WATER FOR PEOPLE AND THE ENVIRONMENT

Consultation Response from the British Hydrological Society

General

(1) There is some concern over the title of this document as it puts 'people' first although the main thrust of the text is naturally on environment issues, reflecting the Agency's core responsibilities. Indeed, we would suggest that the title reflects the way policy makers and regulators have historically approached water resources, i.e. meet the need of people first then manage the residual for the environment. With the advent of the Water Framework Directive and improved understanding of the linkage between water resources, hydrology and ecology, is it not time to adopt the approach taken in other areas of environmental regulation where the implicit assumption is that a well-managed environment benefits business and local communities. Would it be possible to avoid the split between people and environment and simply adopt a strategy such as "(The sustainable use of our) water for all"?

(2) We note that the document states that it is aimed at "informed decision makers". It is questionable whether this is the right place to start a consultation on a new strategy. Decision makers (politicians, regulators and business leaders etc.) generally respond to external drivers such as public opinion, international economic factors and international or global environmental issues. The strategy should be fashioned to reflect these drivers and the best way to get a perspective on these would be to consult a broad cross-section of the community. However, despite being aimed at "informed decision makers" the document appears to be written for the layperson. It uses generalities, simplifications and avoids technical terms. Who is the intended readership? And finally, given that the preparation of WRP09 is well advanced by most water companies is this strategy too late to significantly impact the first RBMP in 2009?

(3) While the aim for the environment is simple, direct and clear, the aim for water resources is not. We would advise a re-think for the aim for water resources. Specifically, to simply aim to achieve sustainable abstraction. The use of the terms 'economic' and 'environment' implies that there is an option to achieve one or the other. Moreover, it begs the question: why is social sustainability excluded? (i.e. social justice in meeting the needs of future generations with respect to their societal needs). The word sustainable implies that the needs of users will be met as well as the need to maintain and enhance the environment. The strategy needs to accept that it may not be possible in future to meet all the needs/demands made of the water environment without managing the demands of users or accepting impacts on the water environment.

(4) It would be difficult to disagree with the principles. However, the strategy needs to go further. It should create the framework for balancing the conflicting interest underlying these principles. Principles are all very fine, but as resource becomes more limited "people" become more and more focussed on their specific needs and less inclined to work towards larger scale sustainable goals. The approach to managing local interests is key to achieving a sustainable use of water resources.

(5) We fully support and agree with the need to look beyond 25 years. This is essential if the strategy is to have regard for the impacts of climate change.

(6) Pursuing the comments made under (2), (3) and (4), we note that there is no reference to education, training and recruitment. While this issue is presumably not considered to be within the scope of the Agency's resource strategy, it is actually central to the issue of valuing water (public education) and delivering strategy (staff recruitment and training). Similar comments may be made about Research and Development.

(7) In paragraph 2 of section 3 the use of the word "properly" implies a single correct way to use water. We would suggest that "effectively" is more appropriate (i.e. optimally).

(8) For a complete picture it would be very useful to include details of the arrangements for catchments that are shared with Scotland (the Solway and Tweed catchments) and in particular the proposals for a trans-border RBMP.

Answers to Specific Questions contained in the Document

Q1. A flexible system is essential but should be designed to avoid risks to business users and public water supply. We should like to see a fixed period licence together with the option for the EA to review larger licences (say >50 m^3/d during a period, for example, in response to a review of returns from an operator). However, the majority of smaller/low risk licences should run for the full period. It is believed that a minimum period of 5 years is needed for business continuity.

Q2. The challenge is to introduce uncertainty into the supply-demand-balance (SDB) assessments that underlie all water company water resource plans. Moreover, as with climate change, a scenario-based approach could be used to consider alternative demand management strategies and approaches to managing *per capita* consumption. The EA may need to consider moving away from standard levels of service and adopting regional or even local levels of service to reflect the regional stresses on water resources. For example, we might see hose-pipe bans introduced on a 1 in 5 year basis in the SE of England compared to a 1 in 10 year basis in the NW. Introducing a scenario-based approach to all aspects of the SDB, combined with carbon foot-printing and total life cycle analysis, would allow the EA to balance new development with more stringent demand control. In the (very) long-term, separating essential from non-essential use may be the answer, allowing water companies to vary costs of non-essential water to manage the SDB. Perhaps even to the extent whereby water companies provide facilities to encourage the use of rainwater butts and prohibit use of tap water for garden use (similar to the way some local authorities are providing compost facilities and restricting bin collections to manage domestic recycling/waste).

Q3. We agree with this approach. However, it must be adopted along with continued pressure to reduce water company leakage levels. Public buy-in to such a strategy will depend on their perception of their contribution to the total "problem" (similar to climate change strategies). You could look at countries like Switzerland where it is common for appliances such as washing machines to be provided for multiple apartments with all residents sharing the same facilities. Increasing incentives to buy water efficient devices and avoiding water hungry devices need improving and would need to be put into publicity campaigns, education and other means of reaching the wider public. We cannot see why private developments should not comply with the Code for Sustainable Homes, as is the case with Building Regulations.

Q4. Some of our members feel that this is a little premature. However, we would comment on two types of impact of climate change on ecology. Firstly, the sudden impact of an extreme flood event or drought resulting in the loss of a specific species or habitat (e.g. scouring of gravels as a result of flooding, substantial bank erosion following sustained low flows etc.). Secondly, the gradual change in species/habitat as a result of a slow trend in climate (e.g. loss/gain of species).

The first impact must be managed through contingency planning, action planning and the measures often seen in catchment plans. Management agreements with operators are frequently used to allow habitat/species to recover.

The longer-term or gradual impacts need to be managed using fixed period licenses, license reviews and the 25 years planning cycle. Operators need long periods to adapt to changes in licensing and any change needs to be considered in the regional context as well as the economic and wider environmental impacts of any new development considered.

Q5. It is not unreasonable that water companies do not see commercial value in reducing leakage below current ELL targets. The question is how can leakage reduction be made more attractive to water companies? Leakage reduction should be the first measure a water company considers when it is seeking to address a SDB deficit. The overall impact of a reduced ELL target to address regional stresses must be more sustainable than the development of new sources. Nevertheless, we would argue that environmental cost-benefit analysis is needed.

Q6. Supply pipe leakage is still a hidden and largely unknown risk for (domestic) property owners despite recent publicity by water companies. Increasing the potential cost of repair would be a blunt tool to address this problem and is unlikely to address the problems well known in metering (addressing disadvantaged communities, multiple occupancies, non-payers, etc.). An alternative approach would be to build these costs into water bills and then use targets to allow water companies to use their expertise to address the problem. Relying on individual property owners and their various small contractors is no way to address a national problem strategically.

It is agreed that transfers should be a last resort. However, there should be a policy to review the viability of national transfers during each WRP cycle so that the collective WRP for each water company can be assessed against the economic and environmental benefit/cost of national transfers.

The economics of effluent re-use has to become more favourable as water resource stress increases. The strategy should provide the incentive for continued investment in technology.

Reservoirs will always be an option in regions where water is unavailable for summer periods but winter abstraction is permitted. The strategy should allow economics to guide the development options of water companies while stating the constraints within which any solution must work.

Q8. Leakage reduction and demand management will have low carbon foot-prints and the strategy must encourage water companies to consider these approaches before turning to new, energy intensive, developments. The EA could use emissions as a performance indicator to water companies and use published reports to encourage water companies to adopt best practice. Using the carbon foot-print as an active way of assessing new development or by requiring off-setting may also be options.

The importance of water quality should not be overlooked. The EA should be discouraging the strategy of paying more and more (in terms of carbon and money) for water treatment. For example, will quality be considered when setting/reviewing licences?

Q9. We agree with this statement. The licence fee is generally a fraction of the capital cost of a new development and is not a factor in determining a preferred solution. In Scotland, where SEPA have introduced reduction factors to reflect good environmental practice the discount is too small to influence all but the smaller water users. Introducing the real cost of water would be an added driver to low efficiency users such as agriculture to develop more efficient/cost-effective practices as well as potentially reducing licenses for agricultural practices of marginal economic value.

It is not clear what is meant by “price signals in bills”. However, we feel that transparent billing will only be partially successful as the link between water use and the environment is

generally complex. Moreover, the relationship between a water company and its customers will generally over-ride any information contained in a bill. We would suggest that the use of a similar approach to that taken in flooding after 1998/99 may be beneficial. The development of standard codes for communicating the state of the environment to the public (drought watch, drought warning, etc.) and the use of the media to communicate these codes through weather forecasts may begin to raise awareness of environmental stress and hence remove the focus on the water company-customer relationship when it comes to understanding the link between water use and the environment.

Q10. Further development is required to ensure an equal balance between supply and demand management. The terminology and language of key documents such as CAMS are still biased towards supply management. CAMS should develop further to encourage users to consider demand management, water rights trading and other low impact approaches before applying for a new licence.

Q11/12. Prioritising the allocation of future water resources may be a necessity in some areas of England. It is difficult to perceive of any scheme that does not give priority to public water supply. However, other users need to have the confidence that water companies are using water as effectively and efficiently as possible such that any remaining resource is maximised. This is essentially the role of Water Resource Planning and the economic and environmental regulators.

Q13. We are not convinced that aim 7 goes far enough with respect to protecting the environment. The UKTAG Environmental Standards are very crude measures of status and will not in themselves lead to a high quality environment. Aim 7 should capture the Agency's several aims of managing water resources so as to maintain and enhance the quality of the water environment. This would include statutory requirements such as WFD, Birds and Habitats Directive as well as local measures agreed through LBAPs, existing Catchment Management Plans and various management agreements.

Q14. Most of the aims are so generalised that we cannot see any difficulty in achieving them. There is some concern that aim 5 is a single national target which may not be appropriate in all regions. Getting a sufficient number of property owners to buy in to this target is unrealistic given the low level of awareness at this time. Aim 6 is too soft and would in any case be expected of water utilities and the EA. Aim 7 is a statutory requirement and will have to be met whether this strategy exists or not. We would like to see wider and more challenging environmental aims proposed, as discussed under Q13.