Environments for people	Southern Water
Environment Industries Commission	Sutton and East Surrey Water
Essex and Suffolk Water	Technical Advisory Group
Essex County Council	Telford Homes Metro
Farming and Wildlife Advisory Group	Thames Water
Flood Hazard Research Centre – Middlesex University	The Crown Estate
Flourish Homes (Aster)	The Wildlife Trust for Lancashire, Manchester & North
Foundation for Water Research	The Wildlife Trust for Staffordshire
Friends of the Earth	The Wildlife Trusts
FP McCann Ltd	Thomas Consulting
Genever and Partners	TPS Consult
GeoMarine and Land Ltd	Turfgrass Growers Association
Glenwood Property Investments	Tyne Rivers Trust
Green Alliance	UK Water Industries Research Ltd
Great London Authority	United Utilities
Guy Linley-Adams Solicitor	UK Contractors Group
H20K Systems Limited	University College London
Halcrow Group Ltd	University of Kent
Hannah-Reed (Peter Brett)	University of Leeds
Hartlepool Water	University Sheffield
Hasker Architects Limited	University of the West of England
HR Wallingford	Upton McGougan Ltd
Homes and Communities Agency (HCA)	URS Corporation
House Builders Association (HBA)	Van Oord UK Ltd
Home Builders Federation (HBF)	Veolia Water UK
Hyder Consulting UK Ltd	Vine Technical Services
Hydro-International	Wallingford HydroSolutions
Hydrock Consultants	Ward Cole Consulting Engineers
	Water Management Alliance

<p> IDOX Independent Water Networks ICE Infastructure Design Studio Ltd Interpave Institute of Civil Engineers Institute of Water Jacobs Engineering UK Joint Nature Conservation Committee Kingcombe Aquacare Ltd Knowsley MBC JBA Consulting JNP Group Consulting Engineers Landmark Information Group Landscape Institute </p>	<p> Water UK Wavin Ltd Waterwise Weetwood Wendage Pollution Control UK Wessex Water Westlakes Engineering Ltd Wildfowl and Wetlands Trust Wildlife and Countryside Link Williams Saunders Worcestershire Wildlife Trust WWF WRc Plc WYG Engineering Ltd Yorkshire Water </p>
---	--