

Phil Woolas MP
Minister of State (Environment)
Defra
17 Smith Square
London
SW1P 3JR

23 September 2008

Draft water resource management plans – overview of issues

As the consultation process on water companies' draft water resource management plans draws to a close, I thought it might be helpful to write to you about some of the high level themes that have emerged.

Planning to balance the supply and demand for water has always been a challenging process. Water companies have to provide a secure supply of water, but we also expect them to protect the environment and to keep customers' bills to a minimum. Over the next twenty-five years, population growth and climate change will make the process even more challenging. Market mechanisms could help to tackle these challenges, and we expect that reforms to the framework for competition will make that possible. In the meantime, we must encourage companies to find innovative, flexible and robust solutions to balancing supply and demand, so that they deliver the best value to customers and the environment.

Quality of the plans

Companies' latest draft plans reveal some progress compared with their 2004 plans. In particular, they give more attention to environmental and social costs, and to the effects of climate change. Overall, however, there is still room for further improvement. In most cases, we have been unable to say whether a company's plan represents the best value for its customers. The reasons for this vary, but they include cases where companies have:

- Failed to demonstrate that the underlying 'baseline' forecasts of demand from customers and supply in the future from existing water resources are robust.
- Pre-selected certain schemes to balance future supply and demand without appraising them.
- Failed to explain clearly the process for selecting preferred schemes.
- Justified schemes on the grounds that they have customer support, but failed to provide robust evidence of that support.
- Taken too narrow a view of the costs and benefits of different options.

.../...

P Woolas
23 September 2008
Page 2

The attached note comments on these and other issues in more detail.

Next steps

We have submitted to Defra our representations on each of the water resource management plans for water companies operating mainly in England, and published these on our web site. We look forward to seeing in October the companies' responses to all stakeholders' representations.

We are currently reviewing companies' draft business plan proposals for expenditure to balance supply and demand over the period 2010-2015, which they must set in the context of their longer term strategies. We will provide feedback to companies over the coming months, which might prompt them to carry out further work on their water resource plans. Companies submit their final business plans to Ofwat, and their final water resource management plans to Defra, in April 2009. We will expect these submissions to be consistent with one another.

Our consultation on targets for companies to promote water efficiency has just closed. We will review the responses and publish our conclusions as soon as possible to allow time for companies to incorporate the new targets into their final plans. We believe that the targets will prove challenging but achievable, and that they will contribute towards achieving the Government's objective to reduce per capita consumption.

For the longer term, we plan to work with the Environment Agency and other stakeholders to improve the guidance that companies must follow in completing their water resource plans. The existing guidance is well developed and logical, but there is scope to improve it in the light of the current round of planning. We expect to begin this work in 2010.

I am copying this letter to Paul Leinster (Environment Agency), Tony Smith (CCWater) and the MD of each company.

Yours sincerely

Regina Finn

Draft Water Resource Management Plans 2008 – overview of issues

Baseline forecasts of supply and demand

Companies' long-term forecasts of 'baseline' supply and demand, based on existing resources and practices, are a critical part of the planning process. If they over-estimate the size of any baseline deficit, companies will spend too much to balance supply and demand, making customers' bills higher than they need to be. If they under-estimate a baseline deficit, they increase the risk of having to impose restrictions on water use, and they may be forced to invest later in more expensive solutions. Companies have to consider a variety of factors, including:

- The available yield from their resources under different weather conditions.
- The effect of climate change on both supply and demand.
- Likely impacts on demand from population and housing growth.
- Any changes in the factors driving per capita consumption (pcc).
- The impact of sustainability reductions.

Companies have generally taken a thorough approach to their forecasts, but we do have some concerns. In particular:

- Companies' forecasts of changes in pcc differ markedly. It is not surprising that the **level** of pcc differs between companies. It is driven by various underlying factors – including wealth, climate, occupancy rates and demographics – that will differ between regions. But it is not clear that companies' assumptions about **changes** in pcc differ because of likely differences in the way that those underlying factors will change.
- Companies plan on the basis of achieving a particular level of service, defined in terms of how often they are likely to have to impose restrictions on water use. In many cases, companies have not demonstrated that their customers are willing to pay for the level of service they have targeted in their plans.
- It would normally be too expensive for companies to achieve their target level of service with certainty. Instead, they have to choose what level of risk to bear. We think that some companies may have taken too conservative an approach, accepting only very low levels of risk but doing so at too great a cost to their customers. We think that companies need to be able to demonstrate not only that their customers are willing to pay for their planned level of service, but also that they are willing to pay to achieve that level of service with a very high degree of certainty.
- The water resource planning guidance requires companies to base their demand forecasts on official population and housing projections. We think that companies may need to revise their assumptions in their final water resource plans (and final business plans for the periodic review of prices in 2009), for example to take account of the likely effects of the credit crunch on the property market over the next few years.

- We asked the companies to take account of the impact of climate change on their baseline forecasts of supply and demand, and on the schemes that they selected to resolve any deficits. The quality of companies' investigations into the impacts of climate change varies across the industry. In general, we think that companies have not carried out sufficiently robust investigations or provided firm enough evidence at this stage to support the investment that they propose to tackle the impact of climate change. We have asked them to carry out further work.

A twin-track approach?

We expect companies to take a twin-track approach to balancing supply and demand. That does not mean that they have to spend equal amounts of money on supply-side and demand-side measures, but it does mean that they have to consider all options on a level playing field. It is not clear whether companies have done that in their draft plans.

Most companies have pre-selected particular levels of metering and leakage control, contrary to the planning guidance. Instead, they should choose appropriate levels of metering and leakage control by comparing the costs and benefits of those options with the costs and benefits of other options to find a solution that provides the best value to customers and the environment. It is not clear whether the assumptions that companies have made would lead them to invest too much or too little in metering and leakage – it is impossible to tell without a proper comparison of the costs and benefits.

Companies must make sure that they take into account the wider costs and benefits of metering, water efficiency and leakage control, as well as the narrow financial impacts. For example, metering and water efficiency can help to reduce energy use in the home, as well as reducing the energy required to treat and pump water. These particular benefits are quantifiable, but others are not. Companies should quantify costs and benefits wherever possible, but otherwise provide a qualitative assessment.

Taking a broader look at costs and benefits also means comparing options in context. For example, companies should consider whether it is cost beneficial to install more meters and replace more pipes in the near term on the basis that they will have to do such work in the long run anyway. This could make a significant difference to the case for compulsory metering, where the unit costs of an organised installation programme could be much lower than the costs of installing meters piecemeal in response to customer requests.

More generally, companies should consider whether there are any links between their wider objectives and their plans to balance supply and demand. The best value solution to balancing supply and demand might not result in the best value overall if companies fail to take into account links with other parts of their investment programmes, including asset maintenance and quality improvements. Companies should explain such links so that their process for selecting preferred options is clear.

.../...

In order to compare options on a level playing field, it is essential that companies identify the most efficient means of delivering each option. For example, water efficiency measures can appear to represent poor value in companies' appraisals because of the cost of making a special visit to install a water efficient device. Companies may be able to reduce costs significantly by fitting water efficient devices when they have another purpose for visiting customers. As Waterwise has pointed out, there are also opportunities for companies to carry out water efficiency jointly with other organisations, including Housing Associations and energy companies.

Dealing with uncertainty

Where companies' investment plans are driven by factors that are subject to a high degree of uncertainty – including the effects of climate change and future trends in pcc – it is prudent to consider options that offer a more flexible response to changes in the supply/demand balance. Committing to large capital schemes with sunk costs might result in significant over-capacity at customers' expense. We are not suggesting that large schemes are necessarily inappropriate, but we think that companies' draft plans have taken too little account of the value of flexibility.

Leakage

The popular perception of leakage is that it represents wasteful mis-management by monopoly water companies. Against a background of rising bills, customers are understandably angry that water companies lose so much water from their pipes. Yet, even if it were possible, eliminating leakage altogether would be a wasteful use of resources. The cost of doing so would far exceed the cost of balancing water supply and demand by other means, and that would mean higher bills for customers. Instead, we expect companies to keep leakage down to a sustainable, economic level. Below this level, the costs of additional leakage control would exceed the benefits. We expect companies to measure costs and benefits comprehensively – taking account of the comparative environmental impact of leakage control and other options, and taking account of customers' views.

Several companies have declared their intention to reduce leakage below the level that they currently consider to be economic, explaining that their customers are willing to pay for these reductions. We said in *Setting price limits for 2010-15: Framework and approach* that what we now call the sustainable, economic level of leakage should itself take account of customers' willingness to pay, so there should be no question of going below it. But companies must provide robust evidence of their customers' views, and they have a responsibility to make sure that those views are properly informed by relevant information. In particular, if customers are willing to pay to reduce leakage even when other options would cost less, then companies must make sure that customers understand that this will make their bills permanently higher than they need to be.

.../...

Some companies already have leakage targets below what they currently regard as the economic level. Such companies should consider whether the cost savings from allowing leakage to rise would be temporary or permanent. There is evidence that, within reasonable bounds, some of the costs of maintaining a given level of leakage may not depend on whether that level is relatively high or low. So some of the savings from allowing leakage to rise would only be one-off. Similarly, companies should consider whether they are likely to need to reduce leakage again in the future. If so, the cost savings from allowing it to rise in the short run might be outweighed by the greater costs and risks of bringing it back down. Taking these points into account, along with evidence of customers' views and the value of environmental costs and benefits, companies should first consider whether the sustainable, economic level of leakage is lower than they previously thought. If a company still considers that it is below the sustainable, economic level of leakage, then it will need to explain why it wishes to maintain leakage below the level that represents best value to customers and the environment.

Efficiency improvements

In general, companies have not explained any assumptions they have made about the scope for future efficiency improvements. The scope for future efficiencies is more obviously critical to the assumptions that Ofwat makes when setting price limits. But it is also relevant to water resource planning. In particular, companies should consider whether the scope for future efficiencies differs between options. For example, if they have a reasonable expectation of finding greater cost savings in leakage control than in other activities, then they should plan to carry out more leakage control and less work on other activities.

Sharing resources

Some companies may have the option to share resources, resulting in lower costs than if they pursued independent approaches to balancing supply and demand. This is likely to be particularly true for companies in the South East of England, where water resources are scarce. These companies are members of a working group whose objective is to identify the scope for a mutually beneficial regional solution to balancing supply and demand. Their draft plans are not based on a regional approach because the work to identify a regional solution was not sufficiently developed when companies were preparing their plans. We will expect companies to take account of the working group's updated analysis when they prepare their final plans.

Sustainability reductions

The Environment Agency considers that the timing of any sustainability reductions should depend on the time according to which companies are able to implement solutions that maintain secure public supplies. In some cases it might not be possible to implement a sustainable solution immediately. For example, a company might only be able to deal with a sustainability reduction in the short term by implementing another environmentally damaging (but legal) scheme. We welcome the Environment Agency's view that it may be able to defer the licence reduction when a more sustainable solution is available over the longer term. We recognise that the Agency would still expect companies to act promptly, and to do all they can in the meantime to minimise any adverse effects of their abstraction on the environment.

Ofwat
September 2008