



House of Commons
Environment, Food and Rural
Affairs Committee

The Water White Paper

Second Report of Session 2012–13

Volume II

Additional written evidence

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Environment, Food and Rural Affairs Committee

The Environment, Food and Rural Affairs Committee is appointed by the House of Commons to examine the expenditure, administration, and policy of the Department for Environment, Food and Rural Affairs and its associated bodies.

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Written evidence

Written evidence submitted by David Linnell

On the following questions:

- How best can the White Paper’s aims to promote water efficiency and the use of sustainable drainage be implemented?
- Do you support the White Paper’s proposals on affordability of water bills for householders?
- Does the White Paper omit any key issues where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?

I submit that the White Paper fails to address one of the most important issues.

The public will not respond sufficiently to the need to use less water unless a positive and speedy programme is put in place to introduce water metering for far more households, with suitable protection for those who would have difficulty in affording their bills. To leave this—as the White Paper suggests—to the water companies is merely putting off solving the problem—the companies have little incentive—and no compulsion upon them—to introduce meters to existing customers (and even less incentive to do so to customers who would have difficulty in affording their bills).

If the Government (understandably) wishes to avoid the opprobrium of being seen as directly responsible for compelling households to adopt meters, then it should set the water companies challenging targets for achieving set proportions of metered households, with suitable penalties applied to any company which fails to meet its targets.

21 December 2011

Written evidence submitted by Barri Hitchin

This Water White Paper, along with the Flooding and Water Management Act fails to address an obvious Conflict of Interest—Farming, supported by DEFRA with its Agencies, and Conservation of Water and the Environment. As seen with the attached example of Water wasting—causing Flooding.



2 January 2012

Written evidence submitted by T Martin Blaiklock, Consultant, Infrastructure & Energy Project Finance

1. The Minister states in the preface to the White Paper that the “privatisation of the water sector has been a success story”. Financially, I maintain that this claim is questionable.

2. One of the avowed objectives for the privatisation of the UK’s water sector, as evidenced by the Water Industry Act 1991 and the numerous share flotations on the London Stock Exchange by UK water supply companies at that time, was the spread of ownership of said companies within the private sector investor community.

3. Twenty years on and we find that in the South-East** no water company is currently a UK-quoted company, or is, indeed, a quoted company anywhere else. Was that the intention?

[** A comparable analysis has not been taken for other regions of England & Wales

The following companies fall under OFWAT's "South-East" regulatory jurisdiction:

- Thames Water (the UK's largest private water company).
- Portsmouth.
- South East Water.
- Sutton & East Surrey Water.
- Southern Water.
- Veolia Central.
- Veolia Southeast.]

4. This scenario raises serious questions of governance and financial sustainability of England & Wales' private sector, public service water utilities,—which are, in effect, regional monopolies. As a consequence of these ownership developments, there is no forum for stakeholders or customers to hold directors and owners to account for their actions. The only constraints on the water companies' proprietors are the Licence agreements, plus Conditions "P" and "F", as imposed and policed by OFWAT.

5. **Recommendation 1:** no matter the ownership of the England & Wales water companies, each year the owners, directors and management of each water utility,—plus indeed OFWAT too,—should be held accountable publicly to its customers. Further, currently OFWAT undertakes two "road shows" per year with the City. Customers should also be notified, invited and able to attend such meetings.

6. Apart from shareholding structures, all of the South-East's water companies are owned and controlled, at least financially, by offshore entities (see analysis later in this Paper). This has implications, not only for taxation,—the Exchequer loses tax revenues,—but also ultimately for governance and accountability. No "fit and proper person" test is imposed on utility owners by OFWAT, as is required in other jurisdictions.

7. **Recommendation 2:** a "fit and proper person" test should be applied to the ownership of such private sector monopolies. Further, this standard should be underpinned by an "on demand" bond reflecting adherence to public interest performance criteria.

8. With respect to ownership, the current OFWAT licensing regime allows changes of ownership to take place without any specific referrals (competition issues apart), eg the recent sale of 9.9% of Thames by Macquarie to the Abu Dhabi Investment Agency for an undisclosed sum. Is it justifiable that the details of such sale should remain undisclosed for the UK's largest private water utility?

9. **Recommendation 3:** any changes of shareholding exceeding 5% share capital should be referred to OFWAT for approval (which should not be unreasonably withheld), and the details of any such transaction made publicly available.

10. Finally, after many years the UK Government has woken up to the fact that such public service utilities are ideal investments for pension funds and life insurance companies, who seek long-term, low risk, income-producing investments to cover their short and long-term liabilities. More recently, some sovereign wealth funds ("SWFs") have also been attracted to the sector, albeit that such SWFs have less of a direct social remit than pension and life funds.

The fact is, however, that now nearly all the investment opportunities for UK pension funds and life insurance investors in the UK water sector are effectively closed off, as the owners of said water companies are mostly non-UK funds and investors,—who additionally enjoy UK tax benefits which UK funds do not. A UK Government "own goal"!

11. **Recommendation 4:** UK life insurance and pension fund investors in UK water utilities should enjoy the same UK tax benefits as non-UK investors in this sector.

12. The table overleaf shows some key financial performance parameters for the South-East Water Companies. It will be seen that Thames and Southern represent approx. 80% of the region's water services suppliers. It will also be seen that, along with Sutton & East Surrey, they are the most indebted (as defined by leverage).

13. Typically, a private sector public service utility will have leverage in the 50–60% range, eg as in the UK and European power sector and some water utilities. This allows the company to have adequate financial strength to fund their capital investment program using their own balance sheets. However, since privatisation and, particularly since some companies have become de-listed, the leverage levels for UK water companies have increased significantly, viz. the figures for Thames and Southern with >80% leverage. This inherently weakens financially such companies.

14. Much of this increased leveraging has come about by the owners/shareholders paying themselves higher annual dividends than the company generates profits, ie an activity commonly called “asset-stripping”.

15. Examination of Thames’ accounts over the years demonstrates this trend:

<i>Thames Water [£ mn.]</i>	<i>2003</i>	<i>2007</i>	<i>2011</i>
Shareholder Equity	1,523	1,331	1,506
Long-Term Debt	1,685	3,417	6,799
Balance Sheet Total Assets	5,366	6,500	10,403

Since 2003, there has been effectively zero growth in shareholders’ equity. Any surplus equity value has been distributed through dividends. The increase in leverage over this period, from 55% to 82%, is clearly seen.

16. The major change in leverage arose in late 2006-early 2007, when RWE, the German energy utility and previous owners, sold Thames to Kemble representing a group of offshore (Luxemburg) Infrastructure Funds (ie private equity), managed by Macquarie Bank (Australia). During 2006–7 RWE paid themselves dividends of £535 million, that is one third of Thames’ Balance Sheet equity,..... and OFWAT just looked on!

Since then, Thames’ dividends have not exceeded profits, except for 2010–11.

[Note: in 2010–11 Thames also provided a £1,865 million unsecured loan to its (offshore?) parent company, assumed in the Accounts as a “current asset”, albeit not expected to be repaid within 12 months. No further explanations are provided!].

17. Southern and Sutton & East Surrey show similar trends which, whilst not in any way illegal, have done nothing to enhance the financial strength of these utilities when they are faced with significant funding requirements for future capital investment.

18. On the other hand, Veolia Central shareholders paid themselves dividends amounting to seven times profits in 2010. This came about by revaluing the company assets, which allowed the issuance of a £200 million bond issue (which increased leverage accordingly), and using the proceeds to pay dividends!

19. Another oft used route to extract “dividends” out of private, public service utilities is via shareholder loans at elevated interest rates, which circumvent income tax, particularly for offshore investors. Such a mechanism is not uncommon in PFI deals, eg London Underground PPP, when owners/investors provided “equity” in the form of shareholder loans at 19% interest, whereas market rates were closer to 5%. The use of such mechanisms in the water sector appears not so prevalent, however, as in other sectors

20. As part of a water company’s licence, they have to maintain (Standard & Poor’s) Investment Grade rating status (ref. Condition F). At privatisation in 1991, the floated water utilities were all deemed well into Investment Grade. Since then their rating has diminished such that their status is often just a “notch” or two above Junk Bond rating. So far licence default has not arisen, but worryingly OFWAT does not appear to have a “Plan B” should such event arise.

Unfortunately, ratings have a habit of changing over time, sometimes quite suddenly!

21. OFWAT, to be fair, imposes a ring-fencing, cash lock-up mechanism on utilities should their financial status come under threat, but in my view this is inadequate and a short-term expedient with limited impact on utilities’ management (eg if the money has already flown the company, such constraint is ineffective!).

22. **Recommendation 5:** the requirement to maintain Investment Grade status is inadequate. Water utilities should be required to maintain a maximum leverage of, say, 60 or 65%.

23. **Recommendation 6:** shareholder loans at inflated interest rates should be outlawed for such public service companies.

24. **Recommendation 7:** water utilities should not be allowed to pay out dividends to shareholders in excess of the accounting after tax profit for the year in question.

Notwithstanding that finance is not a prime focus of the White Paper, I hope the above comments demonstrate that the future health of the sector is increasingly coming under threat and the opportunity should not be missed to strengthen the role of OFWAT to police the sector in financial matters.

I trust, therefore, that the Committee will take my comments into account in their deliberations.

BACKGROUND ON T.M. BLAIKLOCK

I have been a consultant, banker and practitioner in infrastructure and energy project finance,—PFI, PPP and the like,—for the last 35 years or more, with both UK and wide overseas experience. Over the last three years

I have given more than 50 two–four day seminars on these topics internationally, eg World Bank/IFC, EBRD, banks, governments, etc.

5 January 2012

Written evidence submitted by Howard Glenn, Project Engineer Flooding & Land Drainage

The White Paper refers to the SUDS consultation and to the new default build standards for new sewers (at Section 4.29). These standards are thorough and unequivocal giving detailed guidance to the required specifications. However they refer only to foul drainage.

The new build standard for surface water drainage contained in the SUDS consultation falls a very long way short of the quality and detail of the foul drainage standard and can only be described as aspirational.

Given that up to now there have been standards, in “Sewers for Adoption” covering both foul and surface water, where these were to be adopted by the water company, which bear considerable resemblance to the new build standard for foul drainage it seems incongruous to say the least that surface water should in future be guided by a document of principle only.

This is especially bewildering as the industry needs to come to terms with a totally new approach to surface water drainage which the country is relying on heavily to limit the effects of climate change on future flood risk.

A whole new protocol aimed at compliance with the Water Framework Directive on water quality is also newly introduced with little or no guidance to assist thousands of practitioners (and those who must appraise their work) across the country who have no previous experience of this subject.

There are CIRIA design guides and manuals available to which the new standards could have referred.

The committee is urged to prevail upon government to make the SUDS standards much more prescriptive in line with the new build standards for foul drainage.

9 January 2012

Written evidence submitted by David J Martin BSc(Eng) DpBA MICE FCIWEM, Chartered Civil Engineer, Chartered Water and Environmental Manager

1. The White Paper correctly identifies a number of concerns about future water resource needs and the requirements of environmental conservation in the context of climate change. Its emphasis on the desirability of long-term planning, reliable investment returns and overall stability in the water and sewage industry is wholly consistent with these concerns.

2. Unfortunately the good sense of these approaches is muddled by what appears as an ideological commitment to the benefits of competition, which is in practice inimical to these objectives. At present it is open to consumers either to take water and sewage services from their local supplier or to seek licences from the Environment Agency in order to provide those services for themselves, or to engage a specialist contractor to do it for them. This is a reasonable degree of freedom, regulated by the Agency, and likely to be useable only by larger organisations. Any facility going beyond it for another undertaker to move in to provide the services will most likely lead to duplication, short-termism, redundancy and inefficiency. Least of all do we need the sort of spurious competition familiar in electricity and gas supply, where pretended competition is offered for the same gas and electricity arriving in the same pipes and cables.

3. The only way to send the right signals to consumers about water (and sewage) economy is by metering, which must be universal. Offering metering as an option to “those who would benefit” is pointless; clearly they would take up the option and the rest would necessarily pay more to compensate. Only universal metering provides the means to charge differential tariffs and thereby reduce demand peaks and hence delay the need for infrastructure investments. The need to protect those on low incomes must be dealt with in some other way than cross-subsidising their consumption of water and sewage services.

4. Following on from 3, the uptake of water-efficient domestic equipment and other self-imposed economy measures such as rain water harvesting will only take off significantly when there is a recognisable price signal through payment by metered consumption. Exhortation is unlikely to be very effective.

5. The White Paper notes the difficulty of collecting water charges from tenants who are legally liable when there is no requirement on landlords to identify them. It seems that the approach to road traffic offences would be a good one to adopt, whereby the registered keeper of a vehicle is liable for eg a speeding fine if s/he chooses not to say who was driving at the relevant time.

6. On the subject of abstraction regime reform, the White Paper seems not to be aware of the work that is being undertaken by the Environment Agency, starting several years ago, to review critically all existing abstraction licences and where appropriate to reduce or revoke them.

16 January 2012

Written evidence submitted by Scottish Water

1. Scottish Water was the first company in the United Kingdom to implement retail competition for business customers. We separated our business retail activities into a separate wholly owned subsidiary, Business Stream, and established a wholesale service facility to deal with all licensed retailers in the market. With our experience, we are pleased to submit our views on whether the White Paper sets out the right principles for customers and the water and sewerage industry for taking forward reform of the market for water supply.

2. We are generally supportive of the retail competition policy aims sets out in the White Paper, but have a small number of important observations based on our experience in Scotland.

3. We support the Government's proposal that it should not take risks that would reduce investors' confidence in the sector. However, the introduction of retail competition changes the nature of the credit risks facing water companies and we are concerned that this does not appear to have been recognised in the White Paper.

4. As retail competition becomes established, water companies will supply increasing numbers of their previous customers through competitor retailers. The credit risk diversification that currently arises by supplying many thousands of business customers will be reduced and sales will become increasingly concentrated towards a small number of retailers, thereby increasing the inherent credit risk of incumbent water companies. From our experience in Scotland, the key to avoiding this increase in credit risk is to require retailers to prepay their wholesale charges and, if necessary, to provide additional financial guarantees.

5. We note that there is no intention to require the legal separation of retail businesses from the incumbent water company, unlike our situation in Scotland. In the absence of legal separation, we believe that there must be adequate governance arrangements between the incumbent wholesale and retail businesses to ensure fair access for the innovative new entrants. From our experience, we suggest that the governance regime should contain obligations to ensure that there is no discrimination in treatment between retailers, including the incumbent water company's own retail division.

6. We support the proposal that there should be compatibility of market arrangements between Scotland and England as we believe that this is in the interests of customers, particularly those operating on a multi-site basis across both countries. We particularly encourage the Committee to review the lessons learned since market opening in Scotland nearly four years ago to ensure that the arrangements in England build upon our market experience and are compatible with those operating in Scotland.

7. From our experience, we believe that a future Water Bill should place a clear duty upon Ofwat to ensure that the market is opened and administered in an orderly manner. This will necessitate Ofwat working with all interested industry players in establishing market arrangements that meet the government's objectives and which are appropriate for, and build confidence with, market participants. An on-going obligation to ensure an orderly market would require Ofwat to continue to refine market arrangements based on the lessons learned from market operation.

8. One particular aspect of an orderly market that has been important in Scotland, but will be even more critical in England because of the scale of the market and complexity of multiple wholesalers, is data accuracy. We suggest that careful consideration is given to the necessary cost and timescale of cleansing customer data adequately, and establishing the necessary market trading and settlement arrangements, prior to market opening to allow the proper and effective switching of customers after market opening.

9. We would be delighted to provide oral evidence to elaborate upon the matters set out in this submission.

January 2012

Written evidence submitted by the British Chambers of Commerce

1. The British Chambers of Commerce (BCC) welcomes the opportunity to respond to the Environment, Food and Rural Affairs Select Committee inquiry into the Water White Paper.

2. The BCC is an influential network of 52 Accredited Chambers across the UK. No other business organisation has the geographic spread or multi-size, multi-sector membership that characterises the Chamber Network. Every Chamber sits at the heart of its local business community, providing representation, services, information and guidance to member businesses and the wider local business community.

3. From a business perspective, the publication of the December 2011 Water White Paper was very much welcomed. As the White Paper acknowledges, the current market regime has not worked well for businesses. For too many years, the lack of choice available to virtually all businesses in England and Wales when choosing

a water supplier has contributed to the often poor-quality water retail service that businesses receive. This poor quality of service is even more pronounced when compared to the service Scottish businesses receive since a genuinely competitive water market was established there in 2008.

4. The commitment by the Government to implement in England many of the reforms set out in the 2009 independent review of the water industry by Professor Martin Cave should extend much-needed competition and choice in the water sector.

5. As the recent Policy Exchange Report ‘Water Retail Services Competition in England and Wales: Still Hobson’s choice?’ concluded, the deregulatory proposals contained in the Cave Review have the potential to achieve a wide range of benefits to water customers and to the wider economy.

6. Opening up the water retail services market would give substantial net benefits—between £600 million and £2.5 billion—even without taking into account customer service benefits and water saving.

7. It is important that the Government legislates to introduce the White Paper recommendations at the earliest possible opportunity. We hope to see a Water Bill included in the Queen’s Speech in spring 2012.

19 January 2012

Written evidence submitted by the UK Environmental Law Association (UKELA)

1. The UK Environmental Law Association aims to make the law work for a better environment and to improve understanding and awareness of environmental law. UKELA’s members are involved in the practice, study or formulation of Environmental Law in the UK and the European Union. It attracts both lawyers and non-lawyers and has a broad membership from the private and public sectors.

2. UKELA prepares responses to consultations issued by government, public authorities and Parliamentary committees with the help of its specialist working parties, covering a range of environmental law topics. This response has been prepared with the help of the water working party.

3. UKELA considers the Water White Paper proposals to be set out in such general terms that we are unable to judge their workability and effectiveness at this stage.

4. UKELA will be taking a close interest in the more detailed reforms, proposals and draft legislation on particular issues that the government intends to publish in the coming months. We would expect the government to consult extensively, in accordance with the Government Code of Practice on Consultation. We consider this a crucial stage in the process of formulating the new policies and legislation, and one that organisations such as UKELA can usefully contribute to with views and comments on matters of detail, based on experience and expertise.

5. In particular, we consider it very important that there is proper public consultation on the revised guidelines for the next water resources management planning cycle, the strategic policy statement and social and environmental guidance to Ofwat. These documents are referred to at paragraph 4.10 of the White Paper, and will play a vital role in translating the policy priorities in the White Paper into a clear direction for companies and others with an interest in the water environment.

20 January 2012

Written evidence submitted by RM Water Services

INCENTIVES FOR RAINWATER HARVESTING AND SUDS ON EXISTING SITES

INTRODUCTION AND OVERVIEW

1.1 In response to the publication of the “Water for Life” white paper, R M Water Services wish to draw to the attention of the committee the absence of clear guidance from Water and Wastewater Companies (WaSC’s) regarding the cost treatment of sustainable drainage (SUDS) and rainwater harvesting and the need for incentives for the business community to invest in SUDS and rainwater harvesting systems on existing sites.

1.2 The inclusion of charge reducing benefits in WaSC’s Schemes of Charges, that produce realistic cost benefit returns for businesses, will have the effect of:

- reducing WaSC’s abstraction requirements as a result of local collection and reuse of rainwater; and
- reducing the number of flooding incidents from the public sewer system with the consequential environmental benefit of reduced pollution.

These benefits are clear objectives of the White Paper.

1.3 Whilst there are requirements in the planning process for developers to install both SUDS and rainwater harvesting on new sites, the benefits of investment on existing sites are less clear or absent. As can be seen in the attached table, Water Company Schemes of Charges add cost, give marginal benefit or are silent regarding the cost treatment of rainwater and SUDS schemes.

1.4 Whilst enhanced capital allowances are available against installation costs for rainwater systems that are included on DEFRA's water technology list, the benefits are not available to all businesses and do not provide year on year reductions in cost.

1.5 In the absence of clarity in WaSC's Schemes of Charges regarding financial incentives for existing sites, the motivation for a business to promote capital schemes is best described as being largely altruistic.

1.6 We believe that the development of clear incentives, through Schemes of Charges, for existing sites will provide benefits to business, WaSC's and the environment and will promote investment on existing sites by business' in both rainwater and SUDS schemes.

1.7 We fully support the site area principle of charging for the provision of a service to remove and dispose of surface water.

WASC'S SCHEMES OF CHARGES

2.1 The following table summarises each WaSC's approach to charging where rainwater harvesting and/or SUDS are present on a site. It can be seen that some WaSC's do not indicate how they will deal with rainwater that is collected and used by a business for say toilet and urinal flushing. Others will not reduce surface water area charges or provide standing charge rebates but will increase the wastewater charge in line with the amount of rainwater collected. In such circumstances a business that installs a rainwater system is charged twice for the removal of the rainwater that it uses.

2.2 If properly designed, both SUDS and rainwater systems incorporate an overflow that may be connected to a public sewer. Overflows are only required on collection systems to discharge water where rainwater events outside the design limits are experienced.

2.3 Where an overflow is connected to the public sewer system WaSC's do not allow rebates on standing charges or reduce the area used for calculating site area charges. Because such connections are only operational in extreme storm events, we believe that they should be treated differently to direct site connections to the public sewer system for all rain and surface water flows.

2.4 As there is no link between a site's area and the provision of a service to drain the public highway, the use of the site area formula by United Utilities and Northumbrian Water to charge for Highway Drainage even when there is no surface water connection should be removed.

SCHMES OF CHARGES SUMMARY

<i>Water Company</i>	<i>Wastewater charges for rainwater systems</i>	<i>Site area adjustment for SUDS and rainwater collection areas</i>
Anglian Water	section 3 paragraph 2.5 rainwater or recycled water additional volume will be taken into account in wastewater charges	Fixed charge not based on site area. Section 10 paragraph 2.1 Reduced by £36 to £1,226 per year dependant on user tariff where there is no surface water connection
Northumbrian Water	No indication of cost treatment of domestic sewage derived through rainwater harvesting.	Section 6.4.3 Site area charges reduced by up to 70% of the area that does not drain to public sewer.
Severn Trent Water	Section 9 Discharges need to be metered and are charged at wastewater rates.	Page 37 of Scheme of Charges. Rainwater collection areas probably not excluded from site area calculation.
South West Water	Paragraph 5.30 rainwater volume used is taken into account in wastewater charges. Para 6.6 Rainwater must be metered and an additional charge of £6.50 per year is added for each rainwater meter.	Paragraph 6.27 Standing charge is reduced by £16 per annum where there is no surface water connection. There are no reductions for partial connections.
Southern Water	No indication of cost treatment of domestic sewage derived through rainwater harvesting.	Fixed charge not based on site area. For a 20mm meter this reduction is £22 per year. There are no reductions for partial connections.
Thames	No indication of cost treatment of domestic sewage derived through rainwater harvesting.	From their metered charges leaflet, rebate by way of reduction of standing charges where there is no surface water connection. For a 20mm meter this reduction is £47 per year. There are no reductions for partial connections.
United Utilities	No indication of cost treatment of domestic sewage derived through rainwater harvesting	50% reduction of the chargeable area of the roof. Site area charges are reduced where all or part of the site has no connection to the public sewer system. Highway drainage charges are not reduced but continue to be charge on full impermeable site area.
Welsh Water	No indication of cost treatment of domestic sewage derived through rainwater harvesting	Rebate where none of the surface water from the site drains to public sewer. £45 per year on standing charges and a reduction in the volumetric sewage rate of 32.55p per cubic meter. There are no reductions for partial connections.
Wessex Water	No statement regarding cost treatment of domestic sewage derived through rainwater harvesting.	Reduce the metered standing charge where there is no connection to the public sewer system for surface water. For a 20mm meter this reduction is £19 per year. There are no reductions for partial connections.
Yorkshire Water	Section 6 (1) (b) suggests that rainwater returning to the sewer will be charged on a volumetric basis.	No express exclusion areas of the site used for rainwater collection.

January 2012

Written evidence submitted by Wessex Water Services Ltd

Q1. Does the White Paper set out the right principles for customers and the water and sewerage industry for taking forward reform of the market for water supply?

1. We welcome the Government's recognition that water is a successful sector and its commitment to maintaining investor confidence. We agree we need evolution not radical change.

2. We also believe much change can be delivered by improved incentives rather than new regulations.

3. We support many of the market reform proposals, in particular market opening for retail. This adds legitimacy to the sector in customers' eyes. The implementation of retail needs to be low risk and proceed on a sensible timetable. We should build on the lessons and systems from Scotland.

4. We do not support the proposals for upstream market opening. These are complex and unlikely to deliver improvements to resilience and the environment. This extends to Ofwat's proposals on sub-price caps and system operators. Instead we believe improved use of upstream resources can be better achieved by incentivising cross-border supplies. This does not need complicated market structures; instead Ofwat needs to change incentives so companies are rewarded when they buy and sell water rather than penalised (as is currently the case). This will see greater co-operation between companies and better use of existing resources.

5. We also highlight the significant issue of criminal liability for supplying wholesome water. With the proposed open access to distribution systems it is unclear how a contamination will be treated by the DWI. Currently, water companies are responsible for the quality of the water at their customers' taps. However, multiple licensed new entrants blur responsibility. Financial costs of failure can be allocated to a negligent party via contracts, but criminal liability cannot. Any future legislation that provides for upstream entry must address this.

Q2. Are the proposals to protect and enhance water resources, for example on abstraction regime reform, likely to be fully effective?

6. Much has already been done to improve the environment where abstraction has had an impact. Licences have been reduced and mitigation has been provided, for instance by stream support.

7. Going forward, the periodic review process and the Abstraction Incentive Mechanism offer a flexible way to manage change and possible environmental impacts. The EA will also shortly have powers to vary abstraction licences where they cause serious environmental damage. Where appropriate they should use these powers rather than time-limiting all licences, which we liken to time-limiting planning permission: no developer would build a house if it could be taken down after 20 years without compensation.

Q3a. How best can the White Paper's aims to promote water efficiency be implemented?

8. We have found a range of measures successful.

9. The most significant of these is metering. Fitting a meter when someone moves house reduces average consumption by 15% and peak consumption by over 20%. It also comes at a time when a householder's wider financial circumstances are changing and is therefore much more acceptable to customers than mandatory metering. Government proposals should be more ambitious here.

10. Other measures include:

- helping customers understand the connections between their water use, their environment and their bills—we are piloting a "Smart Community", engaging with 1,000 customers through smart meters and other technology;
- working with Green Deal providers to give customers a holistic service covering both energy and water use in the home; and
- further development of water efficiency targets, including a shift from prescribed activities to overall outcomes.

11. Government should also promote more innovative and wide-ranging water efficiency measures, eg water companies installing water efficient devices in customers' homes as part of their funded investment programme, and educational measures in the National Curriculum to instigate behavioural change.

Q3b. How best can the White Paper's aims to promote the use of sustainable drainage be implemented?

12. The White Paper was an ideal opportunity for the Government to propose a future review of drainage responsibilities in the UK. We are disappointed that it is quiet on this subject and does not go far enough in challenging the current disaggregated approach to the nation's drainage infrastructure.

13. Although the Flood & Water Management Act identified responsibilities that were previously unclear, it has not addressed the fundamental problems resulting from disjointed ownership, numerous funding mechanisms and multiple views of flood risk. The current arrangements continue to be a major hindrance in achieving sustainable drainage.

14. To overcome these problems, we advocate a catchment-based model for integrating ownership and responsibility for drainage assets. This would address the increasing inter-dependence between privatized sewerage companies, local authorities, internal drainage boards, riparian owners, land managers and the Environment Agency. Countries that are more progressive in this area restrict drainage responsibility to fewer parties.

15. The private sector can also play a crucial role in providing the required investment to protect the UK from climate change and more frequent flooding.

Q4. Do you support the White Paper's proposals on affordability of water bills for householders?

16. We are disappointed with the strategy set out to deal with affordability issues. Government has suggested some piecemeal interventions in the short term but not addressed the fundamental problems.

17. We agree that water companies should have the primary responsibility for dealing with water affordability issues, but they need to be given the tools by Government to achieve this. To ensure charges are affordable for all, water companies must be able to ensure those who can pay, do pay, and to direct additional support to those who most need it.

18. Government should allow companies access to benefits data and give landlords incentives to provide details of their tenants. Existing regulatory restrictions on water companies, such as the duty to supply and the ban on disconnection, already make water companies different. In this context new regulations are neither unduly burdensome nor intrusive, and would be valuable to help achieve the Government's objectives.

19. Introducing social tariffs should also be made easier by reducing the threshold for customer acceptability and by requiring Ofwat to not unreasonably withhold approval.

Q5. Does the White Paper omit any key issues where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?

20. The proposals to allow licence modification by majority voting will result in an increase in risk with consequential increases in finance costs and, ultimately, customer bills. Companies' individual circumstances and financial structures vary considerably and a licence condition that is acceptable to a majority may still be unacceptable to a few. Individual companies must retain a right of appeal to changes in their particular licences.

20 January 2012

Written evidence submitted by SSE Water Ltd

ABOUT SSE WATER

1. SSE Water Ltd (SSEW)—a wholly owned subsidiary of SSE—is one of the largest new entrants in the water market. It installs, owns and operates water infrastructure and has been appointed to supply water and/or sewerage services to over 14,000 new properties across England and Wales. It is actively involved in, and at the forefront of, the developing competitive framework in the water industry.

In autumn 2007 SSEW was appointed as the water provider to a new housing development and became the first new water and sewerage service provider in England and Wales since the privatisation of the industry. Since then SSEW has been seeking to develop its business by pursuing further inset appointments for new developments in England and Wales. Inset appointments of this kind are the only existing viable route to providing competition in the market.

SUMMARY

2. SSEW has experienced a number of barriers to date in pursuing the development of its water business and therefore welcomes the intent signalled in the White Paper to extend competition in the water sector and improve the competitive processes already available.

3. Also detailed in this submission are additional legislative changes which SSEW believes would significantly remove barriers to new entrants in the current framework for inset competition. More information can be provided at the Committee's request.

Does the White Paper set out the right principles for customers and the water and sewerage industry for taking forward reform of the market for water supply?

4. SSEW welcomes the proposals in the White Paper on reforms for the inset framework. The commitment to introduce a framework of transparent market codes to determine the rights and responsibilities of all market participants in relevant market processes and to establish a transparent wholesale access pricing regime should be particularly helpful. SSEW agrees that Ofwat should have the powers and duty to establish these rather than having market details such as "the costs principle" set out in primary legislation, which is inflexible and can, as noted in the White Paper, actually act as barriers to competition.

5. SSEW also supports the intention to introduce “network” licences and to allow standardisation of existing water industry licences and more streamlined modification of these, in the manner that has become established in the energy sector. These measures should allow for adaptable licences tailored to the specific activities and size of market participants, which should align to the development of market codes and wholesale pricing, thus aiding the process of orderly market development.

6. SSEW also welcomes the extension of retail competition for business customers but hopes that effort to revive this currently dormant form of competition will not delay the changes required to assist the inset framework, which is actively being used by SSEW and others. The reduction in the competitive threshold in England to 5Ml of annual water use brings an estimated 26,000 premises into the competitive market but it is worth noting that, in Scotland, where around 130,000 business premises can choose their water and/or sewerage supplier, there are still not many new entrants. Evidence of business customers being willing to switch away from incumbent suppliers would be helpful in encouraging new entrants but it is unlikely that a very active retail water market will exist until the non-household competitive threshold is reduced to zero—set out as a future intention in the White Paper.

7. While the market and licence reform measures discussed above are necessary to help competition from insets (and in retail supply of services to business customers) to thrive, they will not be sufficient to ensure the success of these competitive frameworks. There needs to be a change in culture within the incumbent water companies that recognises the need to deal on a fair and non-discriminatory basis with companies who are competitors in downstream activities. With no requirement for legal separation of competitive from natural monopoly elements of the water and sewerage services supply chain, this culture may be more difficult to promote. SSEW agrees that monitoring and active regulation by Ofwat will be important in achieving the reforms’ objectives in terms of:

- appearance and growth of new entrant businesses;
- effective choice being available to developers and business customers; and
- choice being exercised by developers and customers in order to reward efficient, customer-focussed and innovative service offerings.

Does the White Paper omit any key issues where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?

8. While the White Paper sets out useful proposals, it is unfortunate that there is no consideration of legislative amendments which SSEW has previously proposed to remove barriers to entry and establish a more level playing field between new inset appointees and existing incumbents. Summarised below are two pro-competitive amendments that would allow the current inset framework to function better. To further create a competitive water market SSEW would urge that these proposals be recognised and fast-tracked. SSEW does not think it fair that current restrictions on incumbent companies be lifted (such as the in-area trading ban) before barriers affecting new entrants have been addressed and the new market codes and pricing arrangements successfully bedded in.

9. The first amendment concerns the sections of the Water Industry Act 1991 that deal with the duty on water undertakers to provide a water main, through a process known as requisitioning. Due to a technicality of wording in the Act setting out who can requisition a main, SSEW is being offered terms for connection works required to meet the needs of a developer customer inferior to those that the developer could obtain if he approached the incumbent water company, as its customer, to requisition the main. The same situation pertains for provision of a public sewer. This clearly has a detrimental effect on competition and we believe it would be easily remedied by a small change to the Act. SSEW has a proposal for drafting on this point if the Committee would like further detail.

10. The second amendment concerns the legal definition of a greenfield site. Known as the “unserved criterion” for granting an inset, our experience suggests that this test of whether a developer can seek to use an inset appointee is unnecessarily complicated and has been used as a barrier. It should be removed and SSEW has pre-prepared drafting for an alternative criterion based on the consent of the developer.

20 January 2012

Written evidence submitted by SSE plc

1. SSE plc (formerly Scottish and Southern Energy) is one of the UK’s largest energy companies. It is the UK’s second largest generation business with an ownership interest in over 100 thermal and renewable power stations, with a total capacity of just over 11,300 MW.

In terms of the issues raised and discussed in the Government’s Water White Paper, SSE’s generation business is most concerned with the proposals to reform of the water abstraction regime. It is this area of the White Paper which this response considers.

2. SSE welcomes the White Paper’s recognition of the importance of water for energy generation and the commitment to work with relevant stakeholders to guide the process of abstraction reform. The electricity

generation industry is a major abstractor of water resources, primarily as a result of the role of water in cooling circuits in thermal power stations (coal, gas, oil and biomass) but also for hydro generation purposes. When compared to other cooling forms that are available (eg air cooled condensers), the use of water for cooling is more efficient, maximising useful energy output from a given fuel use whilst minimising production of “waste” and the use of raw materials. Any proposals for reform should acknowledge the importance of optimisation and responsible use of water, not just water use minimisation. It is therefore vital that the power generation sector is represented on the proposed National Stakeholder Group.

3. Nevertheless, it is important to understand the distinction between water abstraction and water use by the generation sector. That is, the concept of water “borrowing”. SSE therefore also welcomes the recognition within the White Paper accompanying documents that a significant proportion of water abstracted by the energy generation sector is returned back to the aquatic environment near to its point of abstraction.

4. SSE realises that climate change and increased demand may place additional pressure on water resources in future. However, any revision to the existing allocation methods must be holistic and recognise the significant contribution that energy, and hence security of supply, plays in society. That is, reform of the abstraction regime must not be conducted in isolation and without consideration being given to the large range of pressures on the energy sector arising from various policy initiatives from the EU and UK governments. Security of energy supply being particularly critical.

5. The White Paper’s recognition that continued access to water supplies and the importance of ensuring that the new regime does not create barriers to investment is, therefore, welcome. Proposals for abstraction reform come at a time of critical power station investment decisions. Indeed, over the next decade it is estimated that some £200 billion of investment will be needed to replace/refit ageing power stations and transform the energy system in the move towards a low carbon sector. It is therefore important that the programme of reform delivers sufficient confidence to investors in water-dependent power stations of access to water appropriate to the asset life and economic use of the power station and at the right location (which is likely to be at existing generation sites due to the importance of grid connections and infrastructure, fuel routes, waste handling facilities all of which need to be taken into consideration when developing new generation sites).

6. Furthermore, it is important to ensure that the transition arrangements do not undermine previous investment decisions in this sector. SSE therefore takes comfort that the Government has given assurance that the new regime will take account of current licences and the actual volumes used and that the transitional regime will not be used to change licensed volumes. SSE looks forward to working with Defra/Environment Agency to expand upon the principles of the transitional arrangements.

7. A key aspect of the proposed reform must be, therefore, to ensure that suitable volumes and reliability of water supply to the energy sector are sufficient to the current and the next generation of power stations. A key part of this will be to ensure that robust and “recognised” forecast energy scenarios are utilised.

20 January 2012

Written evidence submitted by Waterwise

OVERALL

1. Waterwise welcomes the commitment throughout the White Paper to using water more sustainably, and many specific statements to this end. We look forward to following these up with the Government and regulators as the draft Bill and guidance develop. However, we are concerned that the lack of concrete policies means the challenge laid out by Ministers will not be met. In addition, we lament the lack of a central strategy to manage the transition to full metering.

WATERWISE WELCOMES THE FOLLOWING CONTENT IN THE WHITE PAPER:

2. There is a need for water efficiency beyond the areas currently defined as water-stressed.

This is a major step forward.

3. There will be a link between water efficiency and the Green Deal: hot water included in ECO and Green Deal measures and cold water in Green Deal advice. Water companies have an opportunity to work with the Green Deal.

The consultation paper DECC issued in parallel to the White Paper recreates barriers such as the additionality clause, which has prevented the water and energy sectors working jointly in homes.

4. Water-efficient technologies can play a role in the green economy.

5. Government support for a campaign to save water.

This should involve the third and private sectors. It should not focus on financial drivers alone.

6. The evidence that water efficiency works and is cost-effective is now available.

7. There will be a clearer, tidier link between Water Resource Management Plans (WRMPs) and price determinations and drought plans. White Paper policy priorities will be made explicit to the water companies, through WRMP, and to Ofwat, in the new guidance.

8. There should be a wider cost-benefit analysis, reflecting social and environmental costs and benefits, and a longer-term horizon in price determinations.

9. The policy priorities from the White Paper (two of the four are “A long term perspective” and “Better reflecting water scarcity”) will be translated into a clear direction for companies, and reflected in the strategic policy statement and social and environmental guidance to Ofwat.

10. More demand management measures will be needed in the WRMP process, and the Government will be more specific on these requirements in guidance.

11. Water efficiency is important in adaptation planning for businesses.

12. Water scarcity has an impact on energy generation, and this will be investigated.

13. Metering is important in driving sustainable water use.

14. All stakeholders must change how they value water.

15. The understanding of motivations, barriers and effectiveness of messages will be improved.

16. “Water companies must have both the incentive and the freedom to try novel approaches: they must believe it to be worthwhile to take risks, benefiting from success rather than being penalised for failure. Ensuring traditional capital projects are not more financially attractive than operational spend must be part of this reorientation of the incentive structure.”

Addressing this capex bias would be a major factor in increasing the scale of water efficiency activity in the sector.

17. The increase in competition is expected to drive an increase in water efficiency, as in Scotland.

18. Support for a voluntary water efficiency label.

Concrete policies which Waterwise would have liked to have seen, to underpin Ministerial ambition on water efficiency

19. An overall government aim on water efficiency to which all policies and measures contribute.

20. Only social tariffs which drive water efficiency to be used.

21. Water efficiency retrofit and advice offered to all customers with new meters or affordability problems.

22. Evolution of the water efficiency targets on the water companies into a more mainstreamed industry approach (as in the energy sector).

23. Further measures to ensure sustainability in homes and buildings, such as a water efficiency element in social housing standards.

24. New green financial products such as mortgages to include water efficiency.

25. A single plumbing standard on water efficiency.

26. Support for water neutrality partnerships, whereby developers undertake local water efficiency retrofitting in existing schools and businesses so that water demand does not increase.

SUSTAINABILITY DUTY

27. Waterwise supports the Government’s view that in the absence of a primary duty on sustainable development, the price review process must include a broader assessment of benefits. The “strong steer”, central to its future guidance, which Government commits to providing to Ofwat on the interpretation of the current duty, will be fundamental to the scale of delivery of water efficiency in the next price review (and, as the Government says, a test of whether a primary duty is necessary).

CUSTOMERS

28. Customer behaviour is key to more sustainable use of water. However, Waterwise is concerned at the commitment to “put customers at the heart of decision-making in the water sector”. Government, regulators and the water industry itself are better-qualified than customers to make complex decisions based on decades-long supply-demand scenarios and investment decisions.

ABSTRACTION

29. The commitment to the role demand management will play in abstraction licensing reform—the seven objectives include “drive efficiency in water use”—is welcome. This must be honoured, to avoid the discredited

policy approach of “predict and provide”. For example, supply-demand scenarios should include retrofitting an entire town for water efficiency rather than relying solely on the contribution of abstraction to supply.

METERING

30. The White Paper speaks glowingly about the importance of metering in affordability and managing demand. It is therefore disappointing that the Government rules out a strategic transition to full metering in favour of a patchwork of local solutions: and counter-productive, since affordability issues will be exacerbated during the transition, if unmanaged. A Government commitment to a managed increase in metering, to meet Walker’s 80% target for England by 2020—supported by water efficiency retrofit and advice, and social tariffs—would have been more effective.

NEXT STEPS

31. The White Paper sets out laudable aims on water efficiency. In the absence of concrete policies, it is vital that the strategic policy statement, social and environmental guidance for Ofwat, social tariff guidance, draft WRMP guideline and draft Bill translate these into actions to deliver water efficiency on the scale of the ambition set out in the White Paper.

January 2012

Written evidence submitted by Water-Value

1) *Does that Water White Paper set out the right principles for customers and the water and sewage industry for taking forward reform of the market for water supply?*

- The principles set out on the Water White Paper, taken holistically, peruse the right course of action; they set a trajectory rather than “bold blueprint for action”. This trajectory must account for the water-energy-food-climate nexus and rising per capita consumption.¹ Per capita each of take 4,645 litres per day², or around 15 bath tubs from our water commons, if we don’t curtail our behaviour this will increase.³
- Society remains unaware of this water stressed reality. It is therefore critical to incentivise conservation. This will be created by creating an adequate supply—demand relationship, which will re-base our water industry in the commercial sector where the competing water demands are reconciled against their importance to society.
- Resource Economics demonstrate that when the price signals which reflect the scarcities of goods and services are distorted or absent, investment and resource allocation in the private sector becomes complex and lurid.⁴ This in turn complicates the public sector decision making related to the resource.⁴ Furthermore it may foster a culture of wasteful behaviour, including actions, such as, water resource exploitation and misuse (water inefficiency), dumping of pollutants and wastes into our water course (pollution sinks) and, *inter alia*, mean water as our most valuable resource is under appreciated (water asset or liability, externalities).

2) *Are the proposals to protect and enhance water resources, for example on abstraction regime reform, likely to be fully effective?*

- We welcome steps by the Environment Agency to improve information disclosure on abstraction licenses, including their returns, which allows abstractor applicants (A) to approach potential abstractors with surplus entitlements (B). Marketization strategy must be carefully deployed if this information is intended to reach its widest audience. If the information were displayed on a “slippery map” interface, potential applicants would be able to find the most suitable abstractor to approach across based on GIS based spatial analysis. May we suggest that this is added to the *what’s in your backyard?* section of the Environment Agency website allowing for maximum exposure. Simultaneously the Agency or Secretary of State, the regulator or lead diplomat, respectively, must remain independent and autonomous in the event of any modification or revocation of a license, of which, the Agency are currently investigating “250 sites”.⁵
- In context of this, both the legal framework and Agency regime need to be changed in order to pioneer the facilitation of effective license revocation or modification. To pave the way for the valuation of a specific water resources.⁵
- In respect of the new water bill, due “in the coming months” clear guidance on how “water undertakers” and “brokers” needs to be set down allowing them to operate in effective negotiation pursuance and not infringe pertinent legislation.^{6,5}
- There are a plethora of caveats if these changes are not pursued. The salient concern of government may be that, without these supply and demand price signals, a net increase in water abstraction would be incurred. As too many applicants may obtain the licenses (A) to abstract the new volumes granted, by right, espoused from revocation of superfluous entitlements from the other license (B).

3) *Do you support the White Paper's proposals on affordability of water bills for householders?*

- Water is life, and therefore those who are disadvantaged will need a hand up in order to have access to this vital resource which sustains life. Overall these changes will need to ensure water is provided to those who need it most, including those in the present generations, and the future too.
- Everyone has the *right* to water, holistic signalling of water resource scarcity needs to be communicated, in order to sustain that right going into the future. But also to protect the nation's riparian flora and fauna, which are often treated as creatures less useful to human kind. Failure to protect these species will infringe the European Union Water Framework directives.

4) *Does the White Paper omit any key issues where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?*

- A draft national map on how water companies supply infrastructure would be connected would be beneficial for planners involved in strategic regional level planning.
- There is not a clear approach for tackling the legacy of unsustainable abstraction; our understanding is that Ofwat have stalled on the Periodic Review Process whilst the Environment Agency is looking at damaging licenses. Over and above the best practice advice offered in the White Paper. What will be done in the short term to tackle damaging unsustainable abstractions by water companies?

EDITORS NOTES

Water-Value is a part of the George F White Group and was established in 2010 to address the real issue of valuation of water resources. We are now market leaders in valuing water resources both as an asset and a liability for appraisal, strategic planning, compensation and valuation. More information at www.water-value.com.

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20 January 2012

Written evidence submitted by the UK Rainwater Harvesting Association

REF: THE WATER WHITE PAPER—WATER FOR LIFE

Please accept this letter from The UK Rainwater Harvesting Association as our contribution with regard to the above consultation document.

EXTRACTS FROM EXECUTIVE SUMMARY PAGES

Para's 3 + 12: "Only 27% of our Rivers and Lakes are fully functioning ECO—Systems"

This is unacceptable in an educated and environmentally aware society.

Para 5: Details several points which clearly recognise problems that will cause water scarcity within the UK in future.

Para 7: Advises a clear mission statement for all governments:—today and for the future.

Para's 23–36: Identifies the real risks to our Rivers and Lakes due to over abstraction.

Para's 28–30: Identifies opportunities for UK companies active in water management, and should include Rainwater Harvesting.

Para's 37–49: Discusses reducing water use, reducing bills and ensuring affordability.

Para 47: Mentions incentivising water efficiency. (Currently, Rainwater Harvesting receives no incentives or financial support from any scheme such as MCS, feed in tariffs, renewable heat incentives or the Green Deal!)

FROM THE MAIN REPORT

1.12 Identifies population increases of 10 million by 2035 and an expected increase of 35% in the demand for water by 2050

1.18 States a reduction from 154 litres per person per day to 144 lit/pp/pd by 2030. This falls far short of the 80 lit/pp/pd set out in the code for sustainable homes (level 5 and 6).

What can be done to avoid these issues in the future?

Water scarcity issues in the UK could be significantly reduced if the installation of Rainwater Harvesting Systems was adopted for all new-builds as part of a National Programme.

WATER RE-USE SYSTEMS

Water re-use systems can often replace 50% of the water used in a dwelling:—flushing toilets, use in washing machines and for other non-wholesome water usage such as garden irrigation, watering house plants, cleaning cars, jet washing, window cleaning and many other activities.

SOME FIGURES FOR CONSIDERATION

If house building in the UK were to increase to previous levels of 200,000 dwellings per annum, then an additional 7 million new homes may have been built by the year 2050. Consider an average roof area of 80m² and a conservatively low annual rainfall in the South East of England (say 600mm) then:-

80m² x 600mm = approx. 48,000litres (less roof losses and filter efficiency which may reduce this to 44,000 litres) of “collected rainwater” per year. Multiply by 7 million dwellings and this is a total of over 300 million cubic metres of water per year! These are conservatively low figures... applied to larger homes in areas of higher rainfall would result in savings which will be significantly higher.

If commercial buildings were included and a national retrofit campaign for existing homes initiated, a reduction of 10% of the demand for wholesome water from the mains supply network could be achieved... if we act now!!

Construction of new reservoirs (and including associated land costs, construction of new treatment plants and infrastructure) will cost the taxpayer huge sums of money. Why not subsidise or incentivise homeowners and developers to install rainwater harvesting systems?

Is this technology expensive?

Several UKRHA members can supply complete systems for less than £1,500.

If Rainwater Harvesting was mandatory and volumes increased to over 100,000 systems per year, then the price of the equipment would fall significantly. The cost for inclusion in new designs at planning stage would be minimal... ground work costs would be absorbed easily as part of the foundations and drainage installation process.

We have to accept that water costs will increase as the natural supply reduces and demand increases. With the cost of a Rainwater Harvesting systems reducing as volumes increase, we will see much shorter payback periods.

OTHER BENEFITS

Rainwater is FREE.

Rainwater collected from a roof does not consume chemicals or energy for treatment cost which would be incurred by a water supply company before delivery to a similar building.

On a national scale, Rainwater Harvesting will remove significant volumes of water from local drainage systems during periods of heavy rain and flash floods. We have all seen news bulletins where local areas have been devastated by floods, some of which may have been reduced or totally avoided if millions of cubic metres of rainwater had been filling individual RWH tanks instead of flooding into the local drainage system.

A recent study by Richard Kellagher from HR Wallingford demonstrates the benefits of using Rainwater Harvesting as part of a joined up Sustainable Urban Drainage scheme. The costs would be offset by reducing the size or need for huge attenuation and infiltration systems or swales.

This would result in a reduction in insurance claims and national emergencies which consume huge levels of resource and money, which could then be used for other projects.

How can we achieve a reduction in water demand in order to avoid these problems?

1. Make the installation of Rainwater Harvesting Systems a compulsory component of the National Planning Policy Framework document in order to replace up to 50% of non wholesome water demand in new properties.

2. Make the installation of Rainwater Harvesting Systems a compulsory component within the Code for Sustainable Homes and ensure developers are encouraged to install other water efficient devices used to reduce the demand on mains water

3. Ensure all Commercial, Industrial and Educational buildings are encouraged to adopt Rainwater Harvesting during the design phase.

We would welcome the opportunity to meet with you or your fellow panel members to discuss these comments and to consider other solutions to ensure a continued and uninterrupted supply of water in the UK.

20 January 2012

Written evidence submitted by Portsmouth Water Ltd

Portsmouth Water is pleased to respond to the Efra Select Committee's inquiry into Defra's Water White Paper "Water for Life".

Our overall view is that we welcome the paper in that it was needed to provide clarity for the industry. Our views are set out in more detail below.

BACKGROUND TO PORTSMOUTH WATER

Portsmouth Water has been an independent water company proudly supplying water to Portsmouth for over 150 years.

The Company:

- serves large towns and cities such as Portsmouth, Gosport, Fareham, Havant, Chichester and Bognor Regis, as well as rural areas of South East Hampshire and West Sussex;
- has the lowest bills in England & Wales and is considered to be one of the most efficient companies in the water sector;
- has 21 water sources comprising one group of springs, one river and 19 borehole sites. However, despite being located in the south of England and, therefore, in an area of high water stress, the company has only had one hosepipe ban in 35 years;
- can provide a bulk supply to Southern Water of up to 15 MI/d, currently running at one MI/day (sweetening flow); and
- play an active role in Water Resources in the South East Group (WRSE).

Therefore, we believe that Portsmouth Water is well placed to comment on the White paper. We deal with each of the questions raised on the White paper below:

GENERAL POINTS

- The objectives set out in the Water White Paper of meeting customer expectations at an affordable price, reforming abstraction licences to protect the environment and developing and supporting growth will have competing elements. In delivering a framework which will enable successful outcomes to be achieved careful consideration will need to be given to the balance between these competing elements.
- Whilst we support the White Paper's overriding desire to ensure that the environment is protected we are concerned about the impression being given that damage from water supply abstractions, which provide a very important resource for our local communities, is being overstated.
- We believe that water companies act responsibly in recognising the need for sustainability in their water resources management plans. As a result at Portsmouth Water we have incorporated licence reductions which ensure the protection of European Habitats in our Water Resources Management Plan 2009 and we are currently engaged in Water Framework Directive investigations, the outcomes of which will be included in our next Plan in 2014.

We would challenge the basis of any statement that claims that the Company is causing significant damage to its local water environments.

- The development of robust Water Resources Management Plans, based upon sound principles which are developed from agreed Planning Guidelines, are the key elements to ensuring that environmental protection is provided whilst at the same time the security of public water supplies is maintained. This is exactly what they are designed to do!

The linkage between Water Resources Management Plans and the proposal to incorporate sustainability reductions within the Ofwat Price Review is welcomed.

- In most areas, even in the South East, water resources issues are temporal; only a problem in dry years and peak demand, affecting maybe only one in every 10 or 20 years. As noted above, Portsmouth Water has only had one hosepipe ban in 35 years.
- We are not certain that Ofwat's proposal for future price limits will compliment the proposals in the White Paper. The separate price limits for retail and wholesale are expressly not in line with it and in our view will be confusing for customers.

Does the White Paper set out the right principles for customers and the water and sewerage industry for taking forward reform of the market for water supply?

- We support the relaxation of the threshold for business customers, but would recommend a small threshold to avoid complexity and cost of very low users switching. If the threshold is set to zero this could result from a number of low use commercial customers such as shops with complex supply arrangements switching supplies for relatively little or no benefit and the water Companies having to undertake a disproportionate amount of work to facilitate the switching. Ultimately the remaining customer base will have to incur the costs involved.
- The proposed reforms will make our obligations re water quality much more complex. The whole process of delivering water quality which meets regulatory requirements is based on risk assessment from source to tap. How can water companies ensure that their assets are not compromised by these reforms? Have the views of the DWI been taken into account?
- These plans will do nothing to reassure investors left with the possibility of stranded assets which will create added risk in the industry.
- We are not sure the majority of domestic customers are interested in competition. They tell us that they value security of supply and quality; both are potentially at risk and the benefits may be overstated.
- We welcome the absence of the requirement for legal separation of retail. For small companies such as Portsmouth this would have significantly increased costs which we do not believe would produce a tangible benefit to customers.
- The proposed reforms necessitate significant changes to the way in which water and waste water services are delivered and are likely to result in a more diverse set of operators within the industry. This contrasts with the existing arrangements where companies not only guarantee delivery from "source to tap" but plan resources and treatment based on the entire water cycle. The proposals may also lead to changes in the relationships between investors, customers and the environment. It is important that delivery of the required changes does not put at risk service delivery, continued financing by investors or affordability.
- The White paper contains only high level proposals. Therefore it appears that Ofwat will be left with a lot of discretion as to how these high level proposals are implemented in practice. The detailed elements of the proposals will need to be implemented with considerable care in order to maintain the long term confidence of investors.

Are the proposals to protect and enhance water resources, for example on abstraction regime reform, likely to be fully effective?

- One key tool in this area which could be provided now is for charges for abstraction to be based on actual usage. As for domestic households this could encourage companies to minimise their abstractions.
- We support the drive to increase inter-connectivity and the trading of bulk supplies of water. However, whilst we support this objective and would want to provide further supplies, their practicality and the difficulties and practicalities associated with trading agreements must not be underestimated.
- Bulk supplies of water are generally required when everyone has a shortage and because they are needed on infrequent occasions, can be expensive.
- We are sceptical of the number of benefits of the bulk supplies identified by Ofwat in its various papers which were based on the 2008 Draft Water Resource plans. Defra should not be over optimistic in the number of bulk supplies which can be made.
- In order that the challenges of climate change can be addressed it is important that the water resources management planning guidelines make provision for the impacts of climate change to be included in the plan.
- The effectiveness of catchment management is very dependent upon all parties playing their part to achieve the desired objectives. This is especially true in relation to farmers/agriculture. These parties need to be aligned with the objectives and have incentives aligned with those objectives. Otherwise catchment management is unlikely to be successful.
- Initial results from catchment management projects demonstrate positive support from environmental groups and the agricultural community too. However many of the projects will require several years of monitoring to enable a full assessment of success.

- Amending the abstraction regime will be complicated by the unwillingness of many incumbents to be disadvantaged, especially if some of their spare water which otherwise might be tradable is removed without compensation.
- The timescale to change the regime is also likely to be very long, considering the stakes involved and the required legal process.
- We welcome the recognition that “while demand management will have an important role to play, we may need significant new water resources to be developed”. This is a true “twin-track” approach. We cannot rely entirely upon demand management measures to ensure the security of supplies especially as their outcomes are uncertain.

How best can the White Paper’s aims to promote water efficiency and the use of sustainable drainage be implemented?

- Water Companies can encourage demand reduction, but cannot “deliver” it. It requires many organisations and stakeholders be involved and to play their part. It will also require many activities that customers will have to pay for. This raises the question as to whether customers want this and whether or not they are willing to pay for it?
- We have to recognise that by comparison with many European states, we are perceived as a country which receives plenty of rainfall. We should be making best use of the opportunities that exist to store that rainfall.
- An overall PCC reduction in the first five years looks like a target. It will be very difficult to achieve it if we are not funded for metering or if we are required to provide transitional tariffs and social tariffs. If metering remains an option for customers we cannot see how we can meet a target reduction for PCC. Also why should a reduction in PCC be pursued if there is no economic case for it, ie if there is no supply demand imbalance.
- We believe that there should have been a more positive policy statement in the paper on water meter installation.

Do you support the White Paper’s proposals on affordability of water bills for householders?

- We believe that the statement in 39 is very optimistic and we are not sure that the changes in household bills will be much affected by the market reforms. The estimates of the Cave Report etc. that there will be knock on benefits, are, in our view, unlikely to be delivered.
- Yes, we support the proposals but have some concern that the government’s plans could actually lead to higher prices for domestic water customers. The “cost principle” which governs wholesale water prices to ensure they cover the costs of maintaining water infrastructure is proposed to be removed. This means that Ofwat could set a lower wholesale price to encourage new water retailers, but the costs of infrastructure would remain with the existing water companies. Domestic customers, who are not allowed to switch supplier, could end up with higher bills to meet those costs. Alternatively the water companies will face lower margins. This could impact on investor confidence.
- There appears to be little in the paper concerning customer debt issues. We need the Government to implement the provision in the Flood and Water Management Act 2010 to make it a requirement for landlords to provide information on the water company details for their tenants, so that water companies have comprehensive information on whom to bill and pursue debt effectively. Government must also help by making information that it holds available to companies, so that they can provide assistance to customers in need. Government must recognise that the costs associated with debt have a financial impact upon customers who do pay bills.

Does the White Paper omit any key issues where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?

- We welcome the approach to social tariffs and water efficiency measures as good ways of reducing water usage. However we were surprised that the roll out of water meters was not covered in the paper.
- Given the time that change to the abstraction regime will take, we are surprised that there has not been more emphasis on the implementation of bulk water trading in the near-term.
- The White Paper leaves a lot of questions unanswered: the detail will only emerge with the publication of the draft Water Bill.
- The Company supports the focus in the white paper in improving the standards of service provided to developers. Though careful consideration needs to be given to ensure the reforms result in a framework that protects developers being in a situation where they incur the full cost of new assets although they only require a small part of that capacity.

We look forward to working closely with the Government, Ofwat, and all other stakeholders on these proposals, over the coming months to ensure that the best outcomes are delivered for the customer.

20 January 2012

Written evidence submitted by London Borough of Hammersmith and Fulham

1. *Does the White Paper set out the right principles for customers and the water and sewerage industry for taking forward reform of the market for water supply?*

A key way of reducing demand not covered with in the report, both for water supply and sewage disposal, particularly in London where the surface water and foul sewage is “combined”, is to make better use of rain water. The promotion of rain water harvesting in order to use rain water for non-potable functions both reduces the cost and need for water abstraction as well as reducing the impact on the sewerage system.

A copy of Professor Colin Green’s paper attached exemplifies how the economics of such an approach might work. A key to his report is how to encourage, or possibly to enforce via planning, is the retrofitting of existing properties.

2. *Are the proposals to protect and enhance water resources, for example on abstraction regime reform, likely to be fully effective?*

The management of water is vital to the economy and well being of the population at large. The council strongly supports best practice for the use of water through the promotion of efficient household use of water and through metering. However there needs to be a more strategic plan to manage water more efficiently over the longer term.

The historic position in London, which has evolved over the last two centuries, of combining rainfall runoff with foul sewage, needs to change.

The current scenario in London in terms of water management is completely unacceptable. On the one hand there are plans to construct the Thames Tideway Tunnel to deliver a mixture of valuable fresh rain water and foul sewage to Beckton for treatment to put the treated effluent back into the Thames and on the other hand there are proposals to construct a desalination plant to provide potable water.

This extreme waste of rain water, at an obscene financial cost, cannot be right. The current approach will increase water bills putting many people into water poverty.

The council support the programme that includes demand management to significantly reduce water use through both best practice for water usage and metering. However the long term strategic approach must be to take some of the surface water out of the system and to use it more efficiently particularly as many of the household tasks do not require potable water. Such an approach reduces costs for both water and sewage treatment and must be sensible.

The council welcomes the intention to consult on a national strategy on urban diffuse pollution in 2012 ... encouraging the introduction of drainage systems that reduce flood risk and the amount of pollution running off our roads and industrial estates and into our streams and rivers, as well as relieving pressure on our sewers. We also welcome the proposal to consult on national standards and new approval system for sustainable drainage.

3. *How best can the White Paper’s aims to promote water efficiency and the use of sustainable drainage be implemented?*

The implications for the London boroughs in respect of their new duties under the Flood and Water Management Act as a Lead Local Flood Authority is to manage flood risk.

These new duties apply to the London boroughs individually and any joined up thinking has been initially led by the Greater London Authority through the Drain London group. This group oversaw the development of each borough’s Preliminary Flood Risk Assessment and their Draft Surface Water Management plan but the group has now passed the lead back to the boroughs to manage individually—albeit that clusters of authorities are meeting on a local catchment basis.

The Greater London Authority (GLA) has taken a lead on Flooding matters but they are not a Lead Local Flood authority, this is delegated under the Flood and Water management Act to the London boroughs. Additionally unlike in planning, where there is a London Plan overseen by the GLA and the Mayor of London, there is no similar process for Water management.

There is no joined up thinking in relation to governance and accountability for water management. The council considers that the GLA have a role to play here and that the appointment of a Water Commissioner similar to other major world cities, particularly in the United States who would have overall responsibility for water quality and natural resources would be appropriate to ensure that the whole water cycle is properly managed

The impact of London's combined sewerage system in time of rainfall gives rise to the combined sewer overflow problem. Part of the solution to this problem, in the longer term needs to look at water management and how this sits along side development in the capital. Better use of rain water and sustainable drainage provides benefits not only for avoiding river pollutions by limiting overflows but also by reducing water demand.

An explanation of the current disjointed arrangement and how London might benefit from having a Water Plan, much like the London Plan for planning matters, overseen by a new role of Water Commissioner might be structured is set out in the attachment below. The Commissioner could promote water efficiencies via SuDs or other measures, within new and existing developments as well as the co-ordination of works associated with surface water management plans.

4. *Do you support the White Paper's proposals on affordability of water bills for householders?*

The cost of water bills in London and throughout the Thames region will be grossly affected by the construction of the proposed Thames Tideway Tunnel scheme.

The estimated cost of the Thames Tunnel scheme has increased from £1.7 billion in 2006 to £4.1 billion today and the council understands that the cost of this scheme will add around £80 to £100 in perpetuity to the average annual water bill throughout the Thames Water region. Whilst Thames Water's bills are lower than the national average, these increased charges will fall to some of the most vulnerable who can least afford to pay such an increase.

The Urban Waste Water Treatment Directive (UWWTD) states that the design, construction and maintenance of collecting systems should be undertaken in accordance with the use of Best Technical Knowledge Not Entailing Excessive Cost (BTKNEEC) to limit pollution of receiving waters.

The Thames Tideway Strategic Study (TTSS) proposed three solutions to meet the requirements of the Directive; sewage treatment works upgrades (cost £0.7 billion); the Lee Tunnel, Abbey Mills to Beckton (cost £0.6 billion) both of which are already being constructed, and the Thames Tideway Tunnel. The upper Tideway (in the West) has seven of the 10 most polluting Combined Sewer Overflows (CSO). One of the remaining other three is Abbey Mills which is being dealt with by the Lee tunnel.

The upper Tideway has a small tidal cubature so has limited ability to dilute any CSO discharge. In Professor Chris Binnie's view (he Chaired the TTSS review in 2005) only the West tunnel, starting at Acton and finishing at about Heathwall, would solve the issues in this section. The West tunnel might cost about £1.9 billion. Connecting this tunnel with the Lee tunnel in the East (TW's current proposal for a single tunnel solution) would cost a further £2.2 billion. The Lee and West tunnels, at a combined cost of about £2.5 billion, reduce spill by a quoted 72%.

With these localised solutions, much of the benefit of the full tunnel could be achieved by the Lee and West tunnels. The full tunnel would cost an extra £2.2 billion for another quoted 22% of spill reduction. Surely this extra expenditure amounts to "excessive cost" under the UWWTD or "disproportionate cost" under the Water Framework Directive?

5. *Does the White Paper omit any key issues where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?*

As outlined in the responses to questions 1 to 4 the key issues that need to be addressed are summarised below:

- (1) to make better use of rain water to reduce water and sewerage demand;
- (2) particularly in areas where there is "combined drainage" to take surface water out of the equation via measure such as SuDs and "rain water harvesting";
- (3) to encourage improved and more joined up water management which, in London might be via a Water Management Plan overseen by a Water Commissioner to assist with planning, existing and new development and co-ordination of the roles of Lead Local Flood Authorities within the catchment; and
- (4) to encourage government to opt for a more cost effective solution to the Thames Tideway Tunnel where the objectives for the original scheme can be met for almost half the cost saving water charge payers, and possibly tax payers if the costs overrun, £40-£50 pa

Written evidence submitted by David Wilks, Varyflush Ltd

1. Over 52% of water company output is used in households, fact.
2. The flushing toilet is, by far, the biggest single user of household water, using around 60 of the 150 litres we each use per day, fact.
3. For 160 years we have been flushing the FULL cistern every time, to flush away what is essentially always VARIABLE pan contents. The result is that about half the flushing water, on average, is completely wasted, water that continues to flow into the pan AFTER the contents have gone. That's 30 litres of water wasted per person per day.
4. My revolutionary INTERRUPTIBLE flushing technology, in the form of the INTERFLUSH retrofit kit and now the full siphon version, SAVER-SIPHON saves every drop of this previously wasted water because it allows the user to STOP THE FLUSH AS SOON AS THE PAN IS CLEAR OF IT'S CONTENTS.
5. By logic alone, nothing can flush a toilet with less water because using any less would mean the pan has not been fully cleared.
6. "Push and let go" is replaced by: "Push, HOLD DOWN to flush, let go to stop". It is no more complicated than that but you would not know it from the resistance that it has faced from Defra, Waterwise, CC Water, UK water, ALL the water companies and their allies.
7. It took two years to convince Defra to conduct a trial. The trial was conducted on a purpose built test rig at Herriot Watt University in January 2003 by the chief test person at WRAS. The tests proved that the INTERFLUSH or SAVER-SIPHON saves 47% of the flushing water, on average over a number of flushes with varying amounts of pan contents.
8. A contact at Ofwat recently informed me that Defra have now LOST the report.
9. In 2003 ALL the water companies received a video, fully explaining my very simple technology. They have done nothing but try to "kill" it since then because it saves so much water they see it as a threat to their revenues.
10. For all their talk about water being a precious resource and the need to save it, one water company executive let slip their true view on water savings, when he was drunk at a dinner: "Why should we save water, we are in the business of selling it, not saving it".
11. This may explain why the water companies lobbied so hard, at the time of privatisation, for the inclusion of one extra word into their inherited duty on "water conservation". That one word was PROMOTE so their legal duty became to "PROMOTE water conservation", which translates into just talking about it.
12. Indeed, the water companies were further incentivised to dismiss water saving measures because the legislation made provision for them to make a good profit from providing new supply side infrastructure, in the form of civil engineering schemes.
13. This latest white paper, yet again, is steering us down the supply side solution because I believe it to be written with the benefit of the water companies taking priority over our national resource of water.
14. For instance, my technology can save the same amount of water as the proposed Abingdon reservoir can supply but at one seventieth of the cost, that's zero for clarity. Yet my technology has again been dismissed by Thames water, in favour of building their new reservoir. Thames water will be borrowing the money for this and it's customers will be paying it back plus the interest. This is bankers logic and we all know where that leads.
15. You, the government have been misled for decades by your advisers because most are in the pockets of the water companies one way or another.
16. A senior Whitehall official at Defra telling me: "That I will never get the interflush off the ground, the economy is more important than saving water". Translate that into what you will. Either way, you cannot drink money.
17. RECAP: The flushing toilet is the biggest user of water and my technology is the biggest saver of flushing water. Therefore, my technology is the biggest water saving technology since the siphon became the sole flushing device in a British cistern, over 150 years ago.
18. This raises another major thing that you were misled on. These dual flush toilets that feature in the White paper on "Bathroom savings". They are invariably push-button operated, which means there is a drop valve or flap valve in the cistern and NOT a siphon.
19. These valve flushing devices have been KNOWN to leak ever since they were invented. The siphon, which NEVER leaks, was invented to replace them in British cisterns in 1863, valves being outlawed as water wasting. In 2001 your advisers misled you into making them legal again under the guise of dual-flush and the "lure" of simple push-button operation.

20. In the USA, all they have ever used is valve flushing devices, their Environmental protection agency estimate valve leakage to be 35 litres per person per day.

21. This White paper is, yet again, promoting dual-flush toilets as water saving, which is a straight lie.

22. Britain is the last country on Earth to still have the siphon in any numbers. If the siphon goes from Britain, the ONLY flushing device that NEVER leaks, to be replaced by something that has been KNOWN to leak for 150 years, then it is gone from the world forever and we will have to find an extra 11.7% MORE WATER just to make up for the leakage and all under the banner of water saving. Is their a better definition of insanity, note the similarities to what happened in banking and the consequences of it

23. The Decent Homes Program have been removing leak free siphons and fitting leaking valve toilets, leaving the poor householder to pick up the tab for the leakage. This, to the poorest people in the land, what is decent about that. Yet another point that you were misled on.

24. You mention fitting hippo bags or other cistern displacement devices. The British Bathroom Manufacturers Associaton (BMA), the people who represent the people who MAKE the toilets and not the people who sell water said the following about them:

25. What about putting a brick in the cistern? The BMA recommends against putting any object in the cistern to reduce the amount of water it stores because a toilet that was designed to flush on 13 litres will probably not clear the pan if you use a lower volume and then people just flush a second time, which uses even more water.

26. The line marked "water Line" or "WL" on the back of every cistern is not their for decoration. That cistern needs that volume of water to clear a full pan loading, use any less and it will need flushing twice.

27. This is why water companies give them away, they just give the perception of saving water but mainly end up using more.

28. The only time water companies want people to save water is when they do not have enough to sell. Hence the temporary measures like hosepipe bans but never my technology because it delivers PERMANENT water savings and on a massive scale, 8.7% of UK water resources in fact. That plus the 11.7% from not using valve flushing gives a saving of 20.4% of UK water resources, £3.4 billion for consumers and 1.7 million KWh of electricity.

29. The water companies push 6.9 billion tonnes of water through 250,000 miles of pipes per year, which makes them the largest single user of electricity in the UK. Electricity that needs energy imports.

30. The whole world needs it but I have no chance of exporting as long as my own country of origin continues to try to kill it off.

31. The above is only scratching the surface but I have run out of word count. Please do get in touch for further evidence and further solutions. See videos etc at www.interflush.co.uk.

22 January 2012

Written evidence submitted by The River Chess Association

We have read the Water White Paper and are encouraged by the proposals on abstraction and diffuse pollution. We are doing our part to promote efficient use of water to reduce demand and are prompting public awareness through our website, Facebook page and Twitter account. We are also getting this message to the younger generation through hosting local school visits to the river. We monitor the health of the River Chess through measuring river fly life and work to improve wildlife habitat. Through this work we have noticed two major issues, low flows due to excessive abstraction and low rainfall and pollution from sewage discharges. A combination of both these events could lead to an environmental disaster for the River Chess.

The EFRA inquiry is an opportunity for the River Chess Association to voice our concerns regarding the omission of the combined sewage overflow. It is important to point out that the White Paper is vague on what action will be taken to reduce abstraction levels in the years leading up to the proposed licensing legislation change in 2027. It is also less than clear as to what rivers like the Chess will stand to gain from the proposed "ramping up" of the EA's Restoring Sustainable Abstraction programme, particularly as the paper suggests that abstraction reduction will not be pursued in catchments where it is considered to be unfeasible on financial or technical grounds. The Chess is just one of many catchments where this exception clause is being used.

In particular Government sanctioned sewage discharges are not addressed in the Water White Paper, this issue has been successfully buried. This is a major disappointment as we are constantly reminded of the damage these discharges can do. Only on the 8th December 2011 Thames Water were fined for the damage done in the Silchester Brook in Hampshire and Foudry Brook in Berkshire by such an incident. During 2011 there were similar incidents on the rivers Crane, Arun and Thames with many thousands of fish and invertebrates being killed.

The issue of sewage discharges is discussed in Section 4 Planning and building for the future. Specifically in 4.26 it states that “In 2010 over 60% of serious pollution incidents were caused by the failure of the sewerage network (such as sewer collapses and combined sewer overflows)” and in 4.27 “We recognise that planning, and in particular longer term planning, for sewerage infrastructure has had less focus than that for water supply.” Despite these comments there is nothing in the Water White Paper Section 7 Conclusions that addresses the issue. Government continues to approve sewage discharges into our rivers and coastal areas, the Water White Paper should set out a schedule for this odious practice to be phased out.

Here on the River Chess we watch the weather forecast with trepidation. We face the dilemma of needing rain to recharge the aquifer to bring flow back to the upper Chess but hoping it is not too heavy to trigger a sewage discharge. A discharge now will be devastating as flow rates are as low as we have ever seen them.

We appreciate this is a difficult task but we do see the need for more “focus” on the issue of sewage discharges and a structure and policy for reduced abstraction, particularly now as we face the distinct possibility that the Chess will be dry this summer. We look forward to seeing these points being taken up in future Government plans.

23 January 2012

Written evidence submitted by the Major Energy Users’ Council (MEUC)

EXECUTIVE SUMMARY

- The Government’s Water White Paper is an essential step in developing a customer-focused water industry.
- There is a real appetite among our customers (who represent about 25% of business consumption) to be able to choose their supplier and we therefore welcome the Government’s intention to establish a UK market for retail water and sewerage services and to reduce the threshold to zero, which will enable all non-household customers to benefit.
- We know that since retail water competition was introduced in Scotland in 2008, customers have benefited from reduced bills, improved customer service levels and greater water efficiency.
- It is important that the Government meets its commitment to publish a draft Water Bill in early 2012 and that it is ideally included in this year’s Queen’s Speech. This will enable customers to receive the benefits that competition will deliver as soon as possible.
- Our recent research reveals that our members (ranging from Asda, Cable & Wireless, Celanese, Iceland, Mitchells & Butlers, MOD and Rolls Royce) are seriously concerned about poor levels of customer service from their existing suppliers and have highlighted their problems in connection with billing inaccuracies, tariff options, lack of advice on water efficiency, difficult access to meters, service interruptions, leakage, sewage works odour, water resources and risk of flooding and drought. It is clear that there is urgent demand for retail competition.

BACKGROUND

This evidence is submitted by the Major Energy Users’ Council (hereafter MEUC), which is now celebrating its 25th anniversary. We are the UK’s leading lobby and networking organisation for the UK’s largest business consumers of electricity, gas and water.

THE BENEFITS OF COMPETITION

Currently, some customers are receiving thousands of separate paper water bills per year, which is inefficient. A competitive market would help to reduce the number of suppliers an organisation would work with as well as incentivise companies to improve the service they provide, such as switching to online billing.

By abolishing the threshold altogether, a million additional customers will be able to benefit from competition, instead of only 25,000 more when the threshold is at five megalitres. Many of our largest members have sites which consume less than 5ML of water; some use less than 1ML. However, the aggregated consumption of these sites is significant and these customers want to deal with one retailer across the UK. It is important that the delivery of the market takes account of this requirement.

ENSURING THE SUCCESSFUL IMPLEMENTATION OF RETAIL WATER COMPETITION

A draft Water Bill, which clearly sets out how to ensure an orderly transition to a competitive market, should be introduced as soon as possible. It would therefore be a missed opportunity if the Water Bill is not included in this year’s Queen’s Speech.

It is vital that the market is simple and easy to understand for customers with common standards and procedures to minimise any confusion for those customers operating across the borders of Scotland and England.

We know from the lessons learned in Scotland that the success of the market is dependent on certain steps being taken, including a level playing field for new entrants, the removal of the cost principle and regulated wholesale prices and the implementation of customer protection, including default tariffs and codes of practice.

PROMOTING WATER EFFICIENCY

MEUC has held many meetings over the years to encourage best practice in water efficiency by arranging for presentations from members and water consultants on methods used to reduce consumption and costs. As a result many of the UK's leading businesses have been spurred on to improve their efficiency. Regrettably, water is seen as a minor issue in many large businesses and minimum time is spent on it. Suppliers must become much more active in offering advice and support. In Scotland, Business Stream has recognised that customers are not able to spend much time on water issues and in many instances has assumed responsibility for reducing costs.

ADDENDUM

Typical responses from two of our members, AstraZeneca and a large retail group illustrate the depth of feeling about existing service levels and the urgent need for competition.

AstraZeneca's view:

- Metering and AMR reliability and availability including protocols for installation of data loggers on fiscal meters.
- Complexity of tariffs and onus on the customer to ensure they are getting the best price and being charged correctly.
- Water scarcity and sustainability.
- What will Competition mean if SWD/sewerage is not included?
- Quality and availability of electronic billing.
- Rising water costs.
- The basic supply chain costs precise and transparent.

Large retailer's view:

We have experience of being supplied by every single licensed supplier.

The level of customer services varies dramatically from those who are reasonably proactive and forward thinking to those who appear to treat customers as the inconvenient end of the chain where they happen to get their money from.

“Day to day” service—the basic meter reading and billing varies. Some are good (AMR data used, group bills available electronically, billed monthly), most are poor—estimated bills, wrong tariffs applied, individual paper bills for every site, sporadic billing cycle (month? quarter? half year? annual? sometimes never..).

One-off problems are sometimes dealt with in an unreasonably heavy-handed way (eg after we've taken over a site we may not have properly notified the water company of change of tenancy, so bills can go unpaid for a while—however, even after we've made contact and given assurances, some companies will still threaten to disconnect the site unless they get immediate payment, or request unreasonable deposits—all this in spite of the fact that they will nearly always be supplying—and being paid for—other sites that we own. They should trust us to fulfil our promises.

The big attraction for us of opening competition in the water market is to be able to select a single supplier (or perhaps a couple) who could offer services at the higher quality end of the scale—AMR-based reads, regular consolidated bills etc, plus the ability to help us manage the supply change hiccups. I don't anticipate huge financial benefit, although I would expect there to be some efficiencies and economies of scale in some regions—eg the average cost to serve per site for one supplier across all our sites has to be less than a company only supplying a handful.

23 January 2012

Written evidence submitted by Sembcorp Bournemouth Water

1. We welcome the White Paper; it provides a policy link from the Natural Environment White Paper to the proposals for changing water regulation and the water industry (the Cave and Walker reports, the Gray review and Ofwat's Future Price Limits (FPL)). However, it would have been helpful if the White Paper had been published before the FPL consultation. There is some inconsistency between the two publications and some of Ofwat's proposals do not reflect the spirit of the White Paper. In general, the White Paper prefers a more pragmatic and evolutionary approach than does Ofwat, and has a clearer vision of the way forward.

QUESTIONS

Does the White Paper set out the right principles for customers and the water and sewerage industry for taking forward reform of the market for water supply?

2. Customers are clear about what matters for them—they want a continuous supply of clean and wholesome water. Other concerns are subsidiary—they want to pay a fair price and they do not want the environment damaged in their name—but a completely reliable water supply system is their highest priority. They do not want to see radical reform in the pursuit of relatively small financial benefits if this puts the primary service at risk.

3. Accordingly, we agree that now is not the time to take risks with the successful source to tap model, particularly as investor confidence is so important to meeting future challenges. We accept that some regulatory changes are needed, but we think that the key to meeting future challenges lies in allowing a more diverse and local approach to develop, rather than the replacement of one restrictive regulatory approach with another.

4. So, we support a genuinely evolutionary approach to industry reform and initiatives, which like Defra's timetable for changing the large-user threshold, will allow the incremental evaluation of the benefits of retail competition and minimise the risks to all stakeholders.

5. We are concerned at the continued use of Scottish evidence to support radical change. The situation in Scotland is very different from England and Wales. We have already achieved the same efficiency improvements and more. We do not have the same subsidised cost of capital, yet our bills are much lower, and our customers are far more satisfied than those customers north of the border. There are lessons from Scotland and we should use these to inform our thinking, not as a blueprint for a radical new approach.

6. We support the Defra proposals to reform the existing Water Supply Licencing regime. However, there are wider lessons for Defra and Ofwat, mostly relating to the need to consider and test proposals before enshrining them in legislation.

7. We do not agree that new market entry arrangements and formal separation are essential conditions for innovation and change. There is a vibrant process of strategic market entry in the water industry. New owners play an active role—they bring ideas and business models. And well-designed and executed regulatory incentives, such as Ofwat's service incentive mechanism, can encourage both innovation and rapid improvement.

8. While we welcome the decision not to push for legal disaggregation of the companies, (and we think a retail price limit is a reasonable evolutionary step), we do not agree that establishing a retail price limit on its own will provide the wholesale business with a much stronger incentive for improved efficiency. To make a difference Ofwat needs to put in place positive incentives to allow the retail and wholesale businesses to meet both customer expectations and environmental challenges without an increase in complexity and uncertainty.

Are the proposals to protect and enhance water resources, for example on abstraction regime reform, likely to be fully effective?

9. We support the aims for reform of the abstraction regime. The formation of a well-resourced National Advisory Group to lead a broad consultation on abstraction regime is a positive step.

10. We also support the proposal for the EA to lead a study of the scope for interconnections to relieve water stress and deal with future water resource problems. It is important that this work is completed in time for the next water resource management plans (WRMPs) and the next price review.

11. We welcome the statement of principles to maintain abstractor confidence and the proposals for the EA to work to establish a working water market.

How best can the White Paper's aims to promote water efficiency and the use of sustainable drainage be implemented?

12. The White Paper includes little that is new on water efficiency. We had hoped to see proposal for more affirmative action to take water efficiency to a more productive level. For example, while improved product labelling will help customers choose more efficient appliances, some sort of subsidised replacement of household fittings would encourage decisions to replace the damaging equipment.

13. The discussion of metering and new tariffs in the water efficiency context highlights the potential for consumer acceptability issues. More affirmative and supportive action from government could help to overcome these.

14. Finally, we are concerned that some of Ofwat's FPL proposals (which appear to rule out price limits providing any subsidy for free supply pipe leak repairs and provision of water butts, and make higher levels of metering unattractive) run against those in the White Paper.

Do you support the White Paper's proposals on affordability of water bills for householders?

15. We have supported Defra's proposals for the use of social tariffs; however we are also concerned that it might become compulsory to offer a social tariff even where better affordability options exist. Because we have managed to keep price increases to a minimum our bills are substantially below the level of most other companies. This, with our understanding of our customers and the issues that affect them, minimises the water affordability issues in our area. We will continue to identify customers with affordability problems and deal with them sensitively and constructively, offering meters to customers where there are benefits, but we may not need an affordability tariff.

16. Finally, we cannot see how market reform proposals will make any real contribution to affordability issues—the Defra and Ofwat impact assessments appear to promise a bill reduction of around £5 per customer after 30 years! The industry needs to be sure that changes to water regulation decreases costs or provides additional or better services that reflect the increased costs. Change is always good but is usually more expensive than hoped and with benefits at the level predicted we would suggest a careful look to ensure that changes are driven by outcomes that customers want and not idealism.

23 January 2012

Written evidence submitted by Wolseley UK

1. Wolseley UK welcomes the committee's inquiry into the Government's water white paper, and the opportunity to make a submission.

2. Wolseley UK is the UK operating company of Wolseley plc, the world's number one distributor of heating and plumbing products and a leading supplier of builders' products to the professional market. The company is wholly engaged in the distribution of construction products and materials through a nationwide branch network. The company is organised into trading brands, which serve distinct customer groups.

3. This submission incorporates the views of our trading brands Plumb Center and Drain Center. Plumb Center is a specialist supplier of domestic light side products including central heating equipment, plumbing, drainage, bathrooms and showers. It has more than 480 branches throughout the UK. Drain Center is a specialist supplier of drainage products including above and below ground plastics, cast iron, aluminium, polyethylene, an extensive civil range and all other products for the drainage professional. It has 90 branches throughout the UK.

4. Our principal interest is in providing practical and economic solutions to allow both households and businesses to become more water efficient. Our response focuses on water management and conservation.

5. A summary of our key recommendations is provided below:

- Establish a cross industry group with representatives from government, the utility companies, distributors, manufacturers of water products and their associated installers to ensure an integrated and co-ordinated approach.
- There are five practical initiatives that should be introduced to help with water management and conservation. Some of these measures were recommended in the Independent Review of Charging for Household Water and Sewerage Services, undertaken by Anna Walker.
- Incentives need to be developed, and the issue of water conservation needs to rise up the political agenda.
- Water poverty needs to be taken much more seriously and should be an issue with specific Ministerial responsibility.
- We believe that the plumbing installer can play a key role in influencing the uptake of water efficient products. Plumb Center serves a wide range of professionals working in the plumbing sector, many of whom will be involved in the decision making process for both domestic and non-domestic products.
- The inclusion of hot water products in the Green Deal is welcome. However, in view of the overall goal to reduce the environmental impact of our buildings we would prefer the inclusion of all measures designed to reduce water consumption. We see this as a missed opportunity, particularly in view of the fact that the programme is entirely funded from private investment.

BACKGROUND

6. The UK household sector accounts for approximately two-thirds of public water supply use, about 3.5 billion cubic metres per year. Domestic water use has grown consistently to the current figure of 150 litres per person per day.

7. Schools in the UK spend at least £70 million on their water bills each year, and use over 31,000 million litres of water. For the biggest users—a simple retrofit can save up to 20% of their water use: 3,130 litres per day, adding up to 1.14 megalitres a year. There are measures that can be taken to reduce water consumption (see

case study 1), and such schemes are simple and relatively inexpensive and should be encouraged throughout the country.

Case Study 1: Rainwater Harvesting: Champion School

In partnership with both Kingspan Water and Eaga we have recently installed a SmartRain system at Champion School. We are expecting this system to reduce mains water usage by up to 85%-a saving of around 250,000 litres per year.

The development is highly significant because retro-fitting rainwater harvesting offers schools across the country the chance of having their own sustainable approach to water use. Until now, only schools that were actually being built could be fitted with rainwater harvesting because of the complexities of integrating harvested rainwater with the internal plumbing of a building. This has meant the majority of existing British schools are entirely dependent on mains water; something which has both a high environmental and financial cost.

8. Wolseley shares the Secretary of State's concerns about the stability and availability of the supply of water in the future. In fact, Wolseley has long expressed the opinion that water has been treated as the "poor relation" of carbon and energy in the emerging green economy and that such a lack of attention will have serious implications for us all in the coming years. Water is a highly undervalued asset and the drought conditions experienced in parts of the UK last year have highlighted some of the issues which are likely to become more commonplace as demand increases and supplies are affected by changing weather patterns. This twin spectre of increasing demands and reducing supplies will, as the White Paper suggests, require that "We all have a responsibility to use our most precious of resources more wisely".

WORKING WITH WATER COMPANIES

9. Our experience in dealing with water supply companies is that they have very different agendas because of the disparate nature of the industry in terms of geography, scale and assets. This makes the promotion of water efficiency incredibly difficult especially as the perceived financial value of water is so low.

PROMOTING WATER EFFICIENCY

(a) *Water Efficient Products*

10. Although the uptake of more energy efficient appliances has been encouraging, there has been less enthusiasm for water efficient products. **This is the result of both a lack of awareness and the relatively cheap cost of water.** Currently, around one-third of domestic properties in England and Wales are metered. However, this varies across the country, with metering levels in some water company areas around double the national average. **Unless a link between use and cost is clearly established then the appetite for improving water efficiency will be incrementally less.** Levels of metering are likely to increase substantially over the next few years, particularly in the areas defined as being in "Serious Water Stress."

11. We also have to start challenging the misconception that water efficient products provide a worse user experience. Correctly designed and fitted products can provide perfectly acceptable performances. Case studies are always powerful ways of convincing consumers about the efficacy of measures and perhaps there may be solutions in establishing a strong online presence. Allowing purchasers to see products in use is always the most powerful change agent and Wolseley's Sustainable Building Center has received an unprecedented 16,000 trade visitors since it opened in 2008, as well as ministers, parliamentarians, officials and select committees.

The Wolseley Sustainable Building Center

The Wolseley Sustainable Building Center at Leamington Spa is a purpose designed facility to showcase energy and water efficient products to customers from the construction industry. The building features installed products and allows visitors to see them operating in a real working environment. Water efficient product installations include waterless urinals, low flush wc suites, aerated showers, low flow taps, infra red taps, rainwater harvesting and sustainable drainage system.

(b) *Labelling*

12. We support the adoption of a water efficiency labelling system and we already promote the use of the Bathroom Manufacturers Association scheme using the simple A-G scale. We do not share misgivings about the scale being confusing for consumers since it is used for energy as well, in fact we would argue conversely that this common format increases understanding.

13. However, we do not think that the product labelling system goes far enough because of two issues.

- (i) Whilst product labels may allow consumers to compare products, which is a very positive aspect, the measure of water use requires two factors, namely flow rate and time. The purchase of a tap with a lower flow rate is only beneficial if the tap is left running into an unplugged receptacle. This may give a positive outcome in rinsing, although this is not guaranteed. However, if the receptacle is till filled with the same quantity of water then it will simply take

longer. Likewise, the use of a restricted flow or aerated shower will only be beneficial in terms of water use if the user uses the appliance for the same amount of time.

- (ii) Product labelling can only be successful in products which consume water whereas products which potentially reduce potable water use by substituting rainwater or grey-water will fall out of scope.

14. So whilst we remain very supportive of the labelling scheme, it does need to come with a very prominent educational campaign to explain how time and volumes as measurement factors are as important as flow rates.

(c) The Key Role of the Plumbing Installer

15. We believe that the plumbing installer can play a key role in influencing the uptake of water efficient products. The plumber is seen as an expert advisor in technical issues and whilst the bathroom products are often purchased with décor in mind, there will often be performance criteria as well. Plumb Center serves a wide range of professionals working in the plumbing sector, many of whom will be involved in the decision making process for both domestic and non-domestic products.

16. Often product choice is made without an understanding of what is available or possible. We believe that plumbers should be encouraged to provide information to help customers to make decisions with efficiency in mind. Plumb Center promotes water efficient products to trade customers through catalogues and web sites and would be delighted to work with DEFRA in a co-ordinated campaign to involve and encourage professionals to become involved.

(d) The Green deal

17. The inclusion of hot water products in the Green Deal is welcome. However, in view of the overall goal to reduce the environmental impact of our buildings we would prefer the inclusion of all measures designed to reduce water consumption in buildings. We see this as a missed opportunity, particularly in view of the fact that the programme is entirely funded from private investment.

ESTABLISH A CROSS INDUSTRY GROUP WITH FIVE KEY INITIATIVES

18. We feel there is real value in establishing a cross industry group with representatives from government, the utility companies, distributors, manufacturers of water products and their associated installers. The group's purpose would be to promote a range of practical initiatives, which it believes could be extremely effective in terms of making households in the UK more water efficient. The group could play a key role in reducing water consumption and improving water efficiency as well as being at the forefront of the development of new sustainable technologies.

19. We believe that such a group would be well placed to work with the Government to ensure that the policy proposals outlined in the white paper can be practically implemented and to maximum effect. It is our view that the installer is key to the process.

20. By working more closely along the supply chain we can share experience and data which would make a significant difference in ensuring that water efficient products are purchased and installed.

21. We recommend that the department works with the industry in facilitating such a group to encourage industry action in the use and promotion of water efficient initiatives and products.

22. If a cross industry group is to be established we recommend that it focuses on five initial initiatives:

(i) Recognise water as an equally important resource as energy

23. We welcome the White Paper's recognition of water conservation and the need to educate the public on its importance.

24. We would welcome the development of a clear and agreed message surrounding water efficiency, including the impact on energy use, and believe that all group members support this message in its market/customer communication.

(ii) Introduce a water standard

25. We believe it is crucial that the group should define and implement an easy-to-understand water efficiency standard for products and develop a roadmap for product labelling standards which progressively restricts the installation of less efficient devices.

(iii) Develop incentive programmes

26. The group would help co-ordinate water efficiency issues and ensure that water efficient measures are included in incentive programmes like the Green Deal and CERT and that the Enhanced Capital Allowances scheme is more widely promoted.

27. This would provide incentives for large scale retro-fit programmes and alongside existing programmes is an extremely cost effective way of addressing a hard to treat issue.

(iv) *Promote schemes that encourage consumers to monitor their use*

28. The group should work with other agencies and bodies to help consumers understand their water consumption and the direct impact of water using activities. Energy Performance Certificates (EPC) should be extended to become Resource Performance Certificates to include water use data.

29. Consideration should also be given to the introduction of a water efficiency certificate (WEC) which would work in the same way as an Energy Performance Certificate. This would help encourage behavioural change in consumers.

(v) *Educating the consumer*

30. It is widely recognised within the plumbing industry that the consumer is heavily influenced by guidance offered by their plumber who visits their home to carry out repairs or improvements.

31. In today's market, guidance given by plumbers and engineers is largely driven by economics and their experience, so that typically they will recommend solutions with the lowest "up front" cost rather than the most water efficient solution. Working with agencies such as Waterwise we are seeking support for a national media campaign that highlights to homeowners what water conserving options they have from simple initiatives, such as replacing shower heads, through to harvesting systems.

32. The group would use its relationship with installers to execute the media campaign in placing it at the heart of the plumbing industry's sustainability marketing campaigns.

33. Wolseley UK calls on the Government and parliamentarians to support the industry in the implementation of these low cost initiatives which we believe will support the proposals set out in the water white paper and improve water management and conservation in Britain.

POLICY AGENDA

34. Water needs to be seen as an important policy issue for two main reasons. Firstly the impact water use has on energy consumption and emissions, and secondly a growing number of households are finding themselves in "water poverty".

35. Energy issues seem to dominate the policy agenda at the expense of water. The water industry is a major energy user, and together with domestic hot water use, has a very significant carbon impact. Saving water reduces emissions. Solutions are available now and, in many cases, are relatively easy to retro-fit to existing buildings at low capital costs. **Wolseley would like the Government to ensure that practical measures are taken to implement the white paper's proposals to ensure that UK consumers are made aware of the need to use water efficiently.**

36. In England and Wales our drinking water costs around 1p for 10 litres (more than 17 pints). Most household customers pay for their water services based on the rateable value of their property. Whilst the cost of water is seen as reasonable for the majority, there are a significant (and growing) number of households where the cost of water can be problematic and the shift to meters may cause significant challenges. The emergence of "Water Poverty" has been recognised by the Joseph Rowntree Foundation in their report "Vulnerability to heatwaves & drought". Water poverty has been defined as a concern for households that spend 3% or more of their income on water.

37. It is seen as an equivalent to "fuel poverty" but is not as widely accepted or as often used in policy discourse. Large households on low fixed incomes are particularly vulnerable. **There needs to be recognition amongst politicians of the implications and escalation of "water poverty". Measures need to be introduced to address it, such as the five initiatives outlined above.**

38. Wolseley UK welcomes the opportunity to submit our views as part of the Committee's inquiry and would be happy to discuss any elements of this submission in more detail.

Written evidence submitted by the Kelda Group

1. *Does the White Paper set out the right principles for customers and the water and sewerage industry for taking forward reform of the market for water supply?*

1.1 We welcome this comprehensive contribution on the future of the water sector and the recognition of our sector's success. This success has been built on the principals of delivering customers with the highest levels of customer service whilst preserving the best value for money. We also welcome the changes to the special mergers regime which will allow high performing companies to deliver an even better service to a wider customer base. There are however areas where we feel the White Paper could have gone further to address the challenges facing the industry.

1.2 We welcome the White Paper's commitment to the existing Regulatory Capital Value (RCV) mechanism and that there will be no structural change in the industry. The White Paper recognises that the stable regulatory system has built investor confidence and that future investment needs to be sought in an increasing competitive market. When implementing legislative changes stemming from the White Paper, Government must bear in mind the need to maintain stability. Increasing perceptions of risk in the minds of investors directly affects financing costs and could have a detrimental impact on customer bills.

1.3 We recognise that business customers demand a different service to domestic customers and we welcome proposals to reform this market. However, it is vital that domestic customers are not disadvantaged by the implementation of competition for business customers, and that industry risk is not adversely impacted.

2. *Are the proposals to protect and enhance water resources, for example on abstraction regime reform, likely to be fully effective?*

2.1 We welcome proposals to protect and enhance water resources through abstraction regime reform and bulk trading. But these solutions must form part of a wider water resource management process and not seen in isolation. Dynamic permitting would also help to protect water resources whilst also addressing wider issues such as flooding. When considering bulk supply trading, the carbon cost of such a solution must be measured in order for the best overall environmental and economic solution to be selected. This integrated water management model could serve to address issues more holistically and this is outlined in the attached Appendix.

2.2 Population forecasts and climate change mean that water scarcity and sustainability are major national issues. We are keen to play an active part in addressing these fundamental challenges. Yorkshire Water has experience in this area, having constructed a Yorkshire water grid to improve security of supply in our own region. We also engage in some limited water trading with Severn Trent Water on our southern border, and would be happy to share our experiences of this in more detail should this be helpful to the Committee.

3. *How best can the White Paper's aims to promote water efficiency and the use of sustainable drainage be implemented?*

3.1 We support water efficiency measures which have an important role to play in addressing water resource issues. Metering is the fairest way to charge for water. Water companies should be incentivised to move towards universal metering as soon as practically possible.

3.2 The regulatory duty of water companies to promote water efficiency should be strengthened. A water efficiency levy or obligation on bills could encourage customers to recognise the true value of water. More support on water efficiency is needed from outside the water industry. This could be achieved through strengthening building regulations and further incentives for water efficiency in the home.

3.3 Flooding is an issue of concern to our customers and we believe the White Paper could have gone further to tackle sustainable drainage and related issues. Sustainable drainage could be best implemented if more responsibility is given to water companies. In light of the tight squeeze on public sector finances we believe the water sector could play a greater role in addressing surface water management, for example responsibility for Sustainable Drainage Systems could be transferred to water and sewerage companies.

3.4 The White Paper focuses on resilience, but question why it does not address resilience to flooding? Managing and mitigating flood risk remains a critical issue in our region and we are willing and able to play a greater role in delivering these vital public services. We urge the Government to consider further integration which allows for greater resilience and this is covered in the attached appendix.

4. *Do you support the White Paper's proposals on affordability of water bills for householders?*

4.1 We welcome proposals to support vulnerable customers in the Water White Paper and were pleased to see Yorkshire Water's Resolve Scheme and Community Trust used as case studies in the Paper.

4.2 Whilst water companies should be responsible for the effective implementation and management of social tariffs, the decision on who receives assistance is a matter of social policy. We strongly believe that this is a matter for Government to decide, clearly outlining which customers should benefit from a social tariff.

4.3 A national approach must be taken to identify those customers at greatest risk. If companies must dictate which customers will benefit, then access to local authority and/or government data on individual household benefits and pension credit would provide a consistent approach.

5. *Does the White Paper omit any key issues where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?*

5.1 The White Paper could go further in ensuring that the water we provide is sustainable and safe. The integrated nature of the water cycle and the threat of increasing flooding incidents are not addressed. The Paper also fails to take into consideration the environmental/carbon cost of collecting, treating and distributing water.

5.2 Electricity costs are forecast to increase significantly over the next 18 years (to 2030). We believe these rising costs coupled with the increasing levels of market volatility are significant threats to the sector being able to provide stable, cost effective water supplies. Harmonising carbon accounting would help to cut red tape, costs and minimise emission levels.

5.3 The sector should be encouraged to do more to improve the overall environmental performance of its activities. We have the potential to generate significant amounts of renewable energy but are restricted by the current regulatory regime. We believe we should be allowed to generate energy to power our sites through means such as wind as part of the regulated business. Incentives to innovate and invest in technologies that convert waste products into energy to power our operations would be welcome.

5.4 We would like to see a water sector that is incentivised to contribute to the UK carbon emission challenge. We believe there is a greater role that the sector could play. Scottish Water is seen as being key to Scotland's journey to a low carbon economy. We have similar resources in England and should be encouraged to support the transition to a low carbon economy.

APPENDIX

INTEGRATED WATER MANAGEMENT

Through a holistic understanding of the water cycle, our operations and the environment, we can simultaneously optimise our water resources, improve water quality and manage wastewater. We call this **integrated water management** and we do this by...

BUILDING RESILIENCE

In Yorkshire we have demonstrated that connecting a network of assets provides resilience. Our grid enables us to move water around the region to ensure security of supply. We have also invested in computer modelling to enable us to plan according to water resource need. The Water Resource Allocation Plan allows us to optimise our assets to ensure security of supply at the lowest cost. Successful bulk trading across borders will be achieved through the ability to forecast demand and plan resources.

IMPROVING WATER QUALITY

The White Paper endorses our integrated catchment approach to tackling water quality issues at source rather than focusing on expensive and carbon intensive treatment solutions. This approach is more sustainable, avoids increases in costs for customers and supports other ecosystems services such as biodiversity and carbon storage.

INTEGRATING WASTEWATER

In Yorkshire we have found that further benefits can be brought by looking holistically at the real time management of river catchments. Our rtRIVERi (Real Time River Integration) project seeks to integrate both the water taken from rivers for drinking water and the waste water discharged into a dynamic and optimally controlled system. The intention is to deliver increased water supply security, river quality and environmental improvements as well as significant reductions in energy consumption.

MANAGING SURFACE WATER

The threat that surface water can pose is all too real to communities in Yorkshire having experienced major flooding events in 2007. A subsequent flooding event in Goole in August 2011 illustrated that surface water management remains an issue despite new legislation being put in place. Further integration is needed in flood mitigation and flood risk management in order to better protect our communities.

PROTECTING OUR COMMUNITIES

We would like to play a greater role in protecting our communities for the long-term by helping to deliver vital public services. Society faces ever increasing environmental challenges coupled with a squeeze on public finances. Capturing surface water before it goes into the sewerage network can prevent flooding and pollution incidents.

GENERATING RENEWABLE ENERGY

It is our aspiration to maximise opportunities to generate energy from renewable sources to power our operations. This helps to cut the cost to both our customers and the environment. We have a track record of generating renewable energy sources at our sites through wind, anaerobic digestion and hydro; including the first screw hydro-generator ever to be installed in a waste water treatment works.

23 January 2012

Written evidence submitted by the Woodland Trust

1. The Woodland Trust is the UK's leading woodland conservation charity. We have three aims: to enable the creation of more native woods and places rich in trees; to protect native woods, trees and their wildlife for the future; and to inspire everyone to enjoy and value woods and trees. We own over 1,000 sites, 20,000 ha, of which 20% is farmed. We have 300,000 members and supporters.

SUMMARY

2. There is a growing body of evidence^{1,2,3} that demonstrates the value of native woodland to the management of the water environment. However, lower cost, natural options for water management are often ignored as the benefits of nature are not always instantly visible or cross the boundaries between regulatory frameworks (agriculture/water/pollution). This is regrettable as woods and trees provide low cost solutions to some of the challenges that the Water White Paper aims to address.

3. The Water White Paper acknowledges the potential for a more joined-up, holistic response to the management of water resources but identifies few definite mechanisms to achieve these aims, nor provides a timetable for delivery

THE ROLE OF TREES IN WATER MANAGEMENT

4. Woodland can be highly beneficial for water quality, quantity and the overall health of the water ecosystem:

- **Turbidity/siltation and river bank stability**—trees and their roots improve soil structure and stability; increasing soil infiltration, reducing soil erosion, maintaining good water clarity and improving soil organic matter.
- **Eutrophication**—the washing of excessive nutrients (from intensive land use) into watercourses is a major problem. Water draining from native woodland has a lower nutrient content as trees act as a buffer.
- **Pesticides and other chemicals**—watercourses in native woodland are generally free of chemicals pollutants. Riparian woodland acts as a protection buffer.
- **Flooding**—trees and woodland can reduce localised flooding and alleviate the effects of larger floods by: slowing the rate water reaches the ground, increasing soil infiltration so reducing the amount of run off, improving flood storage and slowing the overall rate of flood water movement.
- **Temperature**—trees provide shade and prevent watercourse temperatures rising too high, thereby protecting aquatic life from over heating, as warmer water contains less oxygen.
- **Groundwater quality and recharge**—trees intercept ground and airborne pollution allowing cleaner water to infiltrate soil. Trees can increase the level of groundwater recharge significantly when compared with intensively managed crops.

5. Woodland can also be part of the problem where poorly sited or badly managed woodland can lead to, for example, acidification from conifer plantations, increased water demand from change of grassland to woodland and local increase in flood risk from the change of conifer to broadleaf woodland.

6. All impacts from woodland depend on the underlying geology, scale, climate and type of management practiced which is why any decisions on land use change should be made at a catchment level.

BARRIERS TO EFFECTIVE USE OF LAND MANAGEMENT FOR WATER RESOURCE CONSERVATION

7. We welcome the emphasis on the Water Framework Directive, the catchment approach and Government's support of water industry investment in catchment management as well as the commitment to use CAP reform and agri-environment more effectively.

8. The Water White Paper identifies the need to move towards integrating and aligning existing processes and initiatives relating to water, but fails to identify how to achieve the fully integrated framework necessary (eg joined up Nature Improvement Areas, catchments for Water Framework Directive delivery and approaches to Flood Risk Management) in order to deliver the Government's ambition to halt biodiversity loss, support

healthy functioning ecosystems and establish coherent ecological networks as well as delivering a cost effective and sustainable water resource for all.

9. While we welcome the commitment to consider new mandatory measures should voluntary approaches fail, there is no guidance on when it might be appropriate to consider this option. There is also a lack of clarity about how and when existing baseline regulation will be incorporated into the catchment approach. Defra and the Environment Agency need to commit to tackling diffuse pollution through advice and incentives, underpinned by effective implementation of existing regulation, with a clear timetable for introducing further regulation if existing measures do not meet defined objectives.

23 January 2012

REFERENCES

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² Nisbet, TR, Silgram, M, Shah, N, Morrow, K and Broadmeadow, S (2011) *Woodland for Water: Woodland measures for meeting Water Framework Directive objectives*, Forest Research

³ UK National Ecosystem Assessment (2011) *The UK National Ecosystem Assessment Technical Report*. UNEP-WCMC, Cambridge

Written evidence submitted by the Chartered Institution of Water and Environmental Management (CIWEM)

1. CIWEM welcomes the opportunity to provide written evidence to the EFRA inquiry on the Water White Paper. We welcome the publication of the Government's Water White Paper and believes that overall it places priority on the right issues for action, (although it lacks strength in a number of areas, particularly in its lukewarm support for metering and intelligent tariffing) and much will depend on the speed of its implementation.

2. We welcome the programme of work set out for 2012 which should ensure progress on a number of key issues: including a Water Bill; the focus on catchment approaches; a national strategy on urban diffuse pollution; guidance to water companies on social tariffs; a national SUDs standard and approval system and new guidance to OFWAT on social and environmental factors.

Are the proposals to protect and enhance water resources, for example on abstraction regime reform, likely to be fully effective?

3. CIWEM welcomes reform of the abstraction regime to ensure that our actions do not result in unsustainable exploitation of resources and to protect freshwater habitats from the pressures of climate change, demographics and consumption. We are also pleased to see the acknowledgement of the historical under-recognition of environmental needs.

4. Reformation of the abstraction licensing regime will result in the re-allocation of water rights to people, industry, agriculture and the environment, consistent with their respective needs, but subject to competition between them where and when water is scarce. Reducing household demand through targeted tariffing would assist in striking the right balance in this regard.

5. Prompt licensing reform is required, as soon as practicably possible, in advance of the late 2020s timeline alluded to in the Water White Paper. Even so, effective reform will take some time and in the meantime, the risk or reality of damage to the environment remains. That being so, we support the use of price incentivisation to water companies to avoid taking water from particularly vulnerable sites in low flow spells. And we support the timely completion of the Environment Agency's Restoring Sustainable Abstraction programme, and the funding of arising costs in Ofwat's PR14 determinations.

6. The requirement to reduce abstraction for environmental reasons often applies to good quality, low cost sources, often in catchment headwaters. Thus, to move abstraction to other sources often means using ones of poorer quality and higher cost, including any extra treatment and distribution costs. Savings from demand management initiatives, including metering and tariffing, could substitute for the reduced yield. The full environmental benefits of reduced abstraction from reduced demand need to be fully considered.

How best can the White Paper's aims to promote water efficiency and the use of sustainable drainage be implemented?

7. The White Paper advocates water efficiency by individuals and by communities, and it provides pages of advice as to how it could be achieved. But it side-steps the crucial issue of the need to charge for water by volume used, ideally on a rising unit price basis and beyond essential need levels, and absolutely with protection provided through social tariffs (if not the benefits system) for the vulnerable and needy. Metering and tariffing requires water efficiency measures to be adopted to the levels required. Environmental awareness alone will

not prompt sufficient behaviour change in sufficient numbers. Saving money, too, is a necessary and an attainable part of the case for saving water.

8. CIWEM welcomes national standards and a new approval system for sustainable drainage. However whilst much of the white paper necessarily focuses on the existing water industry and water supply systems, it is hard to believe that a document on sustainable water resources fails to mention rainwater harvesting or water recycling and re-use.

9. These do not feature to any significant degree in the UK water industry at present, unlike in other water-stressed countries. Any future strategy to supply more water to more people in a changed climate should look at emerging technologies in developed countries that currently experience a climate similar to that expected to exist in the UK in future.

10. As an example, new development in Australia sometimes adopts an integrated approach to water supply that combines SUDS-style drainage, rainwater harvesting and water re-use to meet water demands. These schemes operate on a community level—ideal for the larger urban expansion areas which are being considered for the water-stressed SE of England.

11. CIWEM considers standards need to be developed for recycled water use. Further information is available in our 2010 report Regulation for a Sustainable Water Industry.

Do you support the White Paper's proposals on affordability of water bills for householders?

Does the White Paper omit any key issues where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?

12. CIWEM has considered these questions together because we believe the White Paper contains a clear contradiction: how can we value water and not take it for granted, but yet not pay a price for water that properly recognises its true value? The fairest way to ensure this is to establish widespread metering allied to flexible and social tariffs. At present, most households incur zero cost for each litre or cubic metre of water they use. And they have no financial incentive to be more efficient in their use of water; in fact, it costs them more to reduce consumption, unless the water efficient devices they take up are provided free by their water company.

13. The significant issues to be considered here are many: current water consumption is not within sustainable limits, our water wastage is high, our natural environment is under significant stress and millions of customers struggle to pay their water bills. All of which are set to get worse with the onset of climate change and a rising population. Today's system, based on 1974 rateable values, does not reflect water use, nor does it protect many low-income families from unaffordable bills.

14. We consider that affordability issues and metering should be addressed at the same time, as the two are inextricably linked: for metering and intelligent tariffing to work, we need to have affordable tariffs for the vulnerable and needy in place. That done, intelligent tariffs can be used to incentivise high consumption users to think again. The Government is aware of this, stating in an earlier affordability consultation in 2010 that: "some households face (financial) difficulties now and the problem is likely to grow as metering levels increase". CIWEM believes the White Paper is weak on metering and is particularly alarmed by paragraph 6.14: "water is relatively cheap compared to many other household bills, and we want it to stay that way". The Water White Paper is strong on affordability, but weak on charging for water by volume taken. In that regard, it misses an opportunity to promote the retention of affordable water for all who use water wisely, with only those who use high quantities being exposed to higher prices than they now face.

15. CIWEM believes paying for what we use is not only the fairest way to pay for water, it is also the only way to build the clear picture of patterns of water consumption which will be needed to move forward sustainably and to ensure that water is affordable for all in the long term. It is naïve and fanciful to assume that people will change their behaviour to the degree needed through anything but higher prices.

16. Politically, metering may be seen as difficult but recent research from the Fabian Society (Dec 2011) has shown that the public are prepared to support water metering measures, but only if the Government takes the lead and if the measures that are introduced are seen to affect everyone equally, or in a way that rewards those who avoid wasting water and penalises those whose use is excessive.

17. Further information is available from <http://www.ciwem.org/policy-and-international/current-topics/water-management.aspx> and the Fairness on Tap Making the Case for Metering document.

Written evidence submitted by Professor Catherine Waddams, Economic and Social Research Council (ESRC) Centre for Competition Policy, University of East Anglia

1. The ESRC Centre for Competition Policy (CCP) is an independent research centre, funded by the Economic and Social Research Council (ESRC) and established in 2004 as a ten-year Centre of Research Excellence. CCP's research programme explores competition and regulation policy from the perspective of economics, law, business and political science. CCP has close links with, but is independent of, regulatory authorities and private sector practitioners.

The support of the ESRC is gratefully acknowledged. The views and statements expressed are those of the author and do not necessarily reflect the views of the ESRC.

2. These comments relate mainly to chapter 5 of the White Paper, and deal with issues of affordability, consumer preferences and consumer representation.

(a) AFFORDABILITY

3. Affordability is likely to be a very acute problem in a small number of cases, but the White Paper's proposals are unlikely to be the best way of addressing them. The proposal to subsidise all bills in the south west by £50, like all universal schemes, suffers particularly from errors of inclusion—many bill payers in the south west who will receive such help do not require it. The benefit is untaxed, which seems particularly inappropriate for recipients who have sufficiently high income to pay higher rate tax.

4. It is not clear that the water companies are in the best position to assess social need at a local level, as the White Paper claims. Such expertise and responsibility surely lies with social security offices whose professional task is to assess need. Water companies are not well placed to undertake these tasks.

5. Moreover from the perspective of those suffering affordability problems there is a real danger of creating a complex system of entitlement for an individual household across different industries (qualification for social tariffs in energy, water, telecoms, broadband etc) which is both difficult to negotiate and poses a very real danger of creating a piecemeal poverty trap. If income rises, not only are benefits lost, but so may be an array of individual utility-related concessions. Encouraging such complexity seems particularly perverse when the government is trying to simplify the tax and benefits system. In this context the proposal for co-ordination across utility sectors and with debt advisors is a more fruitful avenue. The provision for interim measures while households adapt to their different circumstances is welcome, as long as a "sunset clause" is included so that the subsidy is clearly temporary.

6. The White Paper notes that bad debt adds £15 a year to bills (para 5.18), including those of low income households for whom such an addition is a real hardship. Social tariffs will also add to the bills of those who do not qualify (or claim) for them, with similar implications.

(b) SEPARATION OF RETAIL FROM WHOLESALE

7. As the White Paper acknowledges (para 5.45) the only way to remove risks of discrimination are to force separation. There is persuasive evidence¹ from other sectors that without such separation there is market distortion and consumers obtain less benefit. The White Paper prefers the route which poses lower risk to investment (para 5.34), but this will almost inevitably result in lower rewards.

(c) PROTECTING AND REPRESENTING WATER CONSUMERS

8. It is not clear that new codes of practice are needed on mis-selling: rather the existing law on fraud and mis-representation should provide sufficient protection if adequately enforced. The extension of financial penalties for infringements in guaranteed standards of service (para 5.63) is welcome in this context.

9. Ofwat's Future Price Limit proposals include increased involvement of consumer representatives, with companies being given the responsibility for ensuring that customers (particularly those with no choice of supplier) are adequately consulted within the price setting process. While there are serious doubts about how such a system will work in practice, this seems an inappropriate time to transfer the advocacy and complaint handling powers of CCWater to Citizens Advice. CA would have a vastly expanded role and duties, as well as those inherited from other sectors, at a time when the role of consumer representation will play a major and unproven role at the heart of the regulatory process.

(d) USING WATER WISELY

10. Subsidising prices undermines one of the chief aims of the White Paper, to encourage sustainability. The price of water is an important indicator of its worth, and incentive to reduce consumption appropriately. Chapter

¹ See for example Does ownership unbundling matter? Evidence from UK energy markets. *Intereconomics*, 42 (6). pp. 297–301 by Stephen Davies, Stephen and Catherine Waddams Price (2007)

6 contains exhortations and advice on using water wisely, but evidence shows that prices are likely to be a much stronger incentive, as the effect of metering on levels of consumption indicate.²

11. The White Paper notes that some householders eschew metering because they do not want the uncertainty in bill size which it might introduce. Research³ shows a range of attitudes among consumers, from wanting control to seeking (predetermined) certainty. The latter is met by a tariff with a very large fixed element (unmeasured water being the extreme case) and the former by a tariff in which the bill is almost entirely determined by usage, with very little fixed element. Costs should form the basis of devising efficient tariff structures and levels which provide appropriate incentives for use of water.

12. While differently structured tariffs could offer incentives to save, for example by introducing a time of year or time of day element, there are dangers of introducing optional tariffs for customers who have no choice of supplier. If some consumers transfer to the “optional” tariff and so reduce revenue to the company, others may see their prices rise as a result to fill the revenue gap.⁴ Care therefore needs to be taken to ensure that introduction of optional tariffs should not indirectly disadvantage or discriminate against particular groups of consumers. Of course this does not mean that the basic tariff should not reflect the pattern of costs. Transitional tariffs would be appropriate to help customers adapt to any major changes in tariff structures.

23 January 2012

Written evidence submitted by Lucy Borland

A double agenda is confusing the water demand management picture. To close a demand/supply gap through demand management you need to cut use by big users. This can be very successful, to the extent of being a revenue loss concern to potential investors. The MoD achieved a 25% reduction in UK estate water use 11 years ahead of target, employing the Aquatrine partnership in a PFI deal.

The Walker Review (looking at how ordinary people can be incentivised to use less water whilst ensuring it remains affordable to families), and water industry emphasis on household metering, also overlook a key pricing issue—a failure to match prices to location specific costs.

This creates cross-subsidies which distort choices between on and off grid supply. It removes incentives to prefer water abundant locations for new development, and to avoid water squeezed ones.

Upstream household/office use is a borrow, clean and return for reuse model. Awareness of this reuse aspect is very low and there are (US press) cases of expensive water recycling plant put into buildings despite ample local public water recycling capacity.

Downstream use, clean (a bit), discharge to the sea and wait for it to rain in your catchment—this is more expensive, especially in the context of expanding waste water treatment capacity on the south coast to catch up with population growth.

Off grid cycles can be very resilient, using and returning water at the same location.

If water for irrigation and cooling (lost to the atmosphere, not recycled) is currently cross-subsidised/underpriced, then it is likely we are underusing advanced irrigation techniques and alternatives to water cooling (air cooling or water recapture).

We are likely under using/researching traditional farming practices too, for example mist harvesting into dew ponds on the South Downs and planting local food plant varieties or mixed varieties to reflect unpredictable rainfall conditions.

A separate charging regime for irrigation water/water lost to evaporation, would allow water transfers for farming without burdening household bills.

Water abstraction charging is under review, but this process could usefully be expanded to consider location-sensitive pricing too.

We appear to have a disproportionate emphasis on cutting use by low-income low users, either as a prelude to raising prices (to fund closing the gap through higher supply) or as part of the long campaign to limit daily supply to those in water debt.

Water UK advise the re-use of cooled bath water on gardens. This is contrary to World Health Organisation guidance, and a transmission route for the norovirus and other pathogens (<http://www.emro.who.int/ceha/pdf/Greywater%20English%202006.pdf>).

Recent research for the Food Standards Agency found the norovirus in 76% of oysters from UK growing beds. A sewerage undertaker was fined £25,000 in 2011 for contaminating shellfish beds in 2009—a trivial

² See for example Consumer Choice in the Water Sector by Catherine Waddams and Kerry Clayton—report published by Ofwat as part of Future Regulations project (June 2010)

³ See survey in Waddams and Clayton above

⁴ For a review of evidence in this area see Benefits and Costs of Introducing Tariff Choice in Uncontested Markets—A Report for Ofwat by Kerry Clayton, Catherine Waddams and Catherine Webster.

amount compared to the costs of norovirus outbreaks and loss of consumer confidence in UK shellfish as a food source in a time of global food insecurity.

New research from Brighton university casts doubt on the general adequacy of wastewater treatment plants in the Sussex Ouse to remove human pathogens, especially when rainfall is high (AquaManche project led by Professor Huw Taylor).

The funding required to address inadequate coastal wastewater treatment might more readily win support if the health and economic consequences of failures are more closely tracked.

To re-engage water supply and sewerage with health promotion goals, the Consumer Council for Water's role could in future be split between Consumer Direct (billing issues) and local health/social care purchasing organisations (sewage flooding and water quality).

Smart meters are still on the water agenda despite a very mixed picture of evidence that they change behaviour—South West Water's trial of 1,000 customers on block tariffs did not produce the desired behavioural results and will not be extended.

There is a risk that continuing to push expensive smart meters might provoke a backlash against the private sector's leading role in UK utility provision. Enron found less than 1% of its US household customers wanted its smart energy meters. (Elkind and McLean, *The Smartest Guys in the Room*). The Enron experience perhaps continues to limit private sector involvement in US electricity supply.

Andrew Tyrie, MP, chairman of the Treasury select committee, is arguing against the planned Financial Conduct Committee having a duty to enhance confidence in the UK financial system—encouraging caution can be more appropriate.

Set up in 1990, the Drinking Water Inspectorate has a strategic objective to “maintain public confidence in drinking water.” Encouraging caution can be more appropriate.

Copper has recently been shown to have useful antimicrobial properties and the trend to replace it with plastic water pipes may be one factor in rising failure rates in mains water samples at kitchen taps. (Nature's Building Blocks, Emsley, 2011 edition, South East Water Environmental and Social Achievements 2010–11, p20).

My local water company has declined a request to inform residents when lead pipe work is discovered when meters are installed or to test water at this time, to avoid alarm. This is the prioritisation of maintaining public confidence over encouraging caution.

We have a double standard on lead—it was phased out of petrol on the basis of substantial 1970s US evidence on sub clinical effects (those never prompting medical investigation) on child development (IQ).

But only if clinical cases of acute childhood lead poisoning are linked to water pipes in an ongoing surveillance project here will legislation be proposed and water companies change tack (Correspondence with English water company)

Meanwhile new research shows irreversible harm to children from low levels of lead exhibiting no clinical symptoms extends beyond cognitive damage to include cardiovascular, immunological and endocrine effects (US Advisory Committee on Childhood Lead Poisoning Prevention, report 4 Jan 2012).

10% of French children are estimated on the basis of blood testing to be irreversibly and subtly harmed by lead exposure—the UK might have similar figures—no routine testing is done. (European Environmental and Health Information System, jointly with World Health Organisation Fact Sheet 4.5 “Levels of lead in children's blood” code: RPG4_Chem_Ext.)

A debate about the relatively high importance of water as a lead exposure route is accelerating. (Lead (Pb) in Tap Water and in Blood: Implications for Lead Exposure in the United States. *Critical Reviews in Environmental Science and Technology*, Accepted, 2011, doi:10.1080/10643389.2011.556556.) In July 2011 the WHO revealed its lead in water standard is associated with an infant IQ loss of at least three points and adult blood pressure rise of 3 mmHg (www.who.int/water_sanitation_health/publications/2011/dwq_guidelines/en/index.html).

In Toronto, Canada, pregnant women and children under six in older homes were advised in 2011 to use bottled water until a suitable end of tap filter is installed in their homes (http://www.toronto.ca/health/lead/drinking_water.htm#004).

Water quality standards are historically derived from occupational health data on adult exposures. This misses windows of special vulnerability during growth, including in the womb. A careful review by the US President's Cancer Panel of limitations in methodology for setting safe exposures resulted in a 2010 recommendation that all households filter their mains or other water into glass or aluminium jugs (2008–9 Annual Report, *Reducing Environmental Cancer Risk, What we can do now*).

Newly released US documentary “Semper Fidelis” will likely draw public attention to the links between poorly regulated private water supplies, childhood leukemia and other cancers in 2012.

Problems recently identified here by the Drinking Water Inspectorate with private supplies include high levels of arsenic and bromate, as well faecal contamination issues. See <http://dwi.defra.gov.uk/about/annual-report/2010/private-england.pdf>.

The Drinking Water Inspectorate's mandate might usefully be amended to prioritise caution over confidence. Attention should be paid to ensuring that the Inspectorate receives adequate funding from sources other than public water companies, as water from private supplies (holiday homes, hotels, food outlets, food preparation, work places) affects the public as a whole.

Funding of advice on household plumbing issues which give rise to water quality problems also requires attention. Companies such as British Gas are well placed to bid to provide water testing and solutions as a package, should this be separated out as an activity. Water companies are currently expected to provide this "for free."

January 2012

Written evidence submitted by CBI Minerals Group

1. The CBI Minerals Group is pleased to have the opportunity to submit comments to the Committee on the Water White Paper and on those measures which are likely to be included in forthcoming draft Water Bill announced in the White Paper.

2. This submission represents the views of the CBI Minerals Group and focuses on the concerns of the mining and quarrying sectors. It focuses on the second area identified by the Committee on which submissions were invited:

Are the proposals to protect and enhance water resources, for example on abstraction regime reform, likely to be fully effective?

3. The CBI Minerals Group represents the minerals extraction industry within the United Kingdom including all major non-energy minerals and coal. The Group represents some 500 mineral extraction companies either directly through being members of the Group or indirectly through member trade associations.

4. Minerals are essential for sustainable economic growth, and sustainable development is only achievable by ensuring an adequate and steady supply of all minerals. Adequate supplies are crucial for meeting the Government's growth agenda and in particular its plans for investment in new infrastructure such as the new generation of nuclear power stations and high speed rail.

5. We recognise the need to introduce a new abstraction regime and we welcome the proposed long-lead time for its development. We also welcome the Government's commitment to work closely with key stakeholders in designing the new system and to create a new national advisory group to guide the design process.

6. Many minerals reserves lie below the water table and it is usually necessary to dewater these sites to enable the mineral to be won. The impact of such operations is fully examined during the planning process through rigorous environmental impact assessment procedures.

7. Mine and quarry dewatering usually involves little, if any, water consumption and the water is normally returned to the same catchment. Dewatering is currently exempt from abstraction licensing.

8. The Water Act 2003 introduced new legislation effecting abstraction. In particular, it included proposals for the removal of the exemption for mine and quarry dewatering. The 2003 Act introduced three abstraction licence categories—full, transfer and temporary licences to replace the single licence used. It proposed that mine and quarry dewatering would in future require a transfer licence.

9. Despite the Act being on the statute book for nearly 10 years, the provisions for the removal of the dewatering exemption have not yet been implemented. This has led to uncertainty for the industry regarding the long term security of the permitted minerals reserves that occur below the water table.

10. At the time the Water Act was being debated in Parliament, we emphasised the importance of mine and quarry abstraction licences being issued for the same period as the planning permission so there is certainty over the planned life of extraction operations. The implications of time limiting abstraction licences for dewatering with no certainty of renewal is of great concern to the industry not only from a financial investment point of view but also in terms of maintaining mineral supplies. Unintended safety and environmental consequences may also arise if an operation were required to cease extraction below the water table prematurely because it might then not be possible to adequately restore the site.

11. We do not believe that the issuing of transfer licences to coincide with the permitted life of an extraction operation would inhibit the management water resources in a sustainable manner. The requirement to dewater is rigorously examined at the time planning permission is applied for and, if at that point, there were concerns about the impact on water resources that cannot be mitigated, the permission would not be granted.

12. The need for transfer abstraction licences to be granted for the same period of time as planning permissions is further justified by the unique position of mineral extraction. Unlike other industries, minerals

can only be extracted where they occur in economic quantities and thus the option to relocate does not arise. If dewatering cannot continue at a site for its planned life, extraction would have to stop and, for a small operator that could mean going out of business.

13. It is essential that the proposed new abstraction regime retains the distinction between transfer licences and full abstraction licences. However, since quarry dewatering often does not result in any water consumption because it is returned to the aquifer from which it was extracted, consideration should also be given to retaining the current exemption, in order to limit the regulatory burden on industry.

14. The proposed new abstraction licensing system should also preserve the option for mine and quarry operations to use water abstracted during dewatering in the production process where this is environmentally acceptable. Using untreated water in this way has the benefit of increased resource efficiency through the reduction of the use of mains water. It would be regrettable if licensing deterred such developments.

SUMMARY OF THE CBI MINERALS GROUP SUBMISSION

15. We submit that for the abstraction regime reform should take full account of the following:

- The particular circumstances of the mining and quarrying industry and the need for certainty regarding the dewatering of mining and quarrying operations over the permitted life time of the operations.
- The need to retain both transfer and full abstraction licences. In order to limit the regulatory burden on the mining and quarrying industry, consideration should also be given to retaining the current dewatering exemption.
- The need to ensure any fees or costs associated with transfer licences should reflect the cost of administration of the licence process only and should not act as a deterrent to an activity which has no adverse environmental impact.

January 2012

Written evidence submitted by the Mineral Products Association

(i) The Mineral Products Association (MPA) is pleased to have the opportunity to submit comments on the Water White Paper to the EFRA Committee. MPA is the Trade Association representing the vast majority (90% or more in most instances) of UK producers of aggregates, cement, lime, silica sand and their downstream and associated products, such as asphalt, concrete, recycled aggregates, slag and mortar. It has some 420 members, of which all but ten are independent, small or medium size enterprises. All the five major multinational companies active in this sector are members of MPA. This submission represents the views of the MPA members and focuses particularly on that element of the Inquiry that deals with protection and enhancement of water resources and, for the most part, on abstraction.

(ii) Minerals are not optional consumer items but irreplaceable, vital materials to underpin our quality of life, built infrastructure, and food, water and energy supplies.

(iii) MPA recognises that the abstraction system for England and Wales is outdated and requires modernising to comply with the Water Framework Directive, and the risk of future water scarcity is recognised. The future supply of water to industry and the public must be managed to ensure that it is sustainable.

(iv) We believe that the industry can make a positive contribution to the mitigation of future water scarcity and the effects of climate change.

(v) Dewatering is an essential part of a large number of quarry operations to enable machinery to operate safely and economically in a dry excavation. Without dewatering many quarries would cease to operate, jeopardising the steady and adequate supply of minerals. The ability to dewater is therefore vital to secure the future supply of aggregates for construction materials and intermediate production materials for cement, lime and asphalt, upon which the whole construction industry, as well as other industrial processes and applications, depend.

(vi) Minerals can only be worked where they lie. A quarry does not have the flexibility to move to another catchment with available water (according to Catchment Area Management Plans). A responsive legislative system is required to ensure that this is reflected and that a steady supply of minerals can be continued.

(vii) Many of our members' sites are long duration operations with equally long planning consents: some have been in operation for 100 years already and have, perhaps at least another 30 years or more to run. During the Parliamentary debate on the provisions in the Water Act, MPA highlighted the need for quarry Transfer and Abstraction licenses to be the same duration as the planning permission of a site. The ability to dewater for the duration of the planning consent is essential. Uncertainty about the duration of the licence to abstract, especially when the permitted life of the quarry is longer than the perceived life of the water transfer (or abstraction) licence, raises investment risk, which can not be easily quantified.

(viii) Moreover where dewatering will be required at some future stage in a quarry's life a licence cannot be applied for in advance. Consequently there is no security of knowing that a licence will be issued when required, which again will be perceived as an investment risk.

(ix) Quarry operations are a low consumer of water. The MPA do not believe dewatering to be consumptive and where water is abstracted specifically for processes on site such as product washing, the net consumption is typically very low (3–5%).

(x) On many sites a small amount of water is abstracted for dust suppression and product or vehicle washing. It is essential that the different licences (Abstraction and Transfer) are kept separate and that operators are able to apply for both, where needed but without duplicating the administration.

(xi) It is essential that the new abstraction regime is responsive, allowing for water abstractors to understand other abstractions taking place in the catchment. Water trading must be explored to ensure that the system is flexible and efficient. This would be aided by greater transparency of licensed limits and actual utilisation by licence holder enabling licence holders with spare capacity to be approached. Another proposal would be the temporary transfer of volume from one licence holder to another. For example where a quarry operator had a dormant site, or was not operating at a sufficient depth to require the full licence limit to be met they could on a temporary basis loan their capacity to another licence holder. However, this should be approached in a sensitive manner to ensure that abstractors do not have to rely on trading to ensure sufficient supply.

(xii) It is also essential that any water trading system must learn from other trading schemes such as Greenhouse Gas Trading. Only licence holders should be able to trade and the cost of water must not become prohibitively expensive.

(xiii) The lengthy run up to the implementation of the dewatering element of the Water Act 2003 has led to uncertainty for the industry regarding the long term security of the permitted minerals reserves. Although we understand the need to address water scarcity, it is disappointing that the abstraction system is likely to change again in 10–15 years time considering that parts of the abstraction element of the Water Act 2003 have only just been implemented. As with all industries our members require confidence in water resources and the licensing process.

(xiv) In conclusion, any new legislation must protect the ability of quarries and mineral production processes to continue their transfer and abstraction activities without extra regulatory burden and maintain a steady and adequate supply of minerals into the economy. The constraints on location for the industry need to be recognised whilst business confidence demands that water license timescale matches that of the planning permission for the site.

January 2012

Written evidence submitted by The Chartered Institute of Plumbing and Heating Engineering

Does the White Paper set out the right principles for customers and the water and sewerage industry for taking forward reform of the market for water supply?

1. Although the principles may be correct the development of those principles into actions and policy is often questionable. The reduction of bills in the SW will no doubt be welcomed in that region, but this seems to be another step away from making customers fully aware of all of the externalities and better appreciating water.

Are the proposals to protect and enhance water resources, for example on abstraction regime reform, likely to be fully effective?

2. We have no comment on this aspect of the White Paper.

How best can the White Paper's aims to promote water efficiency and the use of sustainable drainage be implemented?

3. Linking of water efficiency and SUDS is not always a good idea as they can impact very different users. The prerequisite with water efficiency is determining how much water is being used, then an appropriate programme of efficiency measures can be implemented and monitored. For SUDS the main impact is natural precipitation, over which we have no control, so a very different approach is needed to water efficiency. The only time they are linked are through systems such as rainwater harvesting, where the retention of peak rainfall can be useful in attenuating the flows to infiltration or other drainage.

4. It would also be beneficial if accurate, correct and factual data could have been included. For example, on page 83 in the green box titled "In the kitchen", the second bullet point wrongly states that "a dripping tap wastes at least 5,500 litres of water a year..". This is a sensational statement that is not true. Indeed a dripping tap can create a waste of water, but it depends on how frequently it drips and for how long.

5. The tips given in the various boxes in Chapter 6 are mainly aimed at garden watering which is well established to be a very minor consumer of household water in the UK. The tips given for bathroom and kitchen use are not new and do not indicate any development of policy to promote water efficiency. Although

mention is made on page 86 of the Plug-It project, there is no mention of how the results will be used to help intermediaries, such as plumbers and shop counter staff, to promote water efficiency to their customers. Although 6.17 states that you will be developing and testing messages, no timescale is given. Will there be a follow-on project to Plug-It or is there now sufficient data to develop some clear policy on messaging?

Do you support the White Paper's proposals on affordability of water bills for householders?

6. Water does need to be affordable, but when the cost of water is far less than the average monthly mobile phone bill it is questionable if it is sending the correct message to users. The lack of any incentives to use alternate water supplies is disappointing. Tariff structures should be in place that can take account of the use of greywater reuse or rainwater harvesting systems. The direct link between mains water supply and the wastewater charges need, at least an option, to be decoupled so that where there is a reduced flow to municipal treatment or discharge it can be accounted for.

Does the White Paper omit any key issues where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?

7. Page 78 of Water for Life shows a professional carrying out a flow test on a kitchen tap and informing the householder of the results and implications. However, Chapter 6 Taking Action, makes no reference at all to water auditing, despite Ofwat stating that water audits can be very effective in producing significant water consumption reductions (see Table 1).

Table 1

(REF OFWAT -SERVICE AND DELIVERY—PERFORMANCE OF THE WATER COMPANIES IN ENGLAND AND WALES 2009–10)

<i>Device</i>	<i>Assumed savings (Ml/d)</i>
Cistern displacement devices	4.27
Retrofit	0.04
Outdoors	0.05
Household audits	2.38
Non-household audits	2.47
Additional activity	4.77
Total	14.05

8. Water audits can be carried out in a number of ways, but to get the most benefit from audits they need to be systematic and consistent. Currently many water companies promote DIY water audits for keen householders, but because they are carried out differently by untrained people they have little value for policy decisions beyond the building in which they were conducted. If professionals were used to carry out water audits the data collected could be used to inform Government and provide a measure of the effectiveness of water conservation policies. To help produce the required workforce, CIPHE has developed a professional Water Audit training program with WaterwiseEast and the Bathroom Manufacturers Association (BMA). The training is available in video form through Navigator Productions' famous Learning Lounge website and is promoted through the CIPHE Website <http://www.ciphe.org.uk/Professional/Water-Audit-Training/>

9. No mention is made in the White Paper of the work being undertaken in Europe by DG Environment to develop a Directive on water use in buildings. The current consultation from the European Commission is due to end at the beginning of February and covers policy issues that it would have been good for Water for Life to have detailed. These include: appliance labelling, building rating and Certification schemes for water reuse systems. How the UK might deal with such a Directive should have been dealt with at this time and not omitted.

10. Consumers need to be better educated with regards to Using Water Wisely and Saving Water Safely, with regards to items such as thermostatic mixing valves, water reuse systems and legionella risks. Plumbing appliances and systems should be inspected annually for water efficiency and water safety measures. CIPHE members can play an important part in helping by installing water efficient devices and undertaking "Plumbing Health Checks".

Written evidence submitted by Blueprint for Water coalition

1. INTRODUCTION

1.1 The Blueprint for Water is a unique coalition of environmental, water efficiency, and fishing and angling organisations to call on the Government and its agencies to set out the necessary steps to achieve “sustainable water” by 2015. The Blueprint for Water is a campaign of Wildlife and Countryside Link. In August 2011, we set out our key tests for the Water White Paper (WWP).⁵

This response is supported by the following nine organisations:

- Angling Trust.
- Buglife—The Invertebrate Conservation Trust.
- The Rivers Trust.
- Royal Society for the Protection of Birds.
- Salmon & Trout Association.
- Waterwise.
- Wildfowl & Wetlands Trust.
- Woodland Trust.
- WWF-UK.

1.2 The Blueprint for Water welcomes the Government’s WWP and is supportive of the vision it sets out for a sustainable water industry that delivers affordable water and protects our precious rivers and wetland wildlife.

1.3 It is right that a healthy freshwater environment forms the heart of the WWP. We welcome commitment to the Water Framework Directive (WFD), the focus on addressing unsustainable abstraction and the emphasis on addressing diffuse pollution via catchment management and the promotion of Sustainable Drainage Systems (SuDS). Our main concerns relate to the long timescales for delivery and lack of clarity over immediate actions. We feel that the WWP does not include sufficient action to drive water efficiency. This, with the absence of a strategy to encourage metering, is a key barrier to delivering sustainable and affordable water and we fear that the Government may fail in the entirety of its vision because of it.

1.4 The true test of the WWP is still to come. Government has promised a number of forthcoming consultations, plans and strategies that will outline how its vision for the water environment will be achieved. But our wildlife is suffering now—just a quarter of our catchments are in good ecological health—and so on many fronts we need immediate action.

2. WASTE LESS WATER

2.1 We welcome the Government’s “contribution to a campaign to save water” and the emphasis on connections between water use and the quality of our rivers. How this campaign is delivered needs careful thought, and long-term commitment. However, the policy drivers for water efficiency are distinctly lacking. We are concerned that the expectations on reducing demand are too oblique and not supported by policy instruments (such as incentives for demand management⁶) that will deliver real savings. It is therefore essential that Government’s guidance to Ofwat includes clarity and emphasis on demand management to reduce water consumption by at least 20%. We welcome the link made between water efficiency and the Green Deal but we are concerned that lack of join up with the Department of Energy and Climate Change may be a barrier to delivery.

3. KEEP OUR RIVERS FLOWING AND WETLANDS WET

3.1 We fully support the case for change and welcome an abstraction regime that better values water, reflects scarcity and protects the environment. The principals outlined in the WWP offer the cornerstones of an effective regime. We are concerned that legislation is delayed until the next Parliament and that a fully reformed, sustainable regime could be two decades away.

3.2 We agree with the Government that immediate action is needed to speed up and amend licences that currently damage the environment. The WWP provides some welcome proposals (including water company Restoring Sustainable Abstraction schemes in the price review 2014), the Abstraction Incentive Mechanism to encourage companies to consider environmental impacts and intention to use powers in the Water Act 2003 to revoke or vary abstraction licences that are causing serious damage). Clarity is urgently needed to allow implementation.

⁵ Available at: http://www.wcl.org.uk/docs/Link_Blueprint_for_a_sustainable_Water_White_Paper_1Sep11_FINAL.pdf

⁶ Ofwat’s Future Price Limits consultation includes incentives to encourage water trading to address the bias against operational expenditure.

4. PRICE WATER FAIRLY

4.1 We are concerned the proposals on charging may fail to protect the environment and consumers adequately. It is a major disappointment that the proposals on water charging set out by Government fail to encourage a significant increase in the installation of water meters, despite clear evidence of the benefits to customers and the water environment. This, plus the focus on flexibility in social tariffs, means that affordability may not reflect geography as much as need.

4.2 Government's guidance to Ofwat must emphasise the role meters play in reducing demand, addressing affordability and keeping bills down over the medium to long-term. It should reinforce the Walker Review findings and set expectation of getting from 50% to 80% metering in the next price review.

5. SLOW, MANAGE AND CLEAN DRAINAGE FROM ROADS AND BUILDINGS

5.1 We welcome the invigorated focus on tackling different sources of diffuse pollution, the references to the multiple benefits of SuDS and the commitment to consult on a national strategy on urban diffuse pollution in 2012. The WWP falls short of providing a full framework to enable the uptake of SuDS including their retrofitting to existing areas where surface water or pollution is a problem. We are also concerned about ongoing policy inertia holding up the delivery of SuDS, including proposals contained within the current SuDS consultation to allow for exemptions and delays in new developments.

6. PROTECT AND RESTORE CATCHMENTS FROM SOURCE TO SEA

6.1 We are pleased to see the emphasis on the WFD, the catchment approach and welcome Government's support of water industry investment in catchment management and the commitment to use CAP reform and agri-environment more effectively.

6.2 The WWP makes important moves towards integrating and aligning existing processes and initiatives relating to water. This is essential in achieving the Government's ambition to halt biodiversity loss, support healthy functioning ecosystems and establish coherent ecological networks. But it falls short of the integrated framework necessary (eg joined up Nature Improvement Areas, catchments for WFD delivery and approaches to Flood Risk Management).

6.3 While we welcome the commitment to consider new mandatory measures should voluntary approaches fail, but there is no guidance on when it might be appropriate to consider them. It is also not clear how and when existing baseline regulation will be incorporated into the catchment approach. Defra and the Environment Agency need to commit to tackling diffuse pollution through advice and incentives underpinned by effective implementation of existing regulation, with a clear timetable for introducing further regulation if existing measures do not meet defined objectives.

January 2012

Written evidence submitted by Thames Water

OVERVIEW

We believe the water industry in England and Wales is in broad terms working well and do not, at present, see an overwhelming case for primary legislation. The Paper outlines several positive steps that will help companies deliver a high-quality and good value service for customers and the environment. However, there are inconsistencies between proposals for market reform and the Paper's broader aspirations. A fuller understanding of the implications is needed to avoid unintended consequences, and ensure a consistent and coherent overall approach.

Does the White Paper set out the right principles for customers and the water and sewerage industry for taking forward reform of the market for water supply?

1. We welcome the Government's intention "...to preserve the features of the current regime that have proved so attractive to investors",⁷ and its decision not to mandate structural change.

2. There is potential value in bringing competitive pressures to bear, given a dispassionate analysis of the costs and benefits. However, there is an inconsistency between proposed market reforms and the Paper's broader aspirations.

3. The Paper, for example, advocates a collaborative approach to water resource planning and a holistic view of managing catchments, both of which have much to recommend them. We also know that this broad approach is supported by a majority of our customers. However, there is a fundamental disconnect between these principles and proposals that facilitate the unbundling of the integrated water supply chain. While it is possible to create a competitive market for water resources, this should be seen as an alternative to a collaborative approach: policy solutions based on planning and co-ordinating sit uneasily alongside market-based approaches.

⁷ Paragraph 5.25; page 68

4. If water supply interactions between companies were principally governed by market arrangements, the incentives and opportunities to work collaboratively with each other and the Environment Agency would be greatly reduced. Equally, a collaborative framework to support enhanced water resource planning would be a constraint on the development of competitive markets. These questions present serious practical problems.

5. Having one company responsible for water resources; a second for the pipe network and a third for the retail element of the service could serve to undermine the existing relationship between customers and companies. It would spread accountability for the quality and reliability of water supply across a number of companies in a way that is, as yet, undefined.

6. This could be confusing for customers, and the perceived lack of accountability would weaken their confidence in the quality of the water they receive.

7. During the drought of 2006, we were able, through appeals to our customers to use water wisely, to reduce demand by more than 5%. Such an approach is unlikely to be possible in a situation in which resources are allocated through the use of market mechanisms, given the separation of accountability for communicating with customers; managing losses from mains pipes; and minimising the volumes taken from the environment.

8. Beyond these practical concerns, it is worth noting that investors regard the existing integration of the value chain as a strength of the sector. Furthermore, investors and rating agencies are concerned at the apparent contradiction between the Government's intention to preserve confidence, and the planned removal of the pillars of the existing regime that build confidence.

9. Proposals to reform the wholesale access pricing regime could have significant implications for companies and investors. While the planned removal of the costs principle from legislation could conceivably unlock value for customers in the long term, no impact analysis has been completed. It follows that the case has not yet been made. By contrast, the helpful impact analysis of legal and functional separation that has been completed recognises the reality of the industry's financing arrangements. A comparable analysis is needed to demonstrate that the benefits of access pricing reforms outweigh the costs.

10. We are pleased that the Government is "...strongly minded⁸" to use a future Water Bill to reform the anachronistic Special Merger Regime. This currently hampers mergers within the sector, and leaves some customers paying more for their water than if consolidation were an option.

Are the proposals to protect and enhance water resources, for example on abstraction regime reform, likely to be fully effective?

11. As well as providing for today's customers, companies must ensure enough water is available to support and sustain tomorrow's economic growth. Their ability to do so, and to cope with the likely impacts of climate change, will be heavily influenced by reforms to the abstraction regime.

12. The Paper takes significant first steps towards introducing the necessary improvements.⁹ These include positive measures to break down existing barriers to abstraction licence trading,¹⁰ which will help ensure more efficient allocation of supplies.

13. We strongly welcome the proposed reform of the process through which companies restore sustainable abstractions. This is urgently needed to replace the existing mechanism, which has demonstrably failed to provide an effective funding mechanism, and come at a cost to water customers.

14. The Abstraction Incentive Mechanism¹¹ (AIM) will, we understand, act as an interim measure until longer-term reforms are introduced. We would urge caution here, however, as the data needed to underpin the variable pricing the AIM proposes is not currently available. We would instead argue for a short-term focus on accelerating measures that will ensure the existing system operates as effectively as it can.

15. The Paper sets out the Government's intention to start using its power to remove or vary, without compensation, licences causing "serious damage".¹² This will require a clear and evidence-based definition of "serious damage" to be agreed. If licences are to be varied or revoked without risking security of supply, or coming at an unnecessarily high cost to customers, companies will need the time and funding to put alternatives in place. The uncertainty this creates is inconsistent with the aim of maintaining investor confidence.

16. Any reforms should avoid stranding existing assets, which could see customers denied benefits for which they have already paid, and companies unable to make the most efficient use of their assets.

17. Opening up the provision of water resources to new entrants will require an agreed methodology and rigorous scrutiny. Critically, new entrants' proposals will need to be subjected to the same level of analysis already applied to companies' plans, to ensure they are robust, reliable and founded on a realistic cost base. Without this, there is a risk that companies are unable to provide customers with the water they need.

⁸ Paragraph 5.54; page 74

⁹ Paragraph 3.35; page 42

¹⁰ Paragraph 3.42; page 43

¹¹ Paragraph 3.35; page 42

¹² Paragraph 3.39; page 43

18. The need for this challenge was demonstrated during the 2010 Public Inquiry into Thames Water's WRMP09, when a third party claimed that it had identified a cheaper alternative resource.¹³ On closer scrutiny it was revealed that the costs provided were unrealistically low, and the volumes of water available were overstated.

How best can the White Paper's aims to promote water efficiency and the use of sustainable drainage be implemented?

19. The Paper is disappointingly light on measures to promote water efficiency. We would like to see a more dynamic approach that recognises the range of stakeholders whose actions influence consumption.

20. Voluntary water efficiency labelling for consumer products¹⁴ is highly unlikely to have a significant impact. It should be replaced with a mandatory approach, and supplemented by a Government-led awareness campaign to help ensure the need to act is understood, and the potential benefits realised.

21. The Green Deal is cited as a mechanism to improve water efficiency.¹⁵ However, energy efficiency remains the focus of the Green Deal, reinforcing the perception that water efficiency is of a lesser order of importance. Rather than treating water efficiency as energy efficiency's "poor relation", we should seize the opportunity the Green Deal presents to make real progress.

22. Bringing about the step-change needed will rely on strong leadership to secure the active involvement of the range of stakeholders whose actions influence water consumption. Re-starting the multi-agency Water Saving Group that helped ensure a collaborative approach during the drought of 2006 would help provide the necessary focus and leadership.

23. We welcome reform of the existing water efficiency incentive,¹⁶ which can only be truly effective if it is directly linked to companies' supply/demand projections.

Do you support the White Paper's proposals on affordability of water bills for householders?

24. We were the sole company to argue for the amendment of the Flood and Water Management Bill to include a social tariff, and are pleased that final guidance is imminent.

25. Companies are developing plans for social tariffs in line with the provisions of the Flood and Water Management Act 2010. However, there remains an unresolved question of whether the Act's provisions override companies' licence condition "e", which prevents them from treating any group of customers with "undue preference".

26. Disappointingly, the Paper does little to address bad debt, and raises the worrying possibility that progress made through the Flood and Water Management Act will be reversed.

27. Despite supporting primary legislation which, in line with the recommendations of the Walker Review, includes a provision to "...require all property owners to provide the details of their tenants to water and sewerage companies or to assume liability for payment", the Government now intends to examine the potential for non-regulatory alternatives.

28. We support the broad aspiration to minimise the regulatory burden. However, it should not make a casualty of the only measure available to prevent those unwilling to pay for their water from, in effect, stealing from honest customers. The costs of non-payment are currently borne by paying customers at a rate of £14 on each bill annually. A legislative requirement is essential to make landlord liability work and remove this loophole.

29. We agree with the Government that neither disconnection nor reduced flow are appropriate ways to dissuade customers from leaving their water bills unpaid. However, in their absence a meaningful disincentive is needed. It is disappointing, therefore, that the Paper makes no mention of Anna Walker's recommendation that companies should be able to pursue debt through magistrates' courts.

Does the White Paper omit any key issues where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?

30. The Paper does not adequately take into account likely water quality failures under standards set by the Priority Substance Directive. The projection of compliance with the Water Framework Directive¹⁷ is, as a result, unrealistic.

31. Many "Priority Substances" are currently present in the treated effluent discharged from our sewage works in levels which have not been demonstrated to cause harm, but which are far in excess of the Directive's proposed standards. The widely-used anti-inflammatory diclofenac has, for example, been found in excess of

¹³ Thames Water evidence rebuttal *TWR9b*; July 2010

¹⁴ Paragraph 6.2; page 79

¹⁵ Page 79

¹⁶ Page 50

¹⁷ Figure vii; page 39

double the proposed permitted level in the effluent of more than 100 sewage works in England and Wales tested in an ongoing analysis.¹⁸

32. Meeting the limits in the Directive and, in particular, those under discussion if the list is extended,¹⁹ would require costly, energy-intensive treatment methods, for what we believe would result in only a very limited environmental benefit.

33. Without action to address these standards, the potential costs to the UK water industry of compliance have been estimated at £27 billion.²⁰

34. Without this investment the UK seems condemned to fail the requirements of European water quality legislation. With it, water bill payers seem committed to fund negligible environmental improvements at a disproportionate cost.

January 2012

Written evidence submitted by South West Water

Does the White Paper set out the right principles for customers and the water and sewerage industry for taking forward reform of the market for water supply?

1. South West Water is the appointed water and sewerage undertaking serving 1.6 million people in Devon, Cornwall and parts of Somerset and Dorset.

2. The White Paper recognises how the industry is currently underpinned by stable investment and the substantial benefits this has already delivered to customers and the environment which in the South West include £2 billion worth of new sewerage infrastructure.

3. The Water White Paper sets out a clear vision and direction for the future. The direction of travel proposes reforms to both regulation and market competition which require significant changes from the status quo.

4. Current arrangements offer a clear “source to tap (and bill)” accountability to stakeholders, regulators and customers and although the White Paper has sensibly recommended not to risk whole scale structural change, there is the potential for accountabilities to be blurred with the scale of activity in key sectors of the industry.

5. Key to delivering against the White paper’s stated vision will be appropriate implementation. Given the extensive nature of the reform the gradualist approach set out seems sensible and supportable. If reform is not implemented in a sensitive, evolutionary manner incorporating the voice of the companies, this level of change could unsettle long term investors and put the long term vision at risk.

6. In this context we are concerned about two more immediate issues:

- the repeal of the “costs principle” which was established to protect customers not eligible for competition. With particular reference to our large region, there needs to be thought given to the likelihood of “cherry-picking” urban customers, the implications on rural customers and the potential stranding of assets; and
- Ofwat’s very recent notice given to water companies to make changes to company licences without due process.

7. There are likely to be significant costs involved in creating the competitive retail market the White Paper envisages—for instance in compatible IT systems which can track customers switching to and from companies—and these hurdles are more likely to be overcome by giving companies a strong, clear voice in the best approach to implementation at every stage.

Are the proposals to protect and enhance water resources, for example on abstraction regime, likely to be fully effective?

8. The long term vision of the White Paper is welcome and we support a more flexible abstraction regime which better reflects the needs of abstractors and the environment in the South West. Again, forward-thinking regulation which positively involves existing companies is more likely to be fully effective.

9. We wholly support the concentration on long term resources and resilience and welcome the recognition of the investment required to create more network interconnections for a sustainable, consistent, regional and national service.

10. The White Paper’s highlighting of South West Water’s flagship Upstream Thinking programme to restore wetlands in partnership with landowners, farmers, national parks and environmental groups is also gratifying and we are glad to see other companies following our lead.

¹⁸ This is based on draft and as yet unpublished data from an ongoing analysis being undertaken by UKWIR on behalf of water companies in England and Wales

¹⁹ Diclofenac has been short-listed as one of 15 substances for which standards are to be proposed by the EU executive

²⁰ According to UK Water Industry Research and an examination by Atkins of priority substances

11. We and others are very likely to be examining the potential for similar projects and any proposals to lessen the need for expensive “end of pipe” solutions will be welcomed particularly by customers. We look forward to Government guidance to Ofwat which should strengthen its development of more flexible, outcome-focused regulation which will help the industry and its partners fully exploit the potential of such schemes.

How best can the White Paper’s aims to promote water efficiency and the use of sustainable drainage be implemented?

12. The focus on promoting water efficiency and stress on finding sustainable solutions to water pollution and flooding problems particularly in the field of urban drainage is to be applauded.

13. Making water efficiency more financially-attractive to customers, businesses and to water companies is still key and we look forward to the development of more practical incentives for all. Perhaps this can be better developed by fostering a closer partnership (eg—hot water saving measures) at all levels with the energy sector which is already well ahead in this field.

14. The White Paper sets out the right messages on urban drainage but how these might be achieved is still out of focus. There needs to be a thorough review of potential activity programmes in close partnership with local authorities to find the most cost-effective approaches to make the progress all stakeholders want to see on this issue.

Do you support the White Paper’s proposals on affordability of water bills for householders?

15. We strongly welcome the Government’s commitment to reduce water bills for our household customers by £50 from April 2013. We are pleased that Government has proposed this as a measure to tackle the unfairness of a small customer base supporting the huge environmental cost of protecting a third of England and Wales’s bathing waters since 1989. However there may be many hard-pressed small business customers in the region who will be disappointed the £50 reduction has not been extended to them also.

16. Affordability particularly for vulnerable customers on low incomes will still remain a high profile issue in the South West and we believe those customers in the most need are best helped by nationally funding already-established tariffs such as WaterSure (and paying the equivalent of the national average metered rather than the regional bill) together with the sensible introduction of new company social tariffs supported across the community.

17. We have already shown our willingness to innovate in the affordability arena with our WaterCare and FreshStart programmes which are designed to engage traditionally “hard to reach” customers these have been recognised by CAB as examples of best practice across a range of business sectors.

18. We are committed to exploring the further potential for well-designed and targeted social tariffs. However we do need to be mindful of the growing strain of cross-subsidising such tariffs from other paying *but hard-pressed* customers whose support is vital to retain.

19. More short term measures which would help companies better target assistance efficiently and effectively to customers in need would include access to information held by Government on means tested benefits and tax credits and enacting the provisions on landlord liability in the Flood & Water Management Act

Does the White Paper omit any key issues where further policy action is required to ensure, sustainable, reliable and cost-effective water supplies?

20. The broad aims of the White Paper are admirable however the large range of issues covered and recommendations made will require further detailed policy development, legislation and co-ordinated introduction of many change proposals.

21. The quantum and pace of these changes may disturb both smooth implementation and more worryingly disturb investors who are more used to finding stability. It would be beneficial to work more collectively to identify the potentially positive role existing companies can play in taking forward both the White Paper, soothing investors and exploring other policy areas offering a wider national benefit.

22. Funding and maintaining flood defences is a long term issue where water companies with their substantial asset management experience could beneficially be involved if they were perceived more as “infrastructure providers” rather than just narrowly-focussed “service suppliers”. Creating new funding streams is also more likely to lessen the risk of existing investors exiting for opportunities elsewhere.

Written evidence submitted by National Farmers' Union

INTRODUCTION

1. The NFU represents 55,000 farm businesses in England and Wales involving an estimated 155,000 farmers, managers and partners in the business. In addition, we have 55,000 countryside members with an interest in farming and the country.

2. The NFU welcomes the opportunity to respond to the Environment, Food and Rural Affairs Committee's call for evidence for their Water White Paper, inquiry as the quality and availability of water has major consequences for food production. The NFU and its members recognise the need for a more sustainable water management regime to help secure and improve the quality and quantity of food produced in England and Wales.

3. The Committee has asked for comments on six specific issues:

4. *Whether the White Paper's aims are supported and the likelihood of these objectives being effectively fulfilled by the approaches it proposes*

The NFU welcomes the Water White Paper as an opportunity to identify appropriate measures consistent with a more sustainable water management regime. However, we have a number of concerns (outlined below) which we believe could risk delivery of successful sustainable water management in England and Wales.

5. *Does the White Paper set out the right principles for customers and the water and sewerage industry for taking forward reform of the market for water supply*

While we agree with the principle of building on the strengths of the existing regime, the NFU is concerned that the development of a single market in abstraction licence trading could lead to a haemorrhaging of agricultural water rights. Farmers and growers use less than 1%, of the total amount of abstracted water annually²¹ but this figure masks some important seasonal and spatial variations in farming's need for access to water rights. In some areas and in drier seasons agriculture is critically dependent on water for irrigation well in excess of this low proportion (conversely in wet seasons licenced access is rarely taken up). In terms of number of licence holders, agriculture holds a disproportionately large number: approximately 62%,²² of the 21, 500 water abstraction licences in England and Wales. Since 2001 all new licences have had an expiry date. Approximately 21% of licences in England and Wales now have time limits.²³ The NFU five year water survey showed that of those respondents who had water abstraction licences, approximately 50% of their licences are now time limited. We understand from the Environment Agency, that this is a significantly higher proportion than for other sectors. This demonstrates not only that there is significantly more interaction between agriculture and the abstraction licensing regime than there is in other sectors, but that water rights for agriculture could already be less secure than the non-time limited licences held by other much larger users of abstracted water eg the energy and public water supply sectors. We are therefore concerned that the market, as proposed, could lead to a "David and Goliath" like struggle for water rights in the future. Agriculture, even for irrigation purposes, would be unable to afford to compete in the same market for water access when in competition with public water supply.

6. *Are the proposals to protect and enhance water resources, for example on abstraction regime reform likely to be fully effective?*

The NFU would like the Committee to acknowledge the substantial improvements on water resources being made by farmers and growers. The NFU's five year Water Survey (launched in November 2011) showed:

- All farming sectors had made improvements with the horticultural sector increasing their water efficiency the most in the last five years.
- 57% of the horticultural survey participants intend to continue increasing their efficiency over the next five years.
- Cash flow was the largest barrier to increasing water efficiency.

7. We recognise the need for the long term reform of the abstraction regime, and that this could provide opportunities for farmers and growers eg through the exchange of water rights on a seasonal basis. We also understand that costs of water (in public water supply) are also driven by pollution control whether for Drinking Water, Bathing Water or WFD purposes, however, the implication that water costs for most people and businesses are set to increase substantially, we find little comfort in, particularly as the increased costs, both in the rates of increase and amounts, are likely in future to be greater in the Anglian and the south-east regions where supply is short and demand is high. These are areas of significant agricultural production and we are particularly concerned, as stated earlier, that developing a single market for abstraction licences and encouraging farmers and growers to sell their abstraction licences when they are not growing a crop that needs irrigating could lead to a gradual loss of abstraction licences for the farming sector.

²¹ Environment Agency -estimated abstractions from non-tidal surface waters by purpose

²² Defra abstraction statistics <http://data.defra.gov.uk/env/iwtb21-ab-purpose-201111.csv>

²³ Environment Agency—The case for change—current and future water availability

8. For the abstraction regime reform proposals to be fully effective, the NFU believes the governance framework needs to ensure:

- A robust peer-reviewed scientific evidence base underpins policy development.
- Continued and secure allocation of water rights for food production in England and Wales.
- Safeguards ensure against potential haemorrhaging of agriculture and horticulture water rights to larger abstractors.

9. *How best can the White Papers aims to promote water efficiency and the use of sustainable drainage be implemented*

The NFU's five year water survey Water Survey showed that most farmers (over two-thirds) use small volumes (under 20 m³ per day) of mains water to supply their needs and saw no barriers to efficiency. However for those using larger quantities, cash flow was seen by respondents as being the largest barrier to increasing water efficiency. The NFU believe water efficiently and the use of sustainable drainage could best be promoted by measures that:

- Encourage investment in the agriculture and horticulture water infrastructure eg increasing reservoir storage, more efficient irrigation systems (such as drip and computerised irrigation systems) and more drought resistant and saline tolerant crops.
- Provision of relevant, timely, robust, advice, information and communication in order for farmers and growers to make informed decisions on water efficiency and sustainable drainage.
- Addressing the significant gaps in understanding the water availability of different soil types Farmers rarely have access to comparative data on water use by different crop varieties or crops (which would ensure that they group crops and varieties suited to their resources) Recent work by McCain's shows that some varieties require significantly larger volumes of irrigation water.
- Increasing the knowledge base of the implications of using different types of water for agriculture ie recycled, grey, and desalinated water.

10. *Do you support the white papers proposals on affordability of water Bills for householders*

The NFU are concerned that farmers will be hit by increases in public water supply costs as over two-thirds use mains water (from the NFU's five year water survey referred to earlier).

11. *Does the White paper omit any key issues where further policy action is required to ensure sustainable reliable and cost effective water supplies?*

12. In the NFU's view, further policy action is needed which takes a perspective beyond that simply of water protection and resource use and recognises other environmental and economic dimensions, and of course, the impact on such policies on agricultural productivity and competitiveness.

13. We believe water policy activity must not become driven by risk management of EU compliance requirements rather than the delivery of sustainable reliable and cost effective water supplies. Our concerns are based on previous European level water related policies, such as the Habitats and Water Framework Directive which have tended to result in a risk averse legislative and policy framework in the UK, where productive farmland seems to be considered effectively as a "disposable resource".

14. The NFU believe further action is required to balance, simplify, and bring consistency between the policy landscapes of biodiversity and the protection natural resources (air, soil and water).

15. We are also cautious about the idea proposed in the White Paper to extrapolate from the 70 catchment scale pilot projects into a national scheme—water is a local issue and a "one size fits all" policy approach will not deliver sustainable water management. In our view, Defra and the Environment Agency need to be

²⁴ Further details on this evidence (including all reference sources) can be found in Chapter 4 of the second progress report of the Adaptation Sub-Committee: *Adapting to climate change in the UK: measuring progress (July 2011)* <http://www.theccc.org.uk/reports/adaptation/2nd-progress-report-2011>

committed to improving their understanding about how water moves through different “families” of catchments, as by doing so the catchment approach is more likely to produce value for money outcomes.

January 2012

**Written evidence submitted by Lord Krebs, Chair, Adaptation Sub-Committee (ASC),
Committee on Climate Change**

The second report of the Adaptation Sub-Committee (ASC) assessed the preparedness of the water resources sector for current and future climate.²⁵ Climate change is an important factor in planning for future water resources in the UK. Water companies estimate that there could be a gap between supply and demand during severe droughts in about 45% of resource zones by 2035 without remedial action. Climate change is a contributing factor in at least 80% of areas projected to have a potential shortfall by 2035. The UK’s first climate change risk assessment will provide further evidence on the possible effects of climate change on the availability of water for use by households, industry, agriculture and the environment.

The Water White Paper goes some way towards enabling the water resources sector to respond to the challenges of climate change with two key reforms:

- **Abstraction licensing.** The ASC found that the current regime for abstraction licensing is a barrier to adaptation because: (i) it does not adequately reflect the environmental costs of abstraction, and (ii) there is insufficient flexibility within the system to respond to changes in water availability.

The commitment in the White Paper to reform of the abstraction regime should address these issues over the long term. It is less clear how the Government plans to tackle the legacy of unsustainable abstractions for public water supply.

- **Long-term investment planning.** The ASC found that water companies now routinely factor climate change into their 25-year business plans. However, it is difficult for the regulators to assess robustly whether greater levels of investment can be justified to prepare for climate change uncertainty, based on the information that water companies provide. Some work that we undertook with Thames Water identified that accounting for climate change uncertainty could actually increase the business case for some so-called “low regrets” measures, such as leakage reduction and targeted metering.

The White Paper may help to tackle this issue to some degree by confirming that the Government’s forthcoming guidance to Ofwat will point to the latest research on how to account for climate change in planning for water resources over timescales beyond the current 25-year planning period.

However, on **reducing demand for water**, my Committee is concerned that the approach outlined in the White Paper will not deliver sufficient change to prepare adequately for a changing climate. Reducing water demand is a priority for adaptation because it provides benefits regardless of the extent of future climate change, including lower costs to customers and reduced pressure on freshwater ecosystems. The ASC found that in the South East water use could be reduced from an average of 160 litres per person per day to 115 litres per person per day by upgrading household fittings over their natural replacement cycle.

The White Paper sets out the Government’s aspiration for **improving water efficiency**. Where water companies are in a water stressed area, or where they have demand that is above the national average, the Government expects water companies to produce a plan that will deliver overall demand reductions in the first five years. It is unclear whether this will lead to any significant long-term change from the previous Government’s aspiration of reducing average water demand to 130 litres per person per day by 2030.

Finally, there is the difficult question of **water metering**. The White Paper rules out universal metering for the time being, as the benefits vary from region to region. In the view of my Committee, consumers will not make sufficient effort to reduce water use unless there is a clear price signal. The ASC’s economic analysis for the South East found that, if a household is metered, the financial savings through lower water bills outweigh any additional costs associated with fitting water efficient measures.

I hope the analysis that the ASC has undertaken is useful for your current inquiry on the Water White Paper. I would be happy to discuss these issues further with your Select Committee if that would be helpful.

January 2012

²⁵ Further details on this evidence (including all reference sources) can be found in Chapter 4 of the second progress report of the Adaptation Sub-Committee: *Adapting to climate change in the UK: measuring progress (July 2011)* <http://www.theccc.org.uk/reports/adaptation/2nd-progress-report-2011>

Written evidence submitted by Food and Drink Federation

1. This submission is made by the Food and Drink Federation, the trade association for food and drink manufacturing. The food and drink manufacturing industry is the largest manufacturing sector in the UK, employing up to 400,000 people. The industry has an annual turnover of over £72.3 billion accounting for 15% of the total manufacturing sector. Exports amount to almost £11 billion of which 77% goes to EU members. The Industry buys two-thirds of all UK's agricultural produce.

Does the White Paper set out the right principles for customers and the water and sewerage industry for taking forward reform of the market for water supply?

2. Following on from the earlier Natural Environment White Paper, FDF considers that the White Paper correctly argues the need to protect our rivers and lakes as fully functioning ecosystems as a key principle underpinning the action needed now to tackle pollution and over abstraction. The Paper is also correct to point out that left unchecked this issue is likely to get worse with the combined effects of climate change and population growth. However when identifying future demand pressures on the water supply system the White Paper fails to acknowledge the implications of addressing the challenges set out in the Government's Foresight report on "The Future of Food and Farming" published last year. This stated very clearly that changes in the UK (along with the global) food and farming system will be needed in order that it can produce more and with less impact in order to meet the twin challenges of future food security and climate change. This will have consequences for the food and farming sector's future water needs and which suggests that some kind of priority use hierarchy (with a bias towards uses that are of national importance) in situations of water scarcity should be considered as part of a reformed abstraction system. Without some form of strategic prioritisation there is a risk that discretionary uses, such as irrigation for golf courses, take precedence over activities such as food production simply on a basis of ability to pay.

3. FDF welcomes the proposal to remove the annual water consumption threshold for businesses in England that wish to choose their water supplier particularly given the opportunity this will present to our members with more than one operating site to choose a single supplier and thereby benefit from efficiency savings.

Are the proposals to protect and enhance water resources, for example on abstraction regime reform, likely to be fully effective?

4. Policies directed at addressing water security and supply issues should be flexible and responsive to particular catchment situations as opposed to imposing blanket national approaches.

5. We would stress that any new abstraction system will need careful design. Using price signals alone as a way of managing unsustainable abstraction would carry the risk that the environment can be damaged with impunity by anyone with sufficient cash which is surely not the intention. As mentioned under the question above this would also allow the Government no discretion as to which types of users could abstract the water according to what may be in the national interest.

6. FDF welcome the emphasis on the water companies needing to plan for their future needs more effectively, in particular the need to build resilience and flexibility into the system through for example joining up their own networks. But it will be important not to underestimate the challenge of achieving this given that the private water companies are incentivised to provide returns to shareholders rather than safeguard national infrastructure.

How best can the White Paper's aims to promote water efficiency and the use of sustainable drainage be implemented?

7. Regarding the aim of promoting water efficiency FDF has, as part of implementation of its Five-fold Environmental Ambition, been encouraging its members to make significant reductions in water use to help reduce stress on the nation's water supplies. This is being achieved through the voluntary agreement administered by WRAP known as the Federation House Commitment which is focused on the use of water used in members' own operations. FDF has also just launched a new leaflet "Every Last Drop" and associated campaign which aims to promote more sustainable use of water right across the supply chain including as individuals at home.

8. In situations where water is relatively cheap for consumers efficient use of water requires doing the right thing to be no harder than doing the wrong thing.

Do you support the White Paper's proposals on affordability of water bills for householders?

9. It is not appropriate for FDF to comment on this aspect.

Does the White Paper omit any key issues where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?

10. As referred to in the preceding questions the main omission from FDF’s perspective and as mentioned above is the impact of addressing the challenges set out in the Government’s Foresight Report and the demand this likely to create for water in the food and farming sector in the UK through increases in food production.

THE UK FOOD AND DRINK MANUFACTURING INDUSTRY

The Food and Drink Federation (FDF) represents the food and drink manufacturing industry, the largest manufacturing sector in the UK, employing up to 400,000 people. The industry has an annual turnover of over £72.3 billion accounting for 15% of the total manufacturing sector. Exports amount to almost £11 billion of which 77% goes to EU members. The Industry buys two-thirds of all UK’s agricultural produce.

The following Associations are members of the Food and Drink Federation:

ABIM	Association of Bakery Ingredient Manufacturers
ACFM	Association of Cereal Food Manufacturers
BCA	British Coffee Association
BOBMA	British Oats and Barley Millers Association
BSIA	British Starch Industry Association
BSNA	British Specialist Nutrition Association
CIMA	Cereal Ingredient Manufacturers’ Association
EMMA	European Malt Product Manufacturers’ Association
FA	Food Association
FOB	Federation of Bakers
FPA	Food Processors’ Association
GPA	General Products Association
MSA	Margarine and Spreads Association
SB	Sugar Bureau
SMA	Salt Manufacturers’ Association
SNACMA	Snack, Nut and Crisp Manufacturers’ Association
SPA	Soya Protein Association
SSA	Seasoning and Spice Association
UKAMBY	UK Association of Manufacturers of Bakers’ Yeast
UKHIA	UK Herbal Infusions Association
UKTC	UK Tea Council

Within FDF there are the following sectoral organisations:

BCCC	Biscuit, Cake, Chocolate and Confectionery Group
FF	Frozen Food Group
MG	Meat Group
ORG	Organic Group
SG	Seafood Group
VEG	Vegetarian (Meat-Free) Group
YOG	Yoghurt and Chilled Dessert Group

January 2012

Written evidence submitted by Association of Electricity Producers

ABOUT AEP

The Association of Electricity Producers (AEP) represents large, medium and small companies accounting for more than 95% of the UK generating capacity, together with a number of businesses that provide equipment and services to the generating industry. Between them, the members embrace all of the generating technologies used commercially in the UK, from coal, gas and nuclear power, to a wide range of renewable sources of energy.

The Association welcomes the opportunity to submit evidence to the Environment, Food and Rural Affairs Committee inquiry into the Water White Paper.

GENERAL COMMENTS

AEP welcome the higher profile given to the energy industry within the Water White Paper (WWP) when compared to DEFRA’s previous strategic water statements. This highlights the importance of water for energy generation and the fact that this sector is a major water abstractor. Nevertheless, the distinction between water abstraction and water use by the generation sector is vital to understand, that is, the concept of water “borrowing”. AEP therefore also welcome the recognition within the WWP accompanying document, “Case

for Change”, that a significant proportion of water abstracted by the energy generation sector is returned back to the aquatic environment near its point of abstraction.

AEP acknowledge that climate change and increased demand may place additional burdens on water resources in the future and that all users must play their part. However, any revision to existing allocation methods that purports to reflect societal economic efficiency must be holistic and recognise the significant contribution that energy, and hence security of supply, plays in society. If there are limitations on future water usage, it is important that more flexible commercial arrangements are put in place that allow the value of water to be discovered together with a smooth transition to these new arrangements. AEP therefore welcome that the WWP has recognised the importance to abstractors of both continued access to water supplies and the importance of ensuring that the new regime does not create barriers to investment, both considerations being key to ongoing security of supply and investment in the generation sector.

CONSULTATION QUESTIONS

1. *Does the White Paper set out the right principles for customers and the water and sewerage industry for taking forward reform of the market for water supply?*

No comment.

2. *Are the proposals to protect and enhance water resources, for example on abstraction regime reform, likely to be fully effective?*

The electricity supply industry is a major abstractor of water resources as a result of the role of water in cooling circuits in thermal power stations (coal, gas, nuclear, oil and biomass) and also for hydropower generation. The use of water for cooling systems in power generation enables the optimisation of systems to maximise energy efficiency and hence minimise gaseous emissions, including greenhouse gases, per unit of electricity generated. It maximises useful energy output from a given fuel use whilst minimising production of “waste” and the use of raw materials. Other forms of cooling are available (eg air cooled condensers); however, these cool process water less efficiently, which has a direct impact on the overall electricity generating cycle efficiency. Indeed, the use of water for cooling has, for the past few decades, been determined by national regulators as the Best Available Technique for minimising the impact of power generation activities on the environment when taken as a whole.

Water policy should not be addressed in isolation. The Government needs to balance environmental issues, such as those related to water use, with impacts on other environmental media along with energy policy, security of electricity supply, and economics. It is therefore essential that water policy should be addressed in a “sustainability” framework that takes into account social and economic aspects as well as environmental ones.

Major infrastructure assets inevitably sit in particular catchments. AEP are concerned that in the Catchment scale approach the benefits at regional and national scale provided by such assets should be fully recognised.

It is expected that summer river flows will decline substantially over the next few decades in response to climate change and there will be changes in the physical and chemical quality of surface waters. However, it is by no means clear at this stage how the protection of the water environment will be determined in this changing backdrop (in terms of flows, Environmental Quality Standards and ecological metrics, etc.) which will influence the amount of water deemed available for societal use. AEP understand that related research is currently being undertaken at national and European level and we welcome the suggestion at WWP 2.13 that future requirements on water flow would be set with regard to the adapting ecosystems. AEP would urge that when setting future environmental protection goals and associated standards and guidance in the context of Water Framework Directive, Marine Strategy Directive, and receptor-based existing standards, the consequences of all pillars of sustainable development are considered. This includes, in particular, the setting of standards for water resources (eg river flows).

Over 21GW of capacity of the UK’s thermal power stations are due to close by 2025, with 12GW closing by the end of 2015. £200 billion of investment is needed in the sector in the next decade to replace ageing power stations and transform the energy system in the move towards a low-carbon sector. Thermal power stations will form a major component of this programme of investment. It is therefore important that the programme of reform of the water abstraction regime should deliver sufficient confidence to investors as to reliable access to appropriate quantities of water to facilitate these future investments in water-dependent power station assets. Additionally, the transitional arrangements that are required prior to the final reform package’s roll-out should ensure that companies and society are permitted to get value for money from direct and indirect sunk investments in infrastructure which depends on water. AEP look forward to working with DEFRA and the Environment Agency (EA) to flesh out the principles listed in section 2.15.

AEP welcome the proposal to form a national stakeholder group (sec 2.17) in the expectation that this will include appropriate representation from the energy sector.

AEP note EA’s intention to examine the possibility of revoking portions of licences that are unused in recent years (sec 3.44) and welcome the recognition of the importance of holding licences of sufficient size for reasonable contingency (an important aspect of providing energy system resilience). AEP take comfort from

the fact that the new regime will take account of current licences and the actual volumes used and that the transition regime will not be used to change licensed volumes (sec 2.15).

3. How best can the White Paper's aims to promote water efficiency and the use of sustainable drainage be implemented?

It is important to note that water use minimisation is not an appropriate goal for thermal power stations ie water efficiency should not be considered as an appropriate end in itself. Cooling systems may broadly be categorised as direct-cooled (once-through), indirect (cooling water recirculated through cooling towers) or air-cooled. Energy efficiency is highest for direct-cooled plant and lowest for air-cooled plant. Gross water use is highest for direct-cooled plant but least for air-cooled. However, net water use is highest for indirect-cooled plant as water is lost by evaporation to provide the cooling effect, whereas water in direct-cooled systems is returned to the water body.

Freshwater bodies in the UK are generally unsuitable for direct cooling systems for large scale power plant as flows are insufficient, but direct cooling may be feasible at coastal and estuarine locations, depending on local environmental constraints. Clearly, it is not feasible to change the cooling arrangements for existing power generation plant. However, nor is it appropriate to assume that once existing, river-based plant closes, new plant will automatically “relocate” to coastal areas in order to gain “unlimited” access to water. Availability of grid connections and infrastructure, fuel routes, waste handling facilities etc must all be taken into consideration and it is therefore more likely that existing sites will be the primary candidates for future, new power station developments.

Optimisation of systems to maximise energy efficiency in thermal power station operation requires water for cooling, with the best results generally arriving with the utilisation of once-through direct-cooled technology. Selecting a cooling method is only one of many factors to consider in a developer's decision-making process for a proposed new power station. AEP wish to emphasise that for development of long-life, water-dependent power sector infrastructure, it is vital to be able to have reliable access to water which is sufficiently secure and predictable. This will allow commercial development and operation of such projects.

AEP consider the promotion of sustainable and efficient water use may be achieved by:

- (1) Providing accessible, accurate and detailed future river flow and water allocation forecasts to the users of water.
- (2) Ensuring a clear and stable regulatory framework for monitoring and enforcement of environmental regulation is in place to act as a strong signal to the market, and therefore provide long-term clarity for investors.

Under these conditions, access to water may be assessed as part of the wider project appraisal process alongside numerous other factors examined during the decision-making process to invest in a power station.

4. Do you support the White Paper's proposals on affordability of water bills for householders?

AEP recognises the potential for interdependencies and interactions between electricity generators and water utilities. In principle, AEP suggests that a robust evidence base should underpin any programme of reform. That is, the EA should aim to provide accessible, accurate and detailed future river flow and water allocation forecasts to the users of water, in order to facilitate efficient and sustainable distribution of water demand points.

Again, it is important to note that water use minimisation is not an appropriate goal for thermal power stations. Optimal efficiency of thermal power station operation requires water for cooling. Thermal power stations on river locations around the UK employ a variety of cooling methods and the selection of a cooling method for the developer of a power station is only one of many factors to consider in the decision-making process. For the power generation sector we wish to emphasise that for development of long-life, water-dependent infrastructure, it is vital to be able to have reliable access to water which is sufficiently secure and predictable. This will allow commercial development and operation of such projects. By maximising useful energy produced from a given quantity of fuel, use of water cooling provides a valuable contribution to affordability goals for energy bills to householders and businesses alike.

5. Does the White Paper omit any key issues where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?

The energy industry is currently subject to a large range of pressures arising from various policy initiatives from EU and UK government. These include policies on carbon intensity of generation, increasingly stringent emission limits to air, energy efficiency, biodiversity, security of supply, fuel poverty, etc. Some of these will run counter to reducing the water dependency of the industry. One example is that carbon capture and storage will increase the cooling demand of power plant to which it is fitted and hence may result in additional water requirements for power plant rather than allowing any reduction in water intensity. AEP considers that a holistic view and effective integration of the various policies is required. One key aspect is therefore ensuring a suitable volume and reliability of water supply to the sector sufficient to underpin the current and next generation of power stations.

A case in point is the UK's legally binding renewables and CO2 emissions reduction targets, which could result in up to 40GW of offshore wind by 2030. Water-cooled power stations would be expected to perform a vital role in maintaining the integrity of the UK's energy system by helping to ensure security of electricity supply during periods when wind generation is not available. Other forms of cooling are available (eg air cooled condensers); however, these cool processed water less efficiently, which has a direct impact on the overall electricity generating cycle efficiency and therefore increase costs. Moreover, air cooling effectiveness decreases faster than water cooling in hot conditions, and is therefore vulnerable to reduced output in future summers, though of course air-cooled plant are not vulnerable to restrictions on water use. This highlights the benefits of diversity within the power sector. The transformation from a largely fossil-fuelled to low-carbon energy system must be undertaken at the lowest economic, social and environmental cost possible. It is therefore essential that water policy should be addressed in a "sustainability" framework that takes into account social and economic aspects as well as environmental ones.

January 2012

Written evidence submitted by the Country Land and Business Association

1. The CLA represents 35,000 members who collectively manage and/or own about half of all rural land in England and Wales. CLA members can be individuals, businesses, charities, farmers and estate managers who collectively represent around 250 different types of rural businesses. They generate jobs; provide land and buildings for investment, housing for local people as well as producing food and a whole range of land-based environmental goods and services.

2. The rural economy makes a major contribution to the national economy. Land-based businesses, within the rural economy, provide the environmental and recreational benefits in the countryside that are valued by the population as a whole. Access to water provides security for rural areas and allows successful and sustainable rural economy to develop. A fair allocation of water for the land based business sector is essential to any reform of the abstraction licensing system.

THE WHITE PAPER'S AIMS

3. Defra thinks the current abstraction system is not up to scratch and wants to simplifying the licensing process by making them all time-limited while also encouraging more trading of water rights.

4. The CLA thinks that whatever failings have been identified we should give credit where credit is due. Abstractors have become ever more efficient in their use of water. They have developed abstractor groups and risen to the challenge of meeting the Environment Agency Catchment Abstraction Management Strategies (CAMS). There are six abstractor groups operating across England and more than a thousand farms rely on irrigation. On the other hand, the current framework has generated insufficient interest in the trading of water rights and the development of water markets.

OBJECTIVES

5. It is essential we plan ahead for future needs while remembering that the allocation of water must be based on sound science and it must ensure food security and land management needs are met ie the need to protect the long run food production capacity of the EU, but do so while enhancing the natural environment. Farmers and land managers in England and Wales have the means to deliver food and environmental security. We need to deliver food and environmental security.

6. **But it is essential they are not priced out of the market.** As demand for water continues to increase, farmers and land managers can be guided by organisations such as Waterwise which help make the best use of the available resources.

APPROACHES

7. Consideration must be given to agriculture and land management, particularly at times of drought, when allocating water. At the moment other users, domestic, industrial and the environment are given preference.

8. Otherwise, farmers and land managers will continue to be disadvantaged more than they already are, as for example water companies have powers to maintain their security of supply through legislation and recover costs through their charging structures. Government has to ensure that the needs of rural businesses are correctly supported.

ABSTRACTION

9. The Government is rightly looking at long-term as well as short-term issues. In the long-term climate change may result in increased water variability and reduced water availability. This could affect river flows as well as groundwater recharge and there is the potential for increased risk of drought that needs to be planned for.

10. Population growth and climate change will mean that demand for water is likely to increase from all abstractors. According to Government this could be an increase of 3.5% by 2020 and as much as 35% by 2050 (*The Case for Change*—EA 2011). This is why the CLA would ask for safeguards to ensure the agriculture and land based industries receive a fair allocation of water.

11. It is also essential that land based business are not priced out of the market by the buying power of other industries and their ability to use pricing mechanisms to cover costs. The CLA thinks that very serious consideration should be given to developing a two tiered market that will allow a ring-fenced allocation of water for agriculture and land management. We recognise that this approach might be against the economic interests of some members who would benefit from selling water outside the sector but safeguarding the long-term needs of agriculture and land based businesses is crucial for long-term viability. In the future they may not be able to buy an allocation of water back to meet their needs.

12. The biggest user of abstracted water by far is the utilities sector. The next biggest user, although at significantly lower volumes, is agriculture, forestry and fisheries. Initial research from the Cave Review and the Environment Agency suggests it is mainly the food and agricultural sector that lacks sufficient water.

FURTHER POLICY ACTION

13. Two factors are thought to be limiting access to water rights and constraining growth:

- Some holders of abstraction licences only partially use them or they do not use them at all, which in some cases may prevent others using these rights to support economic growth.
- There are barriers to buying water rights from others due to lack of information to facilitate the market.

14. Addressing these problems will benefit many land based businesses. But there are still legitimate reasons for holding a licence even if the holder uses little or no water. **A licence may be seen as insurance against uncertainty and as underpinning the asset value of a business.**

15. Many rural businesses have serious concerns about the blight (the devaluation of property and business) which will be attached to their business when licences are revoked. Land that is currently worth £10,000/acre could be worth as little as £2,000/acre if the allocation of water is changed. The reduction in the business turnover will also be significantly less and its contribution to the local economy. In East Anglia alone agriculture contributes £3 billion annually to the economy.

16. It is also essential to reduce the regulatory barriers that stop the development of on farm reservoirs and other water storage initiatives. The CLA think that extending the permitted development rights for reservoirs could help in this area.

17. Changes to the licensing system and the allocation of water could have significant impacts on the value of rural businesses and that is why the CLA are calling for a framework that will:

- Ensure agriculture and land managers receive a fair allocation of water.
- Extend the current compensation arrangement beyond 2012 so that there is an increase in the security of water rights.
- Remove the presumption of renewal and extend licence periods to encourage investment-subject to availability and environmental impacts.
- Put in place measures to address security of supply for food production and land management within any further development of the water market by ring-fencing for agriculture.
- Support sustainable water supplies by promoting on farm reservoirs through advice, incentives and encouraging a sympathetic planning and permitting system to evolve.

January 2012

Written evidence submitted by Northumbrian Water Ltd

EXECUTIVE SUMMARY

1. Northumbrian Water Ltd (NWL) broadly supports the Government's policy intentions for the water industry, as laid out in the Water White Paper—"Water for Life". We welcome the desire to build on the strengths of the current industry structure and strongly agree that a stable business and regulatory environment is vital if investor confidence is to be retained so that the investment required over the coming decades can continue to be financed at a cost our customers can afford. At present a stable and predictable regulatory framework allows water companies to raise debt at financing rates which are lower than many European sovereign states, helping to keep water bills down. Any loss of investor confidence in the regulatory framework would cause this favourable situation to change rapidly and the adverse impact on customers' bills and on company investment programmes would be significant. We therefore support the evolutionary approach to market reform set out in the paper.

2. The reforms and policies in the paper are complex and wide-ranging. Their success is critically dependant upon the development and implementation of appropriate and detailed plans. It is essential that the industry is fully engaged in developing the necessary detail and we would urge government and regulators to maintain a transparent and consultative approach. NWL is very keen to work closely with Defra and the industry's regulators to ensure Government's policies are implemented successfully.

3. We welcome the government's intention to publish a strategic policy statement for Ofwat as this will give clarity and direction to the industry and its regulators about the priorities that government wants to see addressed.

Does the White Paper set out the right principles for taking forward reform of the market for water supply?

4. We are pleased that an evolutionary approach to market reform has been taken. We agree there is currently no case for legal separation of retail and wholesale activities or for extending competition to household customers and we are not convinced these measures will ever be appropriate or offer value for money.

5. We are pleased that the intention is to replace the "cost principle" with "a transparent wholesale access pricing regime that will allow efficient entry by new entrants". Achieving **efficient** entry in practice is key to ensuring some customers do not benefit from competition at the expense of others and, in particular, ensuring that households are not disadvantaged by the introduction of competition leading to "cherry picking" from which they do not benefit. We believe that the access pricing rules, or at least the key principles to be applied, should be set out in legislation. This is a key policy with significant public interest and such policies should be determined by government rather than regulators.

6. We understand the aims of introducing upstream competition but would be surprised if there is significant new entry due to the cost and quality hurdles to be addressed. We believe there will be substantial work required to introduce this reform and are concerned that material benefits are unlikely to be realised.

7. It will be important for the Government to fully evaluate the success of these changes before considering the need for further changes in the future.

Are the proposals to protect and enhance water resources likely to be fully effective?

8. We support the intention to review abstraction licencing and introduce water trading. Abstraction licence reform is a particularly complex area and we are pleased that a considered, consultative approach is being taken.

9. We also support bulk transfers between companies, where this is economic. Ofwat has proposed a number of promising approaches to removing regulatory barriers to transfers and we are happy to work with the regulator to develop these further. Trading may be part of the solution but we believe that cooperation between companies also has an important role to play in addressing regional resource issues and enhancing resilience (*See "Trading Theory for Practice": a paper by Northumbrian Water, Anglian Water and Cambridge Water*).

10. The effectiveness of proposals in the White Paper to protect water resources depends on the eventual plans taken forward. However, it appears the policies, taken together, represent a comprehensive approach to resolving the issues.

How best can the White Paper's aims to promote water efficiency and the use of sustainable drainage be implemented?

11. There are significant challenges both for the water industry and the Government in terms of improving water efficiency. While we recognise that maintaining an adequate supply of water in resource challenged areas will need multiple solutions, improvements to the water efficiency of households is a key measure.

12. We are aware that there are a number of potential "Blue Deal" initiatives being discussed that would operate in a similar way to the Green Deal. We already have an excellent reputation for the innovative promotion of water efficiency, particularly in our Essex & Suffolk area, and would be very interested in understanding how NWL could contribute to the potential "Blue Deal" approach.

13. We support the Government's focus on sustainable drainage. NWL is coordinating a large scale project on Tyneside and piloting four sewer flooding schemes with sustainable solutions. These projects aim to develop best practice approaches in partnership working and the delivery of sustainable solutions.

14. We particularly support Government looking to remove the right of automatic connection by developers to the existing sewerage system. Connections should only go ahead once all sustainable drainage options for the development have been exhausted. The costs of any upsizing required to accommodate the connection should be met by the developers.

Do you support the proposals on affordability of water bills for householders?

15. Water affordability is a key issue in the North East, which has a very high level of income deprivation. We also have some customers with high levels of income deprivation in our Essex area, for example in the London boroughs.

16. In order to manage the requirement for further increases in bills, cost benefit analysis should be applied to all drivers of new standards and any required investment should be fully justified and phased over time as far as is possible.

17. It is important not to overestimate the benefit that social tariffs might bring for affordability. We agree that any cross subsidisation requires the support of the generality of customers. Our experience to date suggests the willingness of customers to fund such tariffs may be very limited. In addition, care would be required to avoid increases in bills to pay for social tariffs resulting in some customers experiencing affordability problems for the first time.

Are any key issues omitted where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?

18. Customer debt is an increasing issue for the water industry, resulting in a burden on the majority of paying customers to finance non-payers. It would be a major step forward if the government enacted the provisions on landlord liability in the Flood & Water Management Act and we are pleased that government has committed to early consultation.

OTHER POINTS

19. We support the Government's environmental ambitions as set out in this White Paper. We also support catchment management initiatives and efforts to tackle diffuse water pollution. We believe that the water industry is, and can continue to be, a significant partner/leader in delivering an enhanced natural environment as well as growth of the green economy.

20. We are grateful to the Environment, Food and Rural Affairs Select Committee for launching this enquiry and NWL is very willing to supply further information on any aspect of this evidence.

January 2012

Written evidence submitted by The Chilterns Conservation Board

1. An initiative of the Chilterns Conservation Board, the Chilterns Chalk Streams Project is a partnership which aims to conserve and enhance all major chalk streams in the Chilterns Areas of Outstanding Natural Beauty (AONB), and to encourage enjoyment and understanding of them. Chalk Streams are a globally rare habitat confined to England and North West Europe and they are a key landscape feature of the Chilterns AONB.

2. The Chilterns Conservation Board welcomes the opportunity to provide evidence to the inquiry on the Water White Paper, which we hope will be of use to the Committee.

BACKGROUND TO THE AREA

3. Of the nine chalk streams in the Chilterns none currently attain Good ecological status or potential as defined by the Water Framework Directive reporting standards. Indeed four are categorised as "poor" or worse. The major reason, common across all, for this is that of low flows. All but one of these rivers have or are currently being investigated under the Environment Agency's Restoring Sustainable Abstraction programme. Over-abstraction for public supply has been confirmed as a cause of low flows in six of these rivers.

4. The Thames River Basin Management Plan (which the Chilterns rivers come under) states that no improvement to the status of any of these rivers will occur up to 2021. The reason given for this is that the measures required are too expensive to implement.

5. The Chiltern Hills is a major aquifer, used for public supply by both Veolia Water Central and Thames Water. This aquifer is also the source of water for the area's chalk streams. Per capital water consumption in the Chilterns area is one of (if not the) highest anywhere in Europe at between 172 and 176 litres per person per day. This is over 20 litres above the national average and 40 litres above Ofwat's target for UK per capita consumption. The area is designated by the UK Government as an area of water stress.

COMMENTS ON THE WHITE PAPER

6. It is the view of the Board that the proposed timeframe for introduction of a revised abstraction regime will be too late to drive the improvement in condition of the country's rivers that is necessary to ensure that Water Framework objectives are attained by 2027. This new legislation is urgently required to redress the balance towards abstraction licensing that takes account of environmental sustainability and resource availability. The current measures to reduce over-abstraction are not working and the Paper does not explain fully how existing abstraction reduction measures will be "ramped up".

7. Changing the abstraction charging scheme to release funding for river restoration measures and including water company solutions for restoring sustainable abstraction are unlikely to deliver desperately needed abstraction reduction to restore flows in the Chilterns rivers. This is because for many rivers in the Chilterns

the financial cost of implementing abstraction reduction is estimated to be too great to consider up to and beyond 2021.

8. The Paper advocates a strategy of favouring hydromorphological enhancement over abstraction reduction as a means of improving the ecological potential of a river. This has been adopted by the Environment Agency on at least one river in the Chilterns to date (R. Gade). This strategy does not address the fundamental underlying problem of over-abstraction but instead seeks to “normalises” it, creating smaller, shorter rivers and moving the goal posts to ensure more rivers attain WFD objectives. There are measures that could be taken now to effect a change.

9. There are mixed messages within the Paper with regard to abstraction. On the one hand it recognises the need for more consideration for environmental damage to be taken when dealing with new and existing abstraction licenses. But on the other it outlines proposals to reduce the burdens on business when seeking new licenses, which could see increased abstraction in already water stressed areas.

10. There is little in the Paper to address the issue of per capita demand reduction. What measures there are concentrate on incentivising efficiency rather than enforcing measures through legislation and regulation.

11. While the Paper recognises that water metering is a proven means of reducing water demand, it stops short of advocating their adoption as a means of addressing over-abstraction in water stressed areas. In water stressed areas like the Chilterns compulsory metering should be an option available to water companies to assist with managing demand, leakage detection and to help minimise environmental damage.

12. Whilst there is recognition of the need to improve river water quality and that much of the pollution of water courses is sewage derived (60% of all pollution incidents), the White Paper does not address the issue of Combine Sewerage Overflows (CSO). This is a major oversight. CSO's have continued for the last 22 years under temporary license. These licenses were originally issued as part of the privatisation process to make acquisition more attractive to potential buyers. However, despite the large investment in the water industry to date, CSO's remain licensed and commonplace. The unregulated release of partially diluted raw sewage into watercourses without the requirement to warn other river users is an abhorrent practise, which requires urgent attention.

13. The Water White paper is strong on recognising the problems and pressures affecting water resources both from an environmental and supply perspective, acknowledging many of the issues that the Chilterns Conservation Board has been highlighting for many years. However, it is short on robust solutions that will deliver the improvements that are required in the short, medium or long term. It is unlikely that the burden of over abstraction will be reduced on any of the Chilterns rivers to the end of the Water Framework Directive deadline. The only way that these rivers, will attain WFD objectives by 2027 will be by enhancing them hydromorphologically so that these reduced rivers reach the lesser standard of good ecological potential.

January 2012

Evidence submitted by Home Builders Federation Ltd

INTRODUCTION

1. The HBF, on behalf of the house building industry, welcomes the opportunity to submit evidence to the EFRA Committee tasked with dealing with the Water White Paper.

2. After many years of lobbying both Ofwat and Government, we are encouraged to see that the White Paper now recognises the need for change with regard to (a) the levels of service WaSCs give to developers and (b) the need for a more transparent charging regime. If more substantive progress can also be made with the introduction of greater competition in the inset regime, then the White Paper heralds a major, beneficial step forward. That said we have a number of concerns as to whether our expectations will be met if the recently published DEFRA Consultations on Sewers and SuDS is indicative of how Government Policy is implemented. This is explained in more detail later in our response.

3. On a separate matter, it is interesting to see that the White Paper labels developers under a section relating to customers. If this was only the case. For this to take place there will need to be a seismic shift in attitude on the part of all WaSCs.

Evidence on whether the White Paper's aims are supported and the likelihood of these objectives being effectively fulfilled by the approaches it proposes

4. In relation to the latter part of this question we would express some disappointment over both DEFRA's and OFWAT's ability to convert Government Policy into practical and workable legislation and guidance. The recently published Consultation on Section 42 of the Flood and Water Management Act being a case in point. If the Regulations, (or lack of effective regulation), were to be enacted as they stand at present we can predict with some certainty that house building in England could be severely constrained whilst the necessary legal agreements are crystallised for all new developments. To provide a wholesome explanation on this issue alone

would exceed the 1,000 words limit that has been imposed for the submission of evidence. That said we would be more than willing to provide more detailed verbal evidence.

5. To a lesser extent the SUDS Consultation raises similar issues but not to the same extent as the Sewer Consultation. However, with the SAB having been given no powers of requisitioning outfalls from SuDS infrastructure to the point of discharge, the prospect of expensive ransom payments when an outfall needs to pass through third party land is very real. Moreover, a number of sites allocated for development will be unviable.

6. Returning to the DEFRA Consultation on Sewers, we are disappointed with its content and the lack of completeness. In essence it does appear that both DEFRA and OFWAT have taken “light touch” regulation to mean that WaSCs take the lead as only they know best. As a result there are a number of serious issues, previously flagged up by the HBF, and which have not been effectively addressed. Without resolution, there is an inevitability that our members will have no alternative other than to have such matters dealt with/resolved through the Courts—this is anathema to effective and efficient new housing delivery. What we find most disturbing is that sensible and practical solutions offered by the HBF have effectively been ignored.

7. The HBF ethos is to work with Government towards the introduction of efficient and appropriate primary and secondary legislation, accompanied by guidance, when appropriate. This has not been allowed to happen in terms of the MBS and SuDS Standards.

How best can the White Paper’s aims to promote water efficiency and the use of sustainable drainage be implemented?

8. As the Committee may be aware new homes are water efficient when compared to the existing housing stock and always have a meter installed. The progressive reduction in water usage driven by both the CfSHs and Part G of the Building Regulations continues to make an effective contribution to efficient water usage.

9. In relation to the implementation of sustainable drainage we will be providing a substantive reply to the recently published consultation. That said we would ask the committee to take cognisance of the fact that the consultation makes no reference to the statutory obligation placed on all WaSCs to “effectually” drain their area”. This applies equally to surface water drainage. Somewhat surprisingly even Sir Michael Pitt failed to understand what Section 94 of the Water Industry Act meant in terms of the effective management of surface water.

10. We would suggest that Section 94 is a key issue in terms of what can or cannot be achieved in relation to SUDS. Moreover, it could begin to support the future funding regime for SUDS if it is finally accepted that commercial imbalances are distorting more effective means of funding, for example the payment of infrastructure charges and how these will be misaligned with the legislation.

Does the White Paper omit any key issues where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?

Section 185 of the Water Industry Act

11. With regard to further Policy action we would note the omission of a minor change to Section 185 of the Water Industry Act. This was originally contained under clause 248 in the draft Flood and Water Management Bill but did not get incorporated into the Act.—see below.

248 Cost of moving pipes

After section 185(7) of the Water Industry Act 1991 (water undertaker’s duty to move pipes costs) insert:

“(7A) A dispute about the reasonableness of the amount of security, costs or interest under subsections (4) to (6) may be referred to the Director for determination under section 30A.”

This in essence is a piece of legislative sweeping up that is of intrinsic importance to developers when a dispute occurs involving the diversion of either a water main or a sewer.

12. The HBF also considers that a commercial imbalance exists in this area when a diversion is required of either a water main or sewer. In almost all instances old infrastructure is replaced by new entirely at the developer’s expense. When similar situations arise involving other utilities, an element of deferral of renewal takes place. Consequently it is fair and reasonable to expect such provisions be extended to developers, albeit this may require a change in primary legislation.

SUMMARY

In response to the call for evidence in respect of the Water White Paper, HBF would welcome the opportunity to give further verbal evidence on the issues that we have raised. The intended changes in water supply and drainage legislation are profound and far-reaching. More importantly they have a direct correlation with our ability to provide the new homes that are so urgently required. To encapsulate a meaningful response covering

several fundamentally important issues in just 1,000 words is just not possible and we close this submission with a plea to provide more detailed verbal evidence in front of the committee.

January 2012

Written evidence submitted by Local Government Association

1. INTRODUCTION

1.1 The LGA welcomes this opportunity to offer written evidence to the Environment, Food and Rural Affairs Select Committee's inquiry into the Government's Water White Paper.

1.2 The LGA welcomes the positive ambition of the White Paper in its aims of achieving a green economy with a sustainable, resilient, affordable water supply.

1.3 It is essential in helping to achieve the White Paper's aims that any solution for the source and mechanism of long-term funding for the maintenance of sustainable drainage systems works for local authorities.

1.4 LGA would like to see a more joined up approach to investment in nationally significant infrastructure networks that is based on the needs of local economies, understands their impacts at local level, and provides certainty for decision making at local level.

2. INFRASTRUCTURE

2.1 The LGA supports the encouragement of the use of Sustainable Drainage Systems (SuDs) in helping to reduce flood risk and reduce pollution. However, it is essential that any solution for the source and mechanism of long-term funding for the maintenance of sustainable drainage systems works for local authorities and does not impose additional burdens. LGA would also like to stress the importance of ensuring that Government provide sufficient support to ensure councils have sufficient skills and capacity to deliver all their flood risk management responsibilities.

2.2 The LGA will be responding to the Defra consultation on SuDs.

2.3 Some issues—waste, energy, infrastructure, housing, flooding—are just too big to be dealt with by one authority. The new duty to cooperate in the Localism Act places an emphasis on Local Planning Authorities (LPAs) collaborating, with each other, and with other public bodies including county councils and others to understand and plan for the wider economic and housing market areas of which they are a part.

2.4 In the spirit of localism however LGA does not believe that Government needs to prescribe in national legislation or guidance the exact processes to be adopted by LPAs. There are numerous examples of councils working together across areas to plan for strategic priorities. For example—shared commissioning of an evidence base; cross-boundary strategic housing market assessments (SHMA); aligned core strategies; joint core strategies; Joint Planning Units (JPUs) and combined waste plans.

2.5 Clearly the role of the water industry is crucial in supporting councils work to plan strategically for infrastructure and growth. The White Paper is an ideal opportunity to incorporate proposals to ensure that water companies collaborate effectively with local authorities. This is essential to ensure sufficient water supply and water/sewerage capacity is available to support economic development and housing demand now and in the future.

2.6 The proposals that the Government, Environment Agency and the water industry consider further whether there are strategic national infrastructure projects necessary to ensure water supplies remain resilient are welcomed. However, this must not happen in isolation of other infrastructure required to ensure economic development can take place.

2.7 The LGA has put forward proposals to Government in our document *Funding and Planning for infrastructure* which would provide support for infrastructure needed to unlock development sites and support new housing supply. In brief we propose that:

- (a) We need to rethink the way investment is funded and planned through bringing together different funding streams into one place-based pot.
- (a) This model needs to be complemented by planning and management of development based on local economies. This will require:
 - A joined up approach to investment in nationally significant infrastructure networks that is based on the needs of local economies, understands their impacts at local level, and provides certainty for decision making at local level.
 - Aligning planning and investment decisions at the right economic level by encouraging councils to plan and coordinate infrastructure delivery at the level which reflects the functional local economy.

- Removing unnecessary bureaucracy and prescription in the planning system will allow local people and their directly elected representatives to plan effectively for the development of their area.

3. ENERGY/CLIMATE CHANGE

3.1 The LGA has put forward proposals to Government in our document *Funding and Planning for infrastructure* which would provide support for infrastructure needed to unlock development sites and support new housing supply. In brief we propose that:

3.2 The LGA supports the Water White Paper's aim to encourage and incentivise water efficiency measures, and its proposals for using the Green Deal as a possible mechanism to deliver this. Several local authorities are taking a leading role in the delivery of the Green Deal, and will be seeking to make it locally appropriate. There could be opportunities for them to also explore offering water efficiency measures. The Government could consider a similar mechanism to the Green Deal to help pay for installing measures which protect housing in flood risk areas.

3.3 Space and water heating accounts for the majority of energy use in the average home, so any incentives that can be offered to encourage water efficiency which would in turn reduce energy and water bills for customers are welcomed by the LGA. The White Paper could make more reference to rainwater and grey water re-use systems including the opportunities of incorporating these systems into new developments.

3.4 LGA would like to stress the importance of Government Departments developing policies from a delivery perspective, rather than from their specialist departmental viewpoint. A householder does not know that DECC are responsible for energy and Defra for water—they will just want an offer that improves the environmental credentials of their home. The LGA is currently responding to the Department of Energy and Climate Change (DECC) Green Deal consultation in which water does not feature prominently.

3.5 It is essential that climate change factors are taken into account in future planning for water supply and water/sewerage infrastructure to alleviate predicted increases in water scarcity (drought) in some areas and increased flooding in others.

3.6 The LGA is working as a delivery partner for the Environment Agency's adaptation advice programme and is supporting the development of a package of support for local councils to adapt effectively to climate change across service areas—this will of course cover issues of water scarcity and flood risk. To support delivery LGA is hosting a secondment from the Environment Agency until April 2013.

4. AFFORDABILITY

4.1 The LGA welcomes the introduction of final guidance to water companies and Ofwat on social tariffs early in 2012, which will be beneficial in tackling both affordability pressures and alleviating bad debt problems for many water customers.

4.2 Whilst LGA agrees that keeping water bills affordable to all and minimising increases as much as possible is very important, this should not be at the expense of adequate investment or as a result create additional costs for future generations. The LGA wishes to ensure that there are not unnecessary burdens placed upon water customers but that their long term interests are best served by appropriate investment in infrastructure for which they will have to pay through charges. This is better than the alternative—having to pay for disruption and repair as tax payers or as insurance policy holders.

January 2012

Written evidence submitted by Carillion Energy Services

Carillion Energy Services (CES) welcomes the opportunity to respond to the Environment Food and Rural Affairs Committee's inquiry on the Water White Paper. In order to put our comments into context, it may be helpful to outline briefly our role in the provision of energy services across the UK and Ireland.

Carillion Energy Services was formerly Eaga plc prior to its acquisition by Carillion in April 2011. Carillion is one of the UK's leading support services companies with a substantial portfolio of Public Private Partnership projects and extensive construction capabilities. The Group has annual revenue of over £5 billion, employs around 46,000 people and operates across the UK, in the Middle East, Canada and the Caribbean.

Carillion Energy Services, a division of the group are a leading independent energy services provider and one of the largest installers of renewable technologies and domestic heating services in the UK. We currently operate within the Private, Domestic, Social and Commercial market sectors offering a wide range of energy efficient renewable technologies and domestic heating services to our customers. CES has the ability to source responsive funding solutions, design & implement a customer centric offering and deliver the installation of required measures with the support of an established supply chain network.

We manage Warm Front on behalf of Department of Energy and Climate Change and we also have experience of working for the Welsh Assembly Government on the Home Energy Efficiency Scheme, the Warm

Homes initiative in Northern Ireland and the Central Heating and Warm Deal programme in Scotland. We also worked closely with Utilities and Local Authorities in managing the delivery of energy efficiency programmes.

Carillion Energy Services are committed to helping the environment and combating climate change; as referred to above we have a history of providing energy efficiency and renewable energy solutions to private housing and social housing and we will be increasing our activity in these sectors as well as expanding our commercial energy services offer taking a total energy management approach.

Prior to the Feed-in Tariff scheme we led renewable innovations through the installation of over 10,000 micro-generation systems including solar thermal and air/ground source heat pumps.

Under the Feed-in Tariff scheme we showed how innovative funding programmes could bring renewable measures to the social housing sector. Our Clean Energy Programme works in conjunction with the Government's Feed-in Tariff to install solar photovoltaic panels on social housing properties, we are working with a number of social landlords to provide free electricity to social tenants.

Within our Carbon Services team, we support the largest number of area-based programmes in the UK, leveraging multiple funding sources to accelerate delivery against policy objectives and drive the Government's climate change and carbon reduction agendas. Our work with the UK's major utilities and energy suppliers allowed us to deliver a total carbon saving of 6.2 million tonnes from energy saving measures and products in 2011.

We have experience delivering water efficiency products and services including providing water audits and efficiency measures for South-West Water's Watercare scheme for vulnerable customers and we install rainwater harvesting systems in partnership with Kingspan.

We are also one of the largest providers of Community Legal Advice in England offering debt, housing, employment and welfare advice on behalf of the Legal Services Commission.

For further information on Carillion Energy Services please visit—<http://www.carillionplc.com/>

RESPONSES TO INDIVIDUAL QUESTIONS

Does the White Paper set out the right principles for customers and the water and sewerage industry for taking forward reform of the market for water supply?

1. Carillion Energy Services support the proposals outlined by DEFRA and in particular welcome the recognition that the water industry needs to become more customer focused and that more competition and flexibility needs to be introduced into the market. We welcome the introduction of a catchment based approach to water supply; though we understand this approach will require a range of bespoke management plans from water companies and their partners.

Are the proposals to protect and enhance water resources, for example on abstraction regime reform, likely to be fully effective?

2. We welcome that the abstraction regime modernisation will enable licence holders to trade licences and that the cost of licences needs to reflect the relative scarcity of water as a resource. The Government's proposals are positive; however, more could be done, for example, by linking the cost of abstraction with greater water efficiency. For example, the amount charged for licences could decrease, or a tiered approach could be considered, if abstractors achieved an agreed level of water efficiency savings appropriate to their operating sector. For agriculture, this could be in the form of efficiency savings made to irrigation processes, installation of private reservoirs, or installing rainwater harvesting technology. For water companies; this could take the form of delivering water efficiency advice to households in addition to interventions earlier in the supply process. Alternatively, abstraction costs could be graduated based upon the volume of water extracted, as has been suggested by Policy Exchange²⁶—again providing an incentive to consider the most efficient use of water possible.

3. We welcome Government's plans to introduce greater flexibility of water supply, including incorporating private water supplies, trading abstraction licences, and greater interconnection.

How best can the White Paper's aims to promote water efficiency and the use of sustainable drainage be implemented?

4. We are pleased that the White Paper has noted a number of synergies between water efficiency and existing energy efficiency programmes such as Green Deal and smart metering implementation.

5. Carillion Energy Services feel that the most effective way to engage domestic customers in water efficiency may be to combine the provision of water and energy advice. Water efficiency is considered to be a low priority among households according to research undertaken by DEFRA²⁷ as unmetered households have no financial incentive to reduce water use. The report highlights that metered customers often feel they have

²⁶ "Untapped Potential: Better protecting rivers at lower cost"—Less, S, 2011.

²⁷ "Public Understanding of Sustainable Water Use in the Home"—DEFRA, 2009, p.43.

already made a saving by switching to a metered supply therefore it is unnecessary to undertake water efficiency measures. Additionally, metered customers are almost always charged a flat rate for consumption and are not incentivised to conserve water through sculpted tariffs, such as a rising block tariff or seasonal tariff.

6. Policy supported drives to encourage domestic energy efficiency are much more established, however, and the higher proportionate cost of household energy consumption acts as a further driver for households to make efficiencies with uSwitch reporting that 83% of households were worried about their energy bills in November 2011.²⁸

7. Combining water and energy saving advice could generate greater customer engagement and water saving advice could be incorporated into a Green Deal assessment, for example, which would provide a “way in” to discussing water efficient behaviours and products that reduce consumption. A holistic approach would enable water efficiency to be pitched in the context of wider money-saving and home improvement advice rather than focusing on the issue in isolation.

8. With regard to sustainable drainage systems we note the potential for these to be retrofitted to public and commercial buildings such as Matchborough First School, cited in the White Paper. In order to assist take-up it may be helpful to promote such technology alongside the non-domestic Green Deal and to offer similar incentives such as cash-back.

Do you support the White Paper’s proposals on affordability of water bills for householders?

9. We support the White Paper’s proposals for the expansion of social tariffs beyond the existing WaterSure programme. However, we question whether water companies have the existing expertise to adequately identify and engage with households most in need of social tariffs, given that water companies have historically not been customer focused and the White Paper acknowledges that 60% of households with affordability problems do not receive means-tested benefits. Water companies are likely to need much more in-depth guidance on the design and implementation of social tariffs with appropriate independent oversight of schemes, particularly if these are to reflect diverse customer demographics.

10. It may be helpful for water companies to work in partnership with independent companies or other voluntary organisations that have experience working with vulnerable households and are able to provide a range of services, such as household audits, benefit checks, customer education and debt advice.

11. Water companies are also under greater pressure to reduce bad debt (and the cost it adds to all customers’ bills) and domestic water efficiency may be a credible measure to tackle this problem particularly as more households move to a metered supply (50% of households by 2015). Combined energy and water audits could help customers make savings on a multiple household bills and other sources of funding, for example, ECO could be leveraged to deliver a range of measures.

Does the White Paper omit any key issues where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?

12. We believe that to fully engage domestic customers in reducing their water consumption, there needs to be a range of innovative products and services available in addition to current low-cost or free of charge water saving products that may appear uninspiring. At this time, though, there is little indication to suggest that householders would be willing to fund water efficiency products and water companies need an attractive cost benefit ratio for them to consider funding products. It may be worthwhile for further consumer research to be undertaken to understand the combination of messages and incentives that most motivate behaviour change.

January 2012

Written evidence submitted by Severn Trent Water

SUMMARY

1. Severn Trent welcomes the Water White Paper, supports its overall strategic direction and looks forward to its timely implementation. We would, however, like to make a number of recommendations about how the positions set out in the Paper could be strengthened further.

KEY TESTS FOR JUDGING THE WHITE PAPER

2. We believe the tests that should be applied to the White Paper are:

- (a) **Will it be of benefit to customers?** Will it help maintain safe and reliable services at affordable prices?
- (b) **Will it benefit the environment?** Does it help to address the challenges posed by climate change and population growth?

²⁸ uSwitch—“Britain goes without heating as bills become unaffordable.”—November 2011

- (c) **Will it help maintain future investment?** Does it provide a sound basis for the water industry to continue to invest an estimated £96 billion needed over the next 20 years?²⁹

3. We very much welcome the White Paper as it supports many of the changes we proposed in our publication *Changing Course*. We would, however, like to see the proposals implemented and believe that the Government should confirm it will introduce legislation this calendar year.

DELIVERING FOR WATER CUSTOMERS

1. The Paper proposes greater wholesale competition. The key to making this happen successfully will be the development of a clear framework for how companies should set prices for other companies wanting to use their infrastructure. *The Government should ask Ofwat and the OFT to work together to devise a suitable framework of access prices and remove the cost principal as proposed.*

2. Non-household retail competition will provide benefits to customers, largely in terms of service delivery. The danger to be avoided is a system in which household customers effectively subsidise the costs to non-household customers. *The Government should develop controls to prevent this from happening.*

3. The Paper signals the Government's support for a relaxation of the regime that prevents significant market consolidation. This is good for customers as it will, in time, allow more efficient companies to grow. *The Government should press ahead and relax merger and acquisition constraints.*

4. The Paper's support for water trading is welcome. Enhancing the connections between the regional water companies will enhance resilience and help ensure that customers benefit from the "best value" source of water.

DELIVERING FOR THE ENVIRONMENT

5. The Paper is right to promote catchment management to help enhance the ecological and chemical status of water courses. But there are more environmental opportunities available to policy makers:

- (a) *The Government should signal its support for flexible consents for discharging into rivers.* When a river is running low, discharge from treatment works has a proportionally greater impact and the standard to which it is cleaned should reflect this. When a river is in spate and discharges are heavily diluted, it is not environmentally sound to use carbon intensive processes to treat discharges beyond a level that would benefit the river.
- (b) *Within the context of the Water Framework Directive, there needs to be clearer information of what constitutes "disproportionate" costs.* The Water Framework Directive is likely to be the biggest single factor pushing up customers' bills. Without clearer guidance on what constitutes disproportionate costs, the risk is that customers could pay more for worse overall environmental outcomes if, for example, the environmental cost of carbon emissions are not taken into account when making investment decisions.
- (c) *The Government should work with the EU Commission to develop a simple measurement system that reflects accurately the progress being made.* British rivers are said to now be in better condition than at any time since the Industrial Revolution. The problem is that the Water Framework Directive's "one-out, all-out" way of measuring water status (ie by classifying a water course as requiring improvement if a single measure is not met) does not reflect the progress being made, which in turn jeopardises public support for necessary investments.

6. The White Paper could do more to complement other Government policies and encourage the use of sewage sludge to generate low carbon, cost efficient energy. We already generate around a quarter of our own energy and could do more if the Government supported the recommendations of the recent Office of Fair Trading report on the market for sewage sludge. The aim of the recommendations is to allow water companies to participate in the market sludge on a fair, competitive basis. *The Government should implement the OFT's recommendations as soon as possible.*

7. The White Paper proposes fundamental reform of abstraction licensing. We support reform and welcome the Government's proposed process for consultation. The Government should:

- (a) Explore a more market-led approach to balancing environmentally sustainable supply with increasing customer demand.
- (b) Confirm that, if abstraction licences are at any stage withdrawn, it will ensure that water companies maintain a reasonable return on past investments and will be able to fund investments into more sustainable alternatives.

8. The White Paper suggests that promoting sustainability should be a primary duty of Ofwat. Promoting environmental sustainability should be central to the whole industry's approach, but making it a primary duty of Ofwat risks confused decision making and forcing Ofwat into a policy-making (rather than a regulatory) role. *Promoting environmental sustainability should be a primary responsibility of DEFRA, which should reflect this responsibility in the guidance it gives to Ofwat. Sustainability should not itself be a primary duty of Ofwat.*

²⁹ *Changing Course*, Severn Trent Water

MAINTAINING FUTURE INVESTMENT

9. The water industry has invested £90 billion of private money since 1989 to maintain clean, reliable water and sewage services at no cost to the taxpayer.³⁰ We estimated (in *Changing Course*) that it will have to spend another £96 billion over the next 20 years. In today's uncertain financial climate, the Government's and Ofwat's commitment to maintaining the use of the Regulatory Capital Value (RCV)—and keeping it in the wholesale part of the value chain, where the big investments are needed—is essential. *To maintain investor confidence, the Government should re-confirm its commitment to the RAV.*

10. Water industry debt now stands at over £33 billion, up from zero at the time of privatisation. The dangers of excessive debt are well known, and in recent years, the water industry has seen a trend away from equity financing (in which financial risk lies with the shareholder) and towards debt financing (in which greater risk is ultimately borne by the customer). The Government should promote the long term financial sustainability of the water industry by encouraging an appropriate balance of equity and debt investment.

January 2012

Written evidence submitted by Whitbread Hotels & Restaurants

In response to the call for a response to the Water White Paper from the business sector, I have enclosed some thoughts on the White Paper and the Water Industry in general.

Whitbread believe that the Water White Paper represents a real opportunity to increase competition and improve service for the wider business community.

For Whitbread this would mean being able to fully engage with a single supplier and focus on ways to promote more efficient use of this precious resource.

While only a proportion of our restaurants, Premier Inn Hotels and Costa Coffee shops will use more than the 5,000m³ limit, we hope this barrier will be removed over time.

There is some reservation over how the system will be regulated by Ofwat and how quickly the structures can be put into place. Dealing with complaints is a time consuming and frustrating process, especially where Whitbread have invested in smart metering only to find the Water Company have removed devices without notice or permission or warning.

Our Major concern is that the Bill will be delayed and this opportunity will be lost or watered down and we urge the Government to press ahead with the proposed change, especially after the number of weighty reviews of the Water Industry.

We welcome a move towards a robust regulation that encourages a real price for water and national reduction campaigns that promote best practice in water efficiency retrofit initiatives and end user engagement.

As a large water consumer we want access to the metered data in order to monitor, measure and control our wastage and costs.

Insistence by the Water Companies to use their own metering solutions that may not be compatible with our own internal systems and then charge for the interface seems to lack customer focus.

The White Paper promotes efficiency awareness and the link between water and energy as well as a better focus on water planning processes. What is missing is a direct encouragement and incentive for large companies and SME's to install SMART AMR water meters to reduce water consumption, understand water footprints and support intended sustainability targets.

In conclusion, unless global water strategy and ownership improves significantly, we will face major challenges in securing enough water to support world populations, underpin economic growth and balance environmental needs. The UK Government have a real opportunity to gain a first move advantage, to ensure water management becomes a priority, and in practice adequately lead societies to value, govern and protect their freshwater supplies for future generations.

January 2012

³⁰ Caroline Spelman, Forward to the Water White Paper

Written evidence submitted by the Mayor of London

INTRODUCTION

1.1 Whilst the Mayor of London has no formal responsibility for water, he has recently published the first water strategy for London as he believes that a London-specific perspective on water issues is required to ensure that London's water interests are best served. This response is based on a comparison between the issues and actions raised in the Mayor's water strategy and those in the WWP.

SUSTAINABLY BALANCING SUPPLY AND DEMAND

2.1 The Mayor believes that reducing London's demand for water through improved water efficiency is critical to sustainably balancing supply and demand, helping Londoners manage their utility bills and creating "green jobs" that will underpin our economic recovery.

2.2 To improve and sustain greater water efficiency, the Mayor's water strategy sets out a "six point plan" of actions:

- (1) improve the water efficiency of existing buildings;
- (2) ensure all new development is "super" water efficient;
- (3) raise Londoners' awareness of the financial benefits of increased water efficiency;
- (4) increase the number of homes with a water meter;
- (5) change the way Londoners pay for their water; and
- (6) continue to tackle leakage.

2.3 The Mayor believes that whilst the WWP is broadly supportive of most of the individual measures in the six point plan, DEFRA should integrate and present these actions as a coherent package of measures to ensure a self-reinforcing cycle of water efficiency.

2.4 Improving the water efficiency of existing development, particularly homes, is one of the most important elements in the six-point plan. The WWP refers to improving water efficiency through the Green Deal (but this only covers improving hot water efficiency) and through guidance to water companies on their Water Resource Management Plans (yet to be published).

2.5 The Mayor has developed with partners an integrated home water and energy efficiency retrofitting programme, called RE:NEW. This area-based scheme provides and installs water and energy efficiency measures, for free, aiming to retrofit 55,000 homes in London by spring 2012. Integrating the installation of water and energy measures at the same time, reduces the need for separate water and energy efficiency visits and encourages Londoners to make the connection between their energy and water use (and bills). Going forwards RE:NEW will provide a mechanism to deliver Green Deal and other retrofit programmes.

2.6 The Mayor welcomes the commitment to review the Sustainable Economic Level of Leakage (SELL). Half of London's water mains are already over a century old and the current rate of replacement is not sufficient to reduce the overall age of the network. The SELL review should take account of the value of water in a water stressed area, the impact leakage has on customer engagement on water efficiency and the potential damage leakage has on infrastructure and the capital's reputation.

2.7 As leakage rates are seasonal, with most leaks occurring during and following cold weather, the Mayor recommends that the deadline for reporting on leakage levels to Ofwat should be delayed to allow water companies more time to fix leaks in a planned and systematic approach.

2.8 The Mayor believes that consumers should be encouraged to and rewarded for using water efficiently, provided vulnerable consumers are protected. This requires consumers to have both a mechanism for measuring consumption (a water meter) and an incentivising cost structure (tariffs). Only about a quarter of London households currently have a water meter and Thames Water estimate that at least three quarters of properties need to be metered before tariffs can be effectively brought in. In their draft WRMP, Thames Water estimate that they will not achieve this level of metering until 2025. This places Londoners at a significant disadvantage and threatens London's water security.

2.9 The Mayor questions the effectiveness of the "water calculator" as a measure of enabling greater water efficiency in new development and recommends that Defra and CLG consider alternatives, such as flow-based approaches.

TACKLING WATER AFFORDABILITY (WATER POVERTY)

3.1 Londoners' water bills are lower than the national average, but this disguises the fact that there are more London households in water poverty than any other water company area. Analysis by Ofwatⁱ suggests that over a million Thames Water customers struggle to pay their water bills, the majority of these in London.

3.2 The Mayor is committed to reducing water poverty in London and is working with the London Water Groupⁱⁱ to: a) review whether the current working definition of water poverty is applicable in London; b)

identify groups of Londoners that are, or are at risk of being in water poverty; c) understand their needs; and d) examine how existing initiatives could be better targeted to help them.

3.3 The Mayor welcomes Government initiatives to tackle water affordability through the Company Social Tariffs Guidance but would encourage Government to provide support for a water affordability pilot in London given that there are more Londoners struggling with their bills than those in the South West. On the basis of Government's support, the Mayor will work with the Citizen's Advice Bureau and the water companies to develop a targeted package of measures that combines a social tariff trial with metering, retrofitting of energy and water efficiency fittings, enhancing understanding of water use and bills, payment and debt advice.

3.4 The Mayor encourages Government to amend the definition of water affordability to include "disposable income after living costs", as living costs in London are higher than the rest of the country. Without a revised definition, Londoners struggling with their bills may not receive the help they need—because of where they live. Government should also consider defining "local" when referring to the design of company social tariffs taking into account "local needs". In London's case this needs to ensure London, with its very different circumstances to the rest of the country, has its own water affordability assessment, development and trial of a social tariff scheme. Government should also consider how water companies are enabled to target customers with water affordability problems to ensure that those struggling get the help they need.

MANAGING SURFACE WATER FLOOD RISK AND DIFFUSE POLLUTION

4.1 Surface water flooding represents the greatest short-term climate risk to London, with more than one million propertiesⁱⁱⁱ at risk of flooding from an extreme rainfall event. To address this challenge, the Mayor has created a partnership of the key organisations with responsibility for managing surface water flood risk to tackle the issue. To date, the partnership, known as Drain London, has mapped flood risk across London and developed a draft surface water management plan for every borough.

4.2 The Mayor welcomes the increased focus on surface water flooding in the WWP, but feels that the issue is not being given sufficient prioritisation. The scale and complexity of the challenge, the lack of delivery mechanism and incentives means that greater efforts are required. The Mayor is working with Thames Water and the Environment Agency to develop demonstration projects on how to work with communities to retrofit "green infrastructure" and rainwater harvesting into existing development, with the aim of managing local flood risk and extending the lifespan of "grey infrastructure".

4.3 The Mayor welcomes the proposal to develop a national strategy on urban diffuse pollution. This will need to sort out some of the issues missed in the Flood and Water Management Act, such as defining ownership and responsibility for sections of watercourses and drainage infrastructure where no party claims ownership.

LONDON WATER COMMISSIONER

5.1 The Mayor believes that Londoner's water interests could be better served and is exploring the potential for an appointed "London Water Commissioner" to represent Londoners, ensuring transparency and accountability on key water issues and projects.

May 2012

REFERENCES

ⁱ Ofwat. Analysis of Family Resources Survey 2008–09. Unequalised income after housing costs. http://www.ofwat.gov.uk/future/customers/metering/affordability/prs_pre110315affordability.pdf

ⁱⁱ The London Water Group is a partnership of the GLA, London's four water companies, London Councils, Environment Agency, Ofwat, Waterwise, Consumer Council for Water, London Sustainability Exchange, Sustainable Water Industry Group that collaborate to tackle water issues in London.

ⁱⁱⁱ This figure was generated using a one-in-100 year plus climate change rainfall event. 80,000 properties are at "significant" surface water flood risk.

Written evidence submitted by The Environmental Industries Commission

I am writing on behalf of the Environmental Industries Commission's (EIC) Water Management Working Group to provide some brief comments which we hope you will find of use to your current inquiry into the Water White Paper (WWP)—particularly on the question of whether the WWP "omits any key issues where further policy action is required to ensure sustainable, reliable and cost-effective water supplies?"

The EIC was launched in 1995 to give the UK's environmental technology and services industry a strong and effective voice with Government. With over 200 Member companies, EIC has grown to be the largest trade association of its kind in Europe. It enjoys the support of leading politicians from all three major parties, as well as industrialists, environmentalists and academics.

To begin, we would like to make it clear that EIC welcomes the Water White Paper. The Coalition's commitment to ensuring our most vital sector is fit for future purpose is both welcome and supported.

Whilst the WWP is a wide-ranging document, we intend to focus on its ramifications for the water industry's supply chain, which make up the core of EIC's Water Management Working Group membership. Our key concern is to ensure that the WWP is used as a driver to end the "boom and bust" investment climate experienced by the UK water industry's supply chain as a result of Ofwat's five-yearly Asset Management Period (AMP) cycle. We would also like to raise some brief points relating to the successful implementation and uptake of Sustainable Drainage Systems (SuDS).

Since its privatisation, the industry has consistently experienced water companies' capital expenditure being concentrated towards the middle of the five-year funding cycle. This concentrates the spending profile of the water sector into an intense three-year period in the middle of the cycle, and a reduced spend at the start and the end of the AMP period. This effectively creates a two year low investment (end year of AMP and first year of next AMP) and a three year massive spike of investment (years two, three and four of the AMP) followed by another two year low investment (end year of AMP and first year of next).

This situation has led to financial and managerial inefficiencies, in addition to instabilities in the supply chain—ultimately resulting in higher costs for the consumer. One notable consequence has been the migration of skilled resources out of the sector to more stable industries, where job security is better, resource management is easier and long-term planning can be better achieved. This has created a severe and worsening skills shortage.

Unfortunately, the supply chain bears the brunt of a massive demand which it cannot plan for, nor can it afford to prepare for financially as the cost is prohibitive to have stock waiting.

This problem is by no means new, and has been officially recognised by Government on many occasions—most recently in Defra's 2011 review of Ofwat (to which EIC submitted evidence) which concluded that "it is bizarre that such a long-term stable industry with relatively consistent supply and demand has such a cyclical pattern of investment. No-one has suggested to us that there is any intrinsic reason for the flow of business to the supply chain to be cyclical at all. Instead, the observed pattern seems to be driven almost entirely by the companies' reaction to the incentives and pressures introduced by the regulatory process."

But for EIC's member companies, and the health of the UK's green economy, recognition is not enough—a solution must be sought. By EIC's own admission, there is no single or simple solution, and it is for this reason that successive governments have often batted the problem aside.

EIC has previously suggested many possible solutions to "boom and bust" to Government, Select Committees, and Regulators. By way of brief overview, these have included:

- Carrying out the necessary determinations annually on a rolling basis to coincide with the water companies June returns.
- Staggering the investment programmes within the water industry so that all the water companies in England and Wales are not working to concurrent cycles.
- Having Water Only Companies on a different five year period to the Water and Sewage Companies which, whilst not as effective as the previous suggestion, would help to smooth out the investment to some degree.
- Transitioning the water industry to a longer-term investment programme (twenty years or more)—perhaps with the option of minor interim adjustments/reviews.
- Making Ofwat truly responsible for maintaining the sustainability of the industry including the promotion of employment or, at least, not promoting unemployment.
- Encouraging the water companies to spread investment more evenly within and across the cycles by means of incentives or penalties.
- Ensuring the inefficiencies due to supply chain problems are adequately modelled by Ofwat, converted to extra cost on each customer's water bill and publicised as such.

The Water White Paper briefly makes acknowledgment of the need to find a solution, but does not suggest what the solution(s) might be.

Our key concern is to ensure that this opportunity is not squandered—a Government of any colour may not look at the water sector again in such detail for at least another decade or more, by which time the negative impacts of two or more "bust" periods will have been borne. The dual opportunity afforded by the White Paper and the Water Bill is not likely to be available again for some time to come.

We believe a key driver to finding or agreeing upon a solution (or set of solutions) would be for Defra to ensure that resolving the "boom and bust" issue is clearly included in its forthcoming strategic policy statement to Ofwat.

Whilst we accept that Ofwat are currently looking at this issue in conjunction with Infrastructure UK as a result of the National Infrastructure Plan 2011, we are acutely keen that any recommendations resulting from this work are pro-actively taken up, and that real, tangible change is seen within the industry. We are also

fortunate that, whilst not necessarily our first resort, the blunt instrument of primary legislation remains available to enforce any recommendations through the Water Bill—this approach would not require Parliament to introduce any further legislation beyond its already agreed programme, or dedicate any further Parliamentary time than it has already done so.

A clear, unequivocal statement from Defra would leave little wiggle room and ensure that Ofwat achieves its own stated mission of ensuring that “customers continue to receive safe, reliable, efficient and affordable water and sewerage services that promote positive social, economic and environmental impacts today, tomorrow and over the long term.” At present, we would argue that it is failing in promoting positive economic impacts for “today, tomorrow and the long-term”.

SuDS

There has undoubtedly been a great deal of progress in recent years with acknowledgement that SuDS can help deliver a whole range of benefits. However the publication in December of the long awaited SuDS Standards consultation documents produced a huge amount of disappointment with much of the expected detail missing and most respondents highlighting the fact that they were unable to respond fully without being able to consider the guidance document that will apparently sit alongside the Standards. There seems to be a complete lack of any update on the progress of the guidance which was supposed to involve a range of stakeholders and representatives from industry in its preparation.

The inclusion, in the standards, of the requirement to introduce water quality treatment in most new development sites, was a welcome step towards helping address WFD requirements and clean up our waterbodies, but the misconception that SuDS have to be either above ground, natural features or permeable paving still seems to be very prominent. There is a huge range of techniques available to deliver surface water drainage that will mimic as closely as possible natural drainage, but many of those successfully used to date are not necessarily natural and require proprietary devices either in whole or in part to produce authentic, effective solutions.

We do hope you find these comments to be of use for your Inquiry, and we look forward to the final report. Should there be anything raised in this document on which you would like further information or evidence, please do not hesitate to get in touch.

May 2012
