Waterwise response to the Defra and Welsh Assembly Government consultation on the recommendations of the Cave Review of Competition and Innovation in Water Markets

December 2009

Overview

1. Waterwise welcomed the emphasis of the Cave Report on the need to tackle "the new challenges facing the water industry, particularly climate change and population growth", which the Cave Report noted will require "alternative approaches and new ways of working".

2. Large-scale water efficiency projects fit squarely into this definition of the future challenges, and must be further incentivised as the shape of the industry changes, reflecting the important role water efficiency plays in both climate change mitigation and adaptation.

3. In this context, Waterwise welcomes the recognition early in the consultation document that "Water resources in many places are already under pressure and this pressure will increase in the future, from both growth in demand and the impacts of climate change. We need to take a long term view to ensuring healthy water resources that are properly managed and where businesses that need to abstract water are able to flourish whilst at the same time recognising the value of this scarce resource." Waterwise is also pleased to note the statement that "The UK Government therefore welcomes the work done by the Cave Review to identify proposals to improve the water licensing regime, taking greater account of the impact on the environment of abstractions and discharges, to ensure that water resources are managed sustainably and efficiently."

4. Water efficiency will be central to all of the challenges outlined in the consultation document. However, Waterwise is disappointed that despite water efficiency featuring in the Executive Summary of the consultation document, and the statements in the consultation document that "Both the Assembly Government and the UK Government recognise the significant challenge that climate change will pose to the water industry of the future" and that "A shared focus on sustainability through water efficiency and environmental protection will help shape the

development of the water and sewerage sectors", there is no recognition of this in the specific responses set out by the UK and Welsh Assembly Governments in the consultation document to the Cave Report's recommendations.

5. The consultation document makes reference to the Walker Review of Charging for Household Water and Sewerage Services, the final report of which has of course been published since the consultation document was published, placing the value of water at the heart of its analysis and recommendations. Waterwise warmly welcomed the Walker Report: Waterwise's press release outlining its position on the Walker Review's final report can be found at http://www.waterwise.org.uk/reducing_water_wastage_in_the_uk/press_releases/waterwise_response_to_walker_review.html .

6. In addition, the House of Commons Select Committee on Environment, Food and Rural Affairs, in its report on PR09 in July 2009, also recommends "that Defra undertake a fundamental review of Ofwat's role and remit to enable it to effectively regulate a future water industry where the value of water and waste water will have a crucial role in determining water companies' charging regimes. If competition is going to be introduced and water efficiency and water demand management are going to become more important, the regulatory regime should be amended."

7. Waterwise would like to see a comprehensive package of legislation, regulation, incentives and policies brought forward by the UK and Welsh Assembly Governments to take forward recommendations from both Reviews and the Select Committee, to reflect the value of water.

Context – climate change drivers for water efficiency

8. There are considerable opportunities for water efficiency to contribute to meeting the new challenges of climate change and population growth. It is unique in that it is a key tool in both mitigation of and adaptation to climate change.

9. Water efficiency is essential for mitigation, because of the carbon costs of heating water in homes, buildings and offices for cooking, bathing and cleaning (in homes this accounts for 5% of the UK's total greenhouse gas emissions), and for industrial processes. Wasting less hot water reduces the carbon footprint at the user end, but it also does so at the supplier end, as the water company is required to pump and treat less water and wastewater.

10. So water efficiency can make significant, quantified contributions to the UK's carbon targets of 80% by 2050 and 34% by 2020.

11. Water efficiency is also essential to the UK's climate change adaptation plans – every sector of the economy is dependent on water, some areas of the UK are already suffering water stress (with some classified by the Environment Agency as suffering

"serious water stress"), and it is known that in the near future there is going to be less water and more people in the UK: so less water will need to go further.

12. However, water efficiency is far from mainstreamed across the economy and government policy. Opportunities to include it in policies, schemes and incentives such as those relating to the development of the low-carbon economy, and in national energy efficiency retrofitting schemes, have rarely to date been taken up.

13. And while the water companies are taking forward significantly larger water efficiency programmes than a few years ago, representing innovation, this still accounts for a tiny proportion of their expenditure when compared with supply-side measures.

Competition

14. Waterwise supports the principle of **retail separation** – if this leads to the creation of water service companies (extending services beyond the supply of water and wastewater) it could help drive water efficiency, and this is one of the four deliverables the Cave Report says it would expect from a framework to allow effective retail competition: more efficient use and allocation of water. The Cave Report also lists demand-side water efficiency initiatives as one potential additional "retail" function. Waterwise is disappointed not to see this specific element of the Cave Report's overall emphasis on delivering more sustainable use of water reflected in the consultation document.

Innovation

15. Waterwise welcomes the UK and Assembly Governments' agreement with the Cave Report's assessment that more successful innovation outcomes in the water sector would be beneficial, requiring more innovation R&D spending and activity, and their acceptance of its wider diagnosis of barriers to innovation such as fragmented spending, lack of co-ordination and a shared long term vision, discouraging risk profiles and other factors such as the need to protect public health leading to a precautionary approach. Waterwise notes that the Government is considering how to take forward the recommendations proposed and is seeking comments from stakeholders.

16. Water efficiency is particularly affected by some of these barriers, as the Cave Review clearly identifies. Indeed, water efficiency's vast potential role in innovation in the water industry, through the planning and execution of water efficiency measures, is not yet delivering its full potential.

17. It is important to note that innovation is not just about more spending and more technologies: innovation is also about driving systemic changes in society and the

economy through new types of partnerships, new regulatory approaches and new services.

18. Waterwise's Evidence Base for Large-scale Water Efficiency in Homes, delivered for the Environment Minister's Water Saving Group in October 2008, presented for the first time the economic case for large-scale water efficiency. The Evidence Base has been used by water companies in Ofwat in PR09, which has seen a step-change in the size and scale of water efficiency schemes now being delivered. The Evidence Base (which is now being updated, with carbon and energy values attached to individual water efficiency measures) established that large-scale retrofit programmes can be delivered at a positive cost-benefit, in particular when taken forward by the water company and other partners, for example in social housing. Establishing these partnerships is innovative for water companies, and can be time-consuming. Water companies can also innovate by designing schemes (for tens of thousands of homes) to identify which measures, fitted in what way (the costs and quality of different fitting procedures impact greatly on the cost benefit of water efficiency measures), reap the highest dividends.

19. Water neutrality is another opportunity for innovation in water efficiency: the UK population is expected to increase by 10 million by 2031, and 2 million new homes are planned between now and 2016 alone. Retrofitting schools, hospitals and businesses (and existing homes) to ensure total demand in an area does not increase as a result of new homes being built – already planned by the Government in areas such as the Thames Gateway - could be an essential tool in meeting demand sustainably. Accompanying school water audits with small investment funds (of, for example, a few thousand pounds) is yet another: several recent water company projects have shown this approach to yield significant water savings.

20. These moves - establishing partnerships, examining the savings of particular microcomponents within water efficiency programmes, and, crucially, scaling up from hundreds to thousands of homes - fit squarely into the future challenges outlined in both the Cave Report and the consultation document, but often fit awkwardly within the current regulatory and pricing process.

21. So innovation in delivering water efficiency can help meet some of the challenges identified in the Cave Report. However there are existing barriers to water company innovation in water efficiency which need to be addressed by government and regulators.

22. For example, while water efficiency measures can be more flexible and responsive than long-term supply-side measures, the uncertainty associated with them is currently greater, as water efficiency programmes on a grand scale are still a relatively new area for water companies (and regulators). This results in inconsistency of comparison between demand and supply-side measures: reservoir yield may be cited at peak not average, while water efficiency savings are usually counted at their minimum level. As the Evidence Base develops and is built on by more, large, retrofit projects, this uncertainty will decrease. But in the meantime, an **allowance** should be made **for exploratory programmes**, much like the demonstration activity allowed by Ofgem for the energy companies, within the Carbon Emissions Reduction Target. This would deliver innovation.

23. In addition, the carbon savings due to reduced hot and cold water consumption through water efficiency retrofit should be accounted for when comparing options. Water companies should be expected to take demand management measures as seriously as reservoirs and other supply-side measures.

24. The Cave Report outlines in some detail the current **bias towards capital expenditure** and how this acts against the sustainable use of water. This remains the case for the water industry despite the welcome revenue correction mechanism Ofwat has now introduced, as this can only be applied narrowly at the end of the spending review period, every five years. One such reference in the Cave Report is as follows: "Water companies can meet a supply-demand imbalance through supply-side or demand management measures. In an example cited by Waterwise a number of water companies have considered giving customers water efficient shower heads to reduce water consumption, thereby reducing the need to build additional capacity. This is operating expenditure and a direct cost to the company (whereas the company would receive a return on capital invested in a supply-side solution). However, Ofwat excludes this operating expenditure from its efficiency assessment so the company is not penalised for apparent inefficiency."

25. Water efficiency retrofit programmes are currently treated as operational expenditure (as required by UK Generally Accepted Accounting Practice), while supply-side projects are treated as capital expenditure. This results in an incentive for water companies to deliver large-scale supply-side schemes, since these generally increase regulatory asset value and may offer opportunities to over-perform on and make additional gains on capital expenditure. Operational expenditure does not have the same potential benefits, and also counts against water companies' financial performance targets.

26. So the capex bias acts as a disincentive for large-scale water efficiency, and as a result the cost-benefit analysis for some schemes is not deemed robust enough, and the amount spent on even the largest water industry water efficiency projects is absolutely minimal when compared to large-scale supply-side measures. Waterwise recognises that a mix of demand and supply side measures will be necessary to

respond to future challenges, but the capex bias needs to be addressed to enable this to be a more equal balance.

27. The Cave Report also clearly identifies the following as a problem: “Much innovation has been top-down, driven by new water and environmental quality standards. This has often taken the form of large scale capital expenditure solutions based on incremental improvements to existing ways of working”.

28. Waterwise supports the Cave Report’s recommendation to remove the link between capital expenditure and returns. As the Cave Report states, this should be taken forward by Ofwat in their post-PR09 review of regulation. However, Waterwise would also like to see the UK and Welsh Assembly Governments making the case for such a move, setting the direction of regulatory strategy for Ofwat.

29. If an **innovation duty** were introduced on Ofwat, Waterwise agrees with the UK and Assembly Governments that this should contribute to furthering the interests of customers and the environment, and it would make sense for such a duty to sit beneath the sustainable development duty and the “consumer objective” duty.

30. However, the wider issue, recognised by stakeholders and in the Cave Report, is that the regulatory framework needs to incentivise innovation, which is not currently the case. Within this, it will be the water industry’s responsibility to perform better through innovation, as well as the responsibility of the regulator to help deliver it. What is currently lacking is the incentive for the water industry to innovate. There are various ways to take this forward within the current regulatory framework, including requiring Ofwat to report on R&D spending, and the percentage of turnover dedicated to innovation.

31. In addition, Waterwise agrees that Ofwat should be mandated to periodically evaluate innovation and competition in the water sector – and believes that such an evaluation should have at its core the contribution both are making to the new challenges of climate change and population growth.

32. Waterwise has been involved with the work the Technology Strategy Board and Ofwat are taking forward on the new water innovation platform, and would welcome the widening of its scope – in particular to cover the improving of water services and the contribution of the wider water sector to the low carbon economy. As a minimum, in response to the key challenges set out in the Cave Report, and the consultation document, the innovation platform should include water efficiency.

33. The Cave review recommends a **national water industry R&D body** bringing together water stakeholders to stimulate greater innovation, supported by £30m funding a year from the water companies and customers. Waterwise agrees that

such a body would be most cost-effective if it involved partners in addition to the water industry itself, to deliver innovative solutions – including through large-scale water efficiency partnerships. We believe such a fund should be administered by the government, rather than a separate body, in the spirit of smarter government outlined recently by the Prime Minister. It could be led by a steering group comprising stakeholders and the Technology Strategy Board. Waterwise agrees that it should not displace existing funding. Partners other than the water industry and its consumers might be considered for investment in such a fund, across the wider private sector: for example retailers, manufacturers and housebuilders.

34. Not-for-profit organisations such as Waterwise, with a strong interest in fostering water efficiency as part of the innovation agenda, and who will undertake future activities accordingly, should be eligible for the fund. Waterwise has a proven track record in levering in matched funding.

Abstraction

35. Waterwise strongly supports the Cave Report's recommendations to identify and reflect the true **value of water** and its regional scarcity, and to make changes to the abstraction licensing regime to reflect this. Waterwise is supportive of the work being undertaken by the Environment Agency and Defra to this end. Waterwise accepts Defra's point, made in the consultation document, that further work needs to be undertaken before any such changes, such as time-restricted licences, can be cemented. However, Waterwise is concerned about the emphasis in the consultation document on the costs and benefits of the proposals, and the reference to the current economic climate. The thrust of the Cave Report's and recommendations is that future challenges of climate change and population will require "alternative methods and new ways of working". Waterwise is concerned that reverting to the previous costs and benefits system relating to finance only, and not reflecting wider costs and benefits, would not be responding to the spirit or the content of the Cave Report. Waterwise welcomes Defra's commitment to work with the Environment Agency, Ofwat and other stakeholders to ensure sustainable abstraction, and to respond to Cave and Walker, and would urge that this wider picture be maintained in the work.

Conclusion

36. There are numerous opportunities for innovation through water efficiency, and the new regulatory framework developed to deliver competition should reflect the new challenges of climate change and population growth, as recommended by the Cave Report.

37. The consultation document states explicitly that the UK and Assembly Governments recognise that more could be done by the sector to improve innovative capacity, particularly to meet the challenges presented by climate change, housing growth and growing customer expectations around customer service. Water efficiency sits squarely at the heart of this.

38. Innovation in water efficiency can be delivered in many ways – through new partnerships, new regulatory approaches and new services.

39. Despite a significant and welcome step change in scale of the water efficiency programmes being carried out by the water companies, the potential for water efficiency to deliver on the new challenges of climate change mitigation and adaptation, and population growth, remain far from being fully realised. The considerable opportunities for driving water efficiency through innovation and competition are outlined in this response, including in terms of reflecting the true value of water.

40. Waterwise looks forward to the UK and Welsh Assembly Government's final response to the Cave and Walker Reports, and the Select Committee report on PR09, in this context.

Nicci Russell
Policy Director