

DINNER/DISCUSSION SUMMARY

Water Management in the UK

Held at The Royal Society on 6th June, 2006

We are grateful to the following for support for this meeting:
Department for Environment, Food and Rural Affairs (Defra)
Engineering and Physical Sciences Research Council (EPSRC)
HR Wallingford Group

- Chair:** **The Rt Hon The Lord Jenkin of Roding**
 President, The Foundation for Science and Technology
- Speakers:** **The Earl of Selborne KBE FRS**
 Chairman, House of Lord Select Committee on Science and Technology
 Inquiry into Water Management
- Dr David King**
 Director, Water Management, Environment Agency
- Philip Fletcher CBE**
 Chairman, Water Services Regulatory Authority (Ofwat)
- Paul Butler**
 Managing Director, Mid-Kent Water

LORD SELBORNE outlined some of the main conclusions and recommendations of the Report of the House of Lords Science and Technology Committee on leakage, metering, tariffing, demand management, inability or reluctance of consumers to pay, and calculations of future demand. But the conclusions on which he laid most stress were the regional nature of water issues - there was not one nationwide problem - and the lack of confidence and understanding in the public about water usage and planning. The public were not engaged; they assumed an automatic right to use water as they wished, saw water company profits as reprehensible and resented any restrictions. A partnership between the industry, regulators, and public was essential; the Committee recommended the establishment of Boards for each River Basin District comprising regulators, the industry and Consumer Councils on Water, to make long term water management plans, advise OFWAT, and Regional Assemblies. A "twin track" policy, dealing with both demand and supply was necessary; there should be clearer understanding by government of the water demands of new housing, the need for incentives to reduce demand, a recognition that help needed to be given to those on low incomes faced with high water bills (in the South West, the bill could be 7% of pension) and support for new sources, such as reservoirs, when these were necessary.

DR. KING welcomed the timely House of Lords report. We were now in a drought situation, which might be short term, but the report was a strong signal that long term thinking and planning were necessary. Pressures on the industry from, in different regions, housing development, increased usage, environmental concern and the consequences of climate change had to be addressed. The aim should be sustainable development integrating economic, social and environmental issues. Regions had different water deficit/surplus balances, but London and the South East were in clear deficit. The Environment Agency sup-

ported a "twin track" approach. Demand management was essential, but it accepted that so was, in specific cases, supply enhancement. Pressure must be maintained to control leakage; and he was concerned that the "economic level of leakage" showed no reduction in the future. Demand management in the South East could certainly be helped by metering, but that was not enough. If domestic usage was to be reduced from 180 litres per household to 125, mandatory standards on equipment and fixtures, better understanding by the householder of his usage, and recognition of that those on low incomes might suffer, were necessary.

MR. FLETCHER said the Report was timely, and there was much in it that his Board would be likely to support, in particular the need to involve the public in understanding the problems. Opinion polls in the past had identified public wishes as the present level of service with no increase in fees and a willingness to have a hosepipe ban every 10 years. He doubted whether that was now the case. OFWAT had the limited, but crucial functions of regulating pricing so as to enable the water companies to finance their functions, and to ensure value for money for consumers; these were not incompatible with concern for social and environmental aims. He accepted that OFWAT should undertake long term planning, but pointed out the difficulty of setting price limits over more than a 5 or 6 year period (the original aim of 10 had proved unrealistic). He drew attention to the security of supply index, which showed that there was little chance of Thames being able to reach security of supply by 2010. There were resource options, of which use of ground water was the cheapest, where environmental and other concerns made it feasible, but leakage control, desalination, reservoir construction and a regional grid were more expensive and problematical in ascending order. Leakage control was crucial. You cannot expect people to accept restrictions if they see water running down the street. While he understood the reasons,

the position of Thames on leakage was unsustainable. The “economic level of leakage” concept would have to be re-considered. Metering was necessary in the South East, but not nationally, but must be introduced with concern for the social implications.

MR. BUTLER also welcomed the House of Lords report as timely and thorough, with many recommendations he thought the industry would support. He noted the media reaction to the current drought, leading to compulsory metering in Folkestone, and hosepipe bans in the South East. He agreed that public attitudes had changed; they were more reluctant to submit to restrictions - accepting hosepipe bans now only in 1 in 50 years, not 1 in 10; were more intolerant of leakage, and regarded water company profits as excessive, if not reprehensive and unnecessary. The specifics of the hosepipe orders must be reconsidered - it was ridiculous to allow swimming pools to be filled, but hosepipes banned. Leakage had been reduced by one third, and a further 20% reduction should come by 2010, but there would still be 20% leakage. The economic level of leakage was to be reviewed in 2007. The public must accept that capital investment by companies had to be paid for by return on debt or equity. Metering was necessary in the South East, although he had doubts about the block tariff - but so was the development of new sources such as reservoirs. He welcomed the recommendation that the industry, regulators and the government needed to think long term about both demand management and supply enhancement.

In the following discussion, many speakers endorsed the Committee's view that the public felt little responsibility for water usage, were ignorant of the financial and resource problems the industry faced and increasingly resented any restriction on their ability to use as much water as they wished. There were a number of ways in which this problem could be addressed. Better and well-publicised river basin management strategies which brought together environmental, social and economic issues – as would be necessary under the EU Water Framework directive – would help, but there was some caution in responding to the Committee's recommendation about setting up River Basin Boards. There was a fear that this might lead to an additional layer of bureaucracy, although the recommendation did not require another formal set of approvals. The suggested relationship with Regional Assemblies, if and when they became significant, could cause problems. There was already in the South East a water resources group which was composed of the major players; it could perhaps serve a similar purpose. It was particularly unfortunate that the Government had not involved the water companies in their house building targets for the South East, and had not produced a methodology which commanded confidence. It was important that the consumer was involved, through the Consumer Council for Water (CC Water), in any such regional long-term thinking. But connecting with the consumer in this way was not enough. Much more needed to be done to make the individual householder aware of his consumption and to reduce it. OFWAT was prepared to finance the duty, which water companies have, to promote water efficiency. But companies must act carefully in attempting to influence their customers, or they would be accused of bullying in order to promote their own interests, such as delaying investment. Metering was an obvious way forward, together with a tariff system that bore down on heavy users. (But, it was pointed out, major conurbation's such as Paris and Copenhagen did not rely on metering, and in any case, it was not water supply, but the cost of disposing of wastewater, which drove prices). However, it would be unreasonable

to expect water companies to set up tariffs, which involved them in, for example, finding out how many people lived in a house. Meters should be readable, and sited in the house, and not in holes (which were very expensive to dig) in the street. This meant that the Water Company would become responsible for pipes within the curtilage, which were now the householders' responsibility (and where 1/3rd of the leakage took place). It could be done, but prices would have to rise to take account of the extra company liability. Mandatory labelling of the water usage of appliances and fixtures was highly desirable, if it did not happen voluntarily (as is already the case in some instances) and the government should encourage both the industry and the appliance makers to undertake research into more efficiency, including greater use of grey water. There should be economic incentives to install water tanks, and to restrict hard paving.

The problems of leakage were raised by a number of speakers. The Committee was probably right to say that the public would not tolerate existing rates of leakage in London, if it were required to undergo restrictions. The “sustainable level of leakage” concept must take account of the practical problems of increasing the rate of repair of pipes, and the traditional high pressure in the London area. The Victorian iron pipes were badly corroded from contact with London clay, and the current pace of renewal could not be increased without causing much greater disruption on roads, and getting and training more contractors and technicians. Nevertheless, unless Thames could bring its leakage rate down towards the level of other companies, it would lose public confidence and support.

Wastewater was also mentioned. It formed a major source in itself of drinking water after treatment. There was no evidence that drinking water standards had prevented unnecessarily its reuse, but much more use of grey water could be made for local household, as well as irrigation and other industrial uses.

Sir Geoffrey Chipperfield KCB

The presentations are on the Foundation web site at www.foundation.org.uk.

Useful web links:

House of Lords Select Committee on Science and Technology Inquiry into Water Management:

www.parliament.uk/hlscience

Defra:

www.defra.gov.uk

EPSRC:

www.epsrc.ac.uk

Environment Agency:

www.environment-agency.gov.uk

HR Wallingford Group:

www.hrwallingford-group.co.uk

Mid-Kent Water Ltd:

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