



**OFWAT STATEMENT TO THE PLANNING INQUIRY FOR THE APPEAL BY
THAMES WATER UTILITIES LIMITED OF THE REJECTION OF PLANNING
PERMISSION FOR LAND AT BECKTON SEWAGE TREATMENT WORKS,
JENKINS LANE, BARKING.**

APPEAL REFERENCE APP/G5750/A/05/1184751.

2 JUNE 2006

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1. **Summary**

- 1.1. The Water Services Regulation Authority (Ofwat) is the economic regulator of the water and sewerage industry in England and Wales. We have prepared this statement to help inform the inquiry about our role in water resource planning and our position on the proposed desalination plant at Beckton.
- 1.2. We are concerned by the unacceptable risk of supply interruptions during prolonged dry spells in areas of London covered by Thames Water Utilities Limited (Thames). Thames has a plan in place to address its inadequate supply position in London. The two most important actions are to urgently reduce leakage and build a new desalination plant. The balance of evidence is that both are needed if London is to reach an acceptable supply position as quickly as is feasible.
- 1.3. Leakage is unacceptably high in London. It was 915 million litres per day (Ml/d) in 2004-05. Ofwat has set Thames the target of reducing this to 725 Ml/d by 2009-10, to bring leakage down to an economic level.
- 1.4. Thames must also implement steps that will act to reduce the demand for water for its position to remain secure in the longer term. This includes helping households and businesses to reduce consumption as well as further metering of households. Increasing activity in these areas now would help the current position, but it would not be enough to solve the problem in the short term without Thames both reducing leakage and building a desalination plant.
- 1.5. Our duties are laid down in law and, where appropriate, we make judgements about how best to perform them. As a non-ministerial government department our decisions are made independently. We are accountable to Parliament.
- 1.6. On water resource issues we work closely with Defra, the Welsh Assembly Government and the Environment Agency. The Environment Agency is the statutory body with responsibility for water resources. The Secretary of State for Environment, Food and Rural Affairs and the Welsh Assembly Government publish guidance on improvements that they wish companies to make.
- 1.7. It is the responsibility of water companies to maintain water supplies to their customers. It is our duty to enable efficient companies to finance this. We set price limits and define the outputs required of each company. We then monitor each company's performance against them. Price limits restrict the increases in charges that companies can make each year. The current price limits were set in 2004 for the period covering 2005 to 2010.
- 1.8. A key input to price limits is the detailed business plan provided by each company. As part of its business plan each water company provides its 25-year water resource plan setting out how it plans to supply water to its

customers. Water resource plans forecast the supply of and demand for water and, where there is any imbalance, set out the company's least cost set of measures, taking into account financial, social and environmental costs. Companies must take account of the risks and uncertainties associated with particular schemes when deciding on an optimal plan. Measures are likely to be a combination of reducing leakage to the economic level, enhancing demand management, extending existing resources and commissioning new sources.

- 1.9. The Environment Agency assesses each water resource plan to make sure that each company can meet customers' demand for water services, while providing adequate protection for the environment. We use these plans as the basis for setting price limits, taking into account the costs required over the five-year period that are required to maintain water supplies for the next 25-year period. We challenge the costs that companies include in their plans and also assume that companies will become more efficient over time, further reducing costs.
- 1.10. The current deficit in London is around 200 to 300 MI/d in a dry year. The water resource plan that Thames produced for the 2004 periodic review indicates that without further action the deficit will increase to over 380 MI/d in a dry year by 2009-10. This is equivalent to the daily demand of more than 2.3 million Londoners. In setting price limits we assumed that this deficit would be removed by the following actions:
- Reducing, and keeping, leakage to the economic level, which includes repair work and replacing old mains with 1,200km of new mains to achieve a 190 MI/d reduction in leakage from the level reported for 2004-05.
 - A desalination plant at Beckton that would be able to produce 140 MI/d at peak times.
 - Other new water resource schemes or extensions of existing water resource schemes that will deliver around 30 MI/d by 2009-10.
 - A 10 MI/d reduction in demand from customers after they request a meter or are metered as part of the metering on change of occupancy trial
 - Around 10 MI/d reduction in demand from an increase in water efficiency activities that we believe Thames should already be undertaking.
- We also took into account the costs of detailed planning for a potential new reservoir in Oxfordshire needed to address the longer-term supply position.
- 1.11. We recognise that Thames may find better ways of delivering solutions during the period. Thames can deliver equivalent schemes as long as it can show that the new scheme will achieve the same or better results for customers. We require Thames to report every six months on progress. At this point, we believe that the plan on which we based price limits continues to offer the best value for customers and will address the inadequate water supply situation in London in as short a time as is feasible. It remains Thames' responsibility to discharge its duties in the manner it believes is most efficient.

- 1.12. To explain our position we briefly state what our and Thames' statutory duties are (section two); summarise the background behind Thames' proposal to build a desalination plant to resolve the inadequate supply position in London (section three) and how we approached this when setting price limits in 2004 (section four). We then present our view on two other important areas relevant to the supply position in London, leakage (section five) and water efficiency (section six).

2. **Statutory duties**

2.1. The duties for most of our work as an economic regulator are laid down in section 2 of the Water Industry Act 1991 (WIA91) as updated by section 39 of the Water Act 2003. Our main duties relevant in this context are to:

- secure that the functions of each company are properly carried out and that they are able to finance their functions, in particular by securing a reasonable rate of return on their capital; and
- protect the interests of consumers, wherever appropriate by promoting effective competition;

Further duties are summarised in Annex A.

2.2. The general duties of water undertakers in respect of water supply are set out in sections 37 to 66 of the WIA91 as amended by sections 62 and 63 of the Water Act 2003. Duties include developing and maintaining an efficient and economical system of water supply within its area including ensuring that all such arrangements have been made for making such supplies available to persons who demand them as are necessary for securing that the water company is and continues to be able to meet its statutory obligations. Further details are provided in Annex B.

3. **London supply position**

- 3.1. We do not believe that the current risk of supply interruptions during prolonged dry spells in areas of London covered by Thames is acceptable. The current deficit is around 200 to 300 MI/d in a dry year.
- 3.2. In 2000 it became clear the situation was deteriorating. We required Thames to report the steps that it was taking to improve the risk of restrictions to an acceptable level. We asked Thames to produce and implement the current least-cost programme to remedy the situation, taking account of the financial, social and environmental costs. Thames reported each quarter on progress and reviewed the programme on a six-monthly basis. This was in addition to reporting each quarter on its progress on leakage. By 2005 Thames had increased the water available from resource schemes by over 200 MI/d, 70 MI/d more than it had planned to in 2000. It also renegotiated and clarified agreements to share water with other companies that led to 30 MI/d more water being available in a dry year to the parts of London supplied by Thames. Unfortunately the additional 100 MI/d (70+30) of water available to Thames was more than offset by increases in leakage. Our disappointment with Thames' progress on leakage over the last five years is examined in more detail in section five.
- 3.3. The work undertaken by Thames over this time fed into the water resource plan that Thames submitted as part of its business plan at the beginning of 2004. At this time the plans indicated that without further action and the completion of new schemes there would be a resource deficit in London of 380 MI/d in a dry year by 2009-10. Since submitting the business plan for the 2004 periodic review Thames has continued to report on its progress on a six-monthly basis.
- 3.4. Water resource plans forecast the supply and demand of water and, where there is any imbalance, set out the company's least cost solution taking into account financial, social and environmental costs. Each company must take account of risks and uncertainties of particular schemes when deciding on an optimal plan. Annex two of the Environment Agency's evidence provides further details about water resource plans.
- 3.5. Each company plans according to a certain risk of hosepipe/sprinkler bans and restrictions on non-essential use occurring in prolonged periods of dry weather. Customer's bills would have to be far higher than they are now if Thames planned never to restrict the use of water by its customers. Each company must set out its approach to water restrictions in times of drought in a publicly available drought plan. The lower the risk of restrictions that the company plans for, the greater the cost to customers.
- 3.6. We expect companies to offer a level of risk that customers are willing to pay for. From time to time both we and water companies ask customers, in customer surveys, if they are happy with the service offered to them. We also ask whether they would be willing to pay more for a higher level of service or less for a lower level.

- 3.7. Generally, research has shown that customers accept that it is reasonable that there should be occasional hosepipe and sprinkler bans. Customers place great importance on water companies maintaining reliable and continuous supplies of water. Water companies usually operate with the risk of having to impose hosepipe and sprinkler restrictions once every ten years. Customers have told us they are broadly satisfied with this level of service. They would like to see the risk of restrictions reduced, but would not pay higher bills to achieve this. Further details of past research on customers' views are included in annex C.
- 3.8. Customers' views may change if they are actually subject to water restrictions. However, research in the nineties when hosepipe bans were in place showed that the majority of customers, even when they have a ban, do not want to pay more to have a lower risk of water restrictions. Conversely the vast majority of customers support the investment that is necessary to deliver the level of risks that each company proposes in its plan.
- 3.9. The risk of water restrictions in London is currently greater than once in ten years. The two main elements of Thames' plan to cut the risk to an acceptable level are reducing leakage to a cost-effective level and building the desalination plant at Beckton that respectively will provide half and over one third of the extra water that is required to be available for customers in a dry year. Further details are provided in Table 2 in the next section.
- 3.10. In addition to planning to keep the risk of water restrictions to an acceptable risk in a dry year, water companies must also plan to comply with the requirements of 'The Security and Emergency Measures (Water and Sewerage Undertakers) Direction 1998'. Each water company is directed to have plans to ensure the provision of essential water supply at all times including a civil emergency or any event threatening national security. Thames examined what extra activity was required for their initial plan to be compliant with the Direction. The extra activity was determined on the explicit basis that the desalination plant at Beckton would be operational by 2007-08.

4. **2004 periodic review**

- 4.1. In March 2003, following public consultation¹, we set out our approach to the review of price limits, including assessing the needs of companies in maintaining the balance between supply and demand, for the five years 2005 -2010².
- 4.2. We signalled that we would accept water resource plans as part of companies' strategic business plans. We expected companies to present robust plans that had given full consideration to the options available including demand management, development of new water resources and reducing leakage. We challenged companies to demonstrate that they had chosen an optimal strategy as part of maintaining the supply demand balance over 25 years. We took into account reporter's views and those of the Environment Agency. The role of reporters is explained in annex D. The price limits that we set were sufficient to allow Thames to meet its obligations for 2005-2010. Many of the activities that they will undertake between 2005 and 2010 will only yield results after this five year period to help maintain an acceptable supply position up until 2030.
- 4.3. We published our final determinations of price limits in December 2004.³ Each company also received a supplementary report, with annexes, setting out the detailed settlement for the company.
- 4.4. The work that Thames needs to undertake to improve the security of its supply position is a major reason for the increases in bills that its customers are experiencing. On average household water bills in the Thames region will increase in real terms to £156 (2004-05 prices) by 2009-2010 from £113 in 2004-2005.⁴ As shown in Table 1 around half of this increase is required because of increased expenditure required for improving the security of Thames' supply position. The vast majority of the price increase took effect in April 2005. All customers of Thames will face these bill increases, not just customers that are located in London.

¹ Setting price limits for 2005-10: Framework and approach - A consultation paper, Ofwat, October 2002

² Setting water and sewerage price limits for 2005-10: Framework and approach, Ofwat, March 2003

³ Future water and sewerage charges 2005-10, Final determinations, Ofwat, December 2004

⁴ Bills quoted are the average household bill for water services. Most households also receive, and are billed for, sewerage services in addition to water services.

Table 1: WHAT IS DRIVING THE CHANGES IN WATER BILLS? (2004-05 PRICES)			
Average household bill in 2004-2005 (£)		113	
Less	(1) scope for reduction through future efficiency improvements ¹	(10)	
Plus	(2) maintaining base services	23	
	Of which;		
	a) changes in revenue		(6)
	b) changes in operating costs		15
	c) changes in capital maintenance		10
	d) changes in impact of taxation		3
	e) financing ²		1
	(3) improving security of supplies to all customers ³	22	
	(4) the impact of improvements in drinking water quality ³	8	
Average household bill in 2009-2010		156	

1 This is the effect of our future efficiency assumptions for all the cost elements; ie base services, improving security of supply and improvements in services.

2 This is the impact of the change in the cost of financing the base service

3 These lines show the impact of improvements in services. Where Thames needs additional revenue for financeability (net of taxation included in line 2(d)) it is allocated in this table across these improvements because it is this new investment which puts extra pressure on Thames' financial position.

4.5. As well as setting price limits we also specify outputs that each company must achieve. The main outputs for Thames with regard to water resources are:

- to reach a security of supply index of 100 by 2009-10⁵
- to meet leakage targets each year, that will result in it reaching an economic level of leakage⁶ from 2007-08

4.6. In addition to the main outputs we also set out a number of schemes. Thames must complete these schemes, or equivalent ones. We recognise that Thames may find better ways of delivering solutions during the period. It can deliver an equivalent scheme as long as it can show that it will achieve the same or better results for customers. It is Thames' responsibility to discharge its duties in the manner it believes is most efficient. For the London area the projects that Thames has yet to complete are set out in table 2.

⁵ The index is our tool to assess each company's compliance with the duty to maintain the security of its water supplies. The index, including how it is calculated, is explained further in Security of supply, leakage and the efficient use of water: 2004-05 report, Ofwat, October 2005

⁶ The economic level of leakage is where it would cost more to make further reductions to leakage than to produce water from another source.

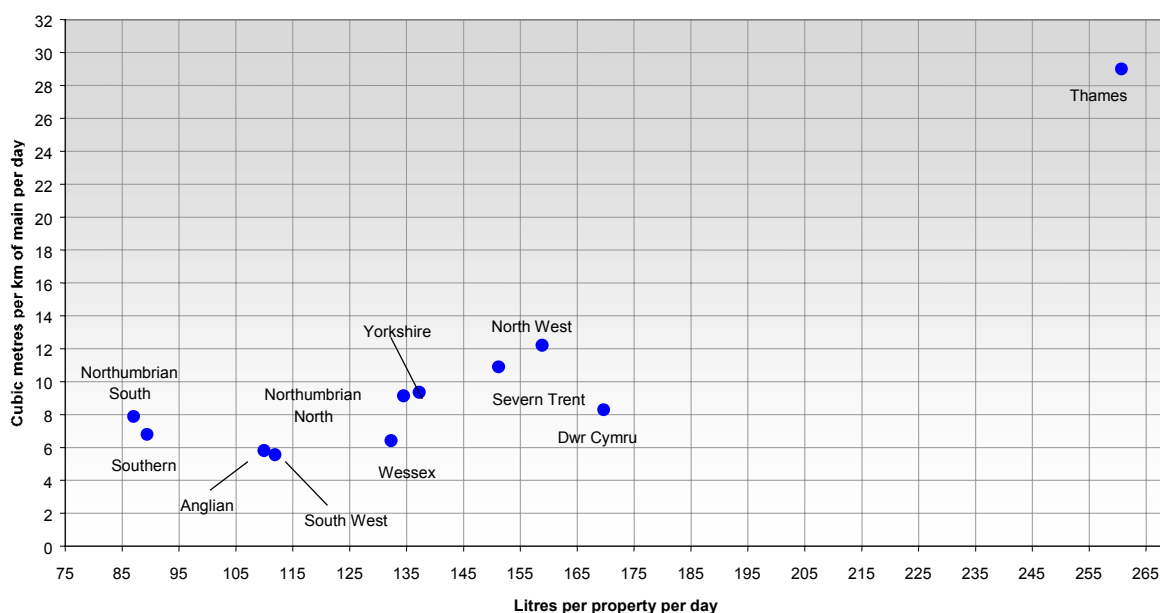
Table 2: Required outputs in London		
Output	Reduction in Deficit (MI/d)	Due
A number of activities related to leakage including district metering (DMA) network upgrade, leakage reduction systems and additional mains replacement activity. Reduction is the difference between reported leakage level in London in 2004-05 and the 2009-10 target.	190	31/03/2010
Desalination plant commissioned at Beckton and 140 MI/d water available for use	140	31/09/2007
Extension of the North London artificial recharge scheme	23	31/03/2007
Increase in yield at Wanstead resulting from the Central London Rising Groundwater project.	4	31/03/2006
Reduction in water due to 62,770 households opting for a meter over the five years to 2010	4.6	31/03/2010
Reduction in water due to the 49,282 households metered as part of a trial of metering households on change of occupancy over the five years to 2010	5.3	31/03/2010
Investigations into the feasibility of artificial recharge schemes in South London. including drilling of new boreholes at potential sites.	None specified	31/03/2007
Investigations into the feasibility of Aquifer Storage and Recovery (ASR), including drilling of new boreholes at potential sites.	None specified	31/03/2007
Investigation into the feasibility of reuse.	None specified	31/03/2010
Increase surface water abstraction during winter months for further artificial recharge in South London after 2010.	27 MI/d in 2010-15	31/03/2012
Outputs relating to a full planning enquiry for a major reservoir in Oxfordshire.	None specified	31/03/2010

- 4.7. We are not aware of a similar feasible scheme as an alternative to a desalination plant that could deliver a reliable and sustainable increase in water available for use of 140 MI/d in as short a time. Our view is consistent with that set out by the Environment Agency in section five of its evidence.

Leakage

- 5.1. Our role is to set appropriate leakage targets and to monitor each company's performance annually against their published leakage targets. These are currently set to 2009-10. When companies fail to meet targets we take regulatory action.
- 5.2. In the first instance, regulatory action will usually mean that more regular reporting is required, along with assurances and an action plan detailing how leakage will be returned to target levels. Ofwat has taken increasing levels of regulatory action in relation to our concerns about Thames' leakage performance. The company has been required to submit interim reports on their progress in tackling leakage and is currently working to an Ofwat agreed action plan to address its high leakage levels. The main milestones within the action plan are revised and published annually.⁷
- 5.3. Figure 1 shows that leakage in Thames is significantly greater than that experienced by other water and sewerage companies. We are particularly concerned by the current high levels of leakage in London.

Figure 1: Water and sewerage companies leakage 2004-05



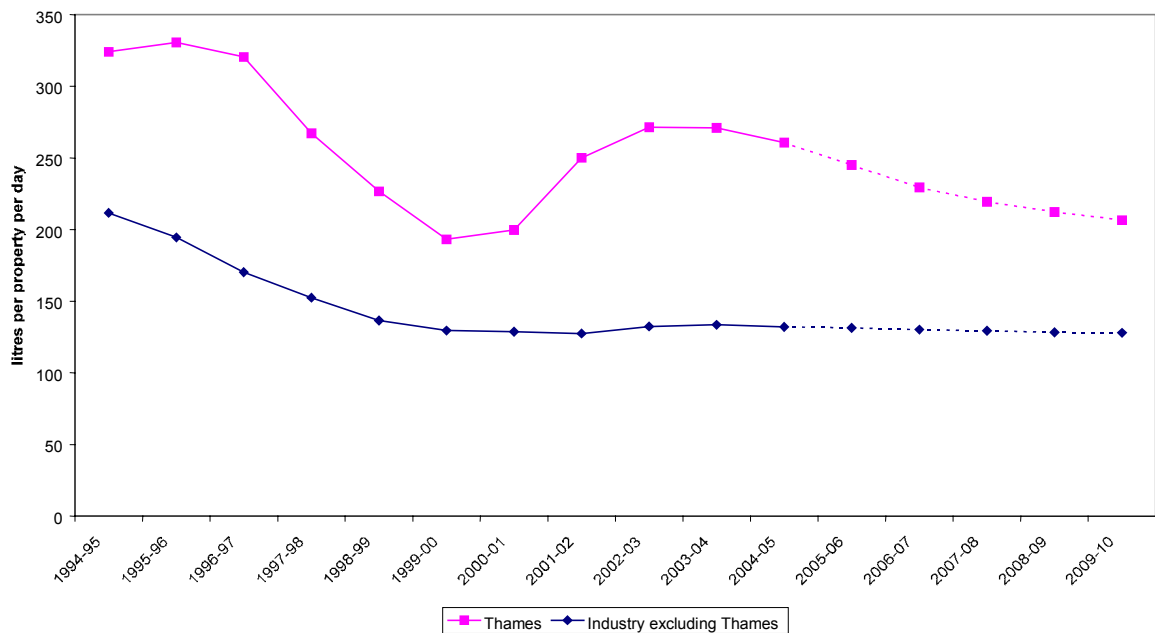
- 5.4. In the areas that Thames serves outside London leakage is at target levels and is close to the industry average.
- 5.5. Companies' annual leakage targets are based on the economic level of leakage (ELL), which is different for each company, and which each company is required to calculate and update at regular intervals. ELL is the point where it would cost customers more for the company to make further

⁷ Security of supply, leakage and the efficient use of water: 2004-05 report, Ofwat, October 2005

reductions to leakage than to produce water from another source when taking into account environmental and social costs and benefits (e.g. traffic disruption, abstraction, river flows, supply restrictions). It is an important factor in water resource plans and the result is that companies will reduce leakage, rather than construct a new water resource, if this will impose a lower cost on customers, the environment and society. Most companies are now operating at or below this calculated economic level.

- 5.6. Now that they are operating at their ELL the leakage rates reported by the majority of water companies in England and Wales are comparable with those reported in other countries. A very few countries, such as the Netherlands, report exceptionally low levels of leakage which would be prohibitively expensive and uneconomic for English and Welsh companies to achieve. If indeed such low levels are achievable here.
- 5.7. This is because there are significant differences in the operating environments in England and Wales and in the Netherlands. The Netherlands has a post-war mains system of non-corrosive PVC pipes, lower pressures are possible because of the flat terrain and because high buildings have their own pumps, and the soil type means that the pipes are subject to less stress caused by ground movement. In supply zones in the UK with similar conditions – sandy soil, low pressures, modern pipes – comparably low leakage levels are found.
- 5.8. The water industry in England and Wales has made significant progress in reducing leakage over the past 10 years as shown in Figure 2. Between 1994-95 and 2004-05 leakage fell by 1500 MI/d from 5112 MI/d to 3608 MI/d. Thames' performance over same period has been more varied. In 1994-95 Thames reported leakage of 1078 MI/d. This fell to a reported 662 MI/d in 1999-2000, and now stands at 915 MI/d.

Figure 2: Leakage and targets 1994-95 to 2009-10



- 5.9. At the end of the 1990s Thames, like other companies, reported significant reductions in leakage. However, in 1999-2000 we found the quality of its data on leakage was poor and it was not using industry best practice in its leakage calculations. As a result, we worked closely with the company to improve its leakage estimates. The absolute leakage levels reported at the time were significantly more uncertain than they are today.
- 5.10. In the most recent price determination, we made provision for Thames to take the unprecedented step of implementing a programme of mains replacement to help solve the problem of high leakage. We assumed that Thames would install more than 1200km mains in London by 2009-10. (Thames now intends to complete this by 2008-09). Our determination also makes financial provision for Thames to step up its programme of leak repairs. In 2005 the number of leaks repaired increased by 80% compared to 2003. We expect to see this higher number of repairs maintained.
- 5.11. Thames has yet to meet its ELL but has targets in place which act as a glidepath to the company meeting its ELL. Leakage in 2004-05 was 915 MI/d and the company plans to reduce it to 725 MI/d by 2009-10.

Table 3 Leakage Targets (MI/d)

	2005-06	2006-07	2007-08	2008-09	2009-10
Total leakage	860	805	770	745	725

- 5.12. In 2004-05 Thames' reported leakage fell by 30 MI/d (3%) to 915 MI/d. This was the first reduction that Thames had achieved for 5 years, but was a lower reduction that had been planned and was above the target level of 905 MI/d.
- 5.13. Thames must meet its future leakage targets. Although leakage has fallen recently, we are disappointed that leakage is not at target levels. We are awaiting notification of Thames' audited 2005-06 leakage performance and will take appropriate regulatory action if Thames has not delivered the required level of leakage.

6. **Water efficiency**

- 6.1. Thames has a statutory duty to promote the efficient use of water by all its customers. We are responsible for enforcing this duty. For more information on how we do this please see section five, *Security of supply, leakage and the efficient use of water: 2004-05 report* that is available from our website.
- 6.2. Water companies' activities to promote the efficient use of water by their customers include:
- advice on the sensible use of water in the home and garden;
 - advice to businesses of how to reduce demand for water;
 - advising customers how to check their own consumption;
 - raising awareness of the availability of cistern devices and other water saving devices;
 - promoting free supply pipe leak detection and repair, and a leak-line number;
 - telling customers where they can get information.
- 6.3. Some of the most significant savings are likely to be through supply pipe repairs. Around 30% of leakage is from customer's supply pipes. Many companies, including Thames, offer free repairs or subsidised replacements, although supply pipes remain the responsibility of property owners.
- 6.4. These activities mainly involve operating costs, costs that are incurred on an annual basis. Our approach to operating costs at price reviews is to assume that the company will continue all existing activities while improving efficiency and then to allow for increased operating costs that will provide customers with an increased level of service.
- 6.5. Each company must comply with its duty to promote the efficient use of water amongst its customers whether or not it faces an immediate constraint in terms of the balance between supply and demand and regardless of whether it forms part of its least cost plan to correct any imbalance. We expect all companies to do this as part of their normal interaction with their customers, and that this forms part of their existing activities. We also make financial provision for identified enhancements to a company's strategy to promote efficient water use by its customers, where there is good evidence that it will result in a further benefit to customers – by improving the security of supply - and that it is part of the least cost water resource plan, taking into account social, financial and environmental costs.
- 6.6. Ofwat and other stakeholders are giving further consideration to positive incentives to increase water efficiency. We are part of the new Government led Water Saving Group which will define, monitor, carry out and review projects and workstreams dealing with targets, the evidence base, best practice, education and policy. Any effective strategy will require contributions from many key players. We believe this strategy should include the following elements:
- Cost-effective metering. Since 2000 all households have been able to opt to have a meter installed free of charge. Each company can also install

meters for households under existing legislation on change of occupancy; if customers have high discretionary water use (eg swimming pools); or if the household is in an area which has been determined by the Secretary of State to be an area of water scarcity.

- Strengthen the research database. The water industry has already started to collate this information as part of its UKWIR Sustainability of water efficiency measures project and could form the basis of a database. Waterwise has also been created by the industry to increase demand-side action to meet public supply needs. One of its aims is to make the economic case for water efficiency as a realistic, large-scale contributor to sustainable water resources.
- Develop a recognised and accredited water efficiency labelling scheme. This could help inform customers about water efficient appliances.

6.7. We collect information from each company annually on a number of water efficiency activities. Of those activities where companies report quantitative information we have compared the activity of different companies. We have compared the level of activity relative to the number of properties that they serve, but have not taken into account any factors that might justifiably lead to different levels of activity. Thames are just in the upper quartile of companies for delivering cistern devices and self audit packs to households, both for the last year reported 2004-05, and for the last five years. In 2004-05 Thames were in the middle of the pack for repairing or replacing supply pipes, and while it has substantially increased activity in this area in 2005-06, it is still unlikely to be the leading company. Thames are amongst the leaders for delivering self-audit packs to non-households, but are around the bottom of the industry for visiting non-household customers to complete water audits. Thames also has a relatively small programme of metering households. It only plans to increase the proportion of households that have a meter installed from 20% in 2004-05 to 27% in 2009-10. For neighbouring companies in the South the corresponding figures are 36% in 2004-05 increasing to 49% in 2009-10. Thames also conducts water efficiency work with schools and attends community events to provide information and advice.

6.8. In its 2004 water resource plan Thames proposed carrying out two large-scale selective metering trials in Chigwell and Swindon on change of ownership. This is with a view to roll out the strategy to the whole of its area in 2010. Thames' view is that a trial is necessary, rather than applying this policy to its entire supply area, because of the potential uncertainties of costs due to the difficulties of metering in London. We made provision for the financing of this activity in our determination.

6.9. Thames included an increase in expenditure for water efficiency activities in its water resource plan. We thought that Thames Water should already be delivering the type of activities that it outlined. We did not assume any additional financing for these activities because we did not judge them to be enhancements of service in the supply/demand balance. These or similar activities should be delivered as part of Thames' ongoing work to meet its duty to promote the efficient use of water by customers.

- 6.10. Water efficient activities, along with Thames reaching and maintaining its economic level of leakage, are an essential part of Thames providing an acceptably low risk of interruptions in water supply. However, evidence does not suggest that feasible increases of activity in both these areas could lead to the desalination plant not to be required. Our view is consistent with that set out by the Environment Agency in paragraph 7.1.4 and annex three of its evidence.

Annex A: Ofwat's duties

The duties for most of our work as an economic regulator are laid down in section 2 of the Water Industry Act 1991 (WIA91) as updated by section 39 of the Water Act 2003.

Our main duties are to:

- secure that the functions of each company are properly carried out and that they are able to finance their functions, in particular by securing a reasonable rate of return on their capital;
- protect the interests of consumers, wherever appropriate by promoting effective competition;
- secure that companies with water supply licences (i.e. those selling water to large business customers, known as licensees) properly carry out their functions.

Subject to our main duties, we also:

- promote economy and efficiency by companies in their work;
- secure that no undue preference or discrimination is shown by companies in fixing charges;
- secure that consumers' interests are protected where companies sell land;
- ensure that consumers' interests are protected in relation to any unregulated activities of companies;
- contribute to the achievement of sustainable development; and
- have regard to the principles of best regulatory practice.
- We also have general duties in exercising our powers to consider the effect on the environment.

Annex B: Water companies' duties – water supply

The general duties of water companies in respect of water supply are set out in Sections 37 to 66 of the Water Industry Act as amended by Sections 62 and 63 of the Water Act. They include duties to:

- 3.1. develop and maintain an efficient and economical system of water supply within its area
- 3.2. provide to premises such a supply of water as is sufficient for domestic purposes
- 3.3. provide mains for domestic purposes
- 3.4. connect properties to mains for domestic purposes
- 3.5. prepare and maintain a water resources management plan.
- 3.6. prepare and maintain a drought plan.
- 3.7. provide supplies for non-domestic purposes on request, but not if this would put at risk the ability of the company to meet any of the existing or probable future obligations to supply water for domestic or other purposes.

When companies were appointed in 1989 the Secretaries of State for the Environment and Wales, the conditions of appointment were set out in a Licence⁸ (called the Instrument of Appointment). As well as delivering their statutory duties companies must also comply with licence conditions that we enforce.

⁸ Instrument of Appointment by the Secretary of State for the Environment of Thames Water Utilities Limited as a water and sewerage undertaker under the Water Act 1989

Annex C: Customer views

It is important for Ofwat to be aware of what customers think about key issues like drought and water restrictions. We undertake regular market research to find out customers' views. We commission our own work, as well as working in partnership with other organisations such as CC Water, Defra and Water UK. Ofwat also monitors the results of work carried out by water companies and other organisations. Much of this work is to inform us at periodic price reviews.

1994 Periodic Review

For the 1994 periodic review we commissioned Middlesex University to conduct customer research⁹. At this time around ten per cent of people nationally were subject to hosepipe bans and bills were expected to increase. More than 990 people were interviewed, spread equally over four different areas; two areas that had a hosepipe ban in place at the time and two areas that did not. 60% were satisfied with the risk of a ban once in ten years, regardless of whether they came from areas subject to restrictions or not. This compared to 26% who would be prepared to accept a higher risk in exchange for lower bills and 14% that wanted a lower risk. There was a link between experience of restrictions and attitudes to changes in the level of risk. Those who wanted a lower risk tended to live in areas with experience of a ban, and customers with awareness and experience of hosepipe bans were more dissatisfied with the 1 in 10 year level of risk.

1999 Periodic Review

For the 1999 periodic review Water UK, the industry association that represents all UK water and wastewater service suppliers, commissioned BEM to undertake research¹⁰. At this time hosepipe bans only applied in Essex and Suffolk and bills were expected to reduce. From a representative sample of over 2000 customers in England and Wales, 65% thought that the value for money for services that they received was excellent, very good or fairly good. When asked to select possible improvements from a list of 11, "Investing to increase the reliability of supply to avoid nearly all water shortages whatever the weather... to make restrictions such as hosepipe bans only half as likely than they are now" was third¹¹. 57% of customers were willing to accept bill increases to receive improvements in service and the environment. Only 4% of people opted to have lower bills at the risk of reductions to the current standards of service.

2004 Periodic Review

For the 2004 periodic review of price limits we commissioned customer surveys in conjunction with other stakeholders. No customer had faced a hosepipe ban for a number of years and bills were expected to increase. The conclusions from an investigation by MORI in 2002¹² were that nationally, of over 2000 customers surveyed, 56% of customers thought that the levels of service of the frequency of hosepipe bans offered by water companies were either fairly good, very good or excellent. This was 67% of customers that answered the question and expressed an

⁹ Customer preferences and willingness to pay for selected water and sewerage services, Flood Hazard Research Centre, Middlesex University, 1993.

¹⁰ Water Industry Customer Consultation Research, BEM, May 1998

¹¹ Reducing the level of leakage was first and minimising foul flooding was second.

¹² The 2004 Periodic Review : Research in Customers' Views, MORI, August 2002

opinion. We do not believe that customers are generally willing to pay bill increases to secure a lower risk of hosepipe bans. The research found that reducing hosepipe bans attracted the lowest level of willingness to pay for improvements of any of the 14 service aspects suggested, with only 5% willing to pay “more” or “a lot more” for improvements. More customers found the 1 in 10 year level of service for hosepipe bans good or excellent than were willing to pay extra on their bills for additional investment in leakage or security of supply.¹³

A further survey conducted by MVA in association with the Water Research Council (WRc)¹⁴ recorded views from a representative sample of around 400 Thames customers. 91% of these thought that it was either important or very important to maintain a continuous supply of water; with the risk of a hosepipe ban no more than once in ten years, rather than have a reduced level of service. 58% thought that it was important or very important for improvements to be introduced by the year 2010. 64% of customers supported Thames’ business plan for 2005 to 2010 to maintain the current level of service with only 3% saying they wanted more of an improvement in this area. 68% were willing to pay the cost of the company plan.

¹³ Customers finding hosepipe bans level of service good/excellent = 56%. Customers willing to pay “more” or “a lot more” for improvements in leakage = 21%, or a reliable and continuous supply = 16%.

¹⁴ Periodic Review: Customer Research 2003 – Company Results, Final Report, MVA, December 2003.

Annex D: The role of reporters

Each company's licence¹⁵ provides for the appointment of independent professionals to examine and test information and tell us their opinions. Their licences refer to reporters and assessors, but in practice the roles of reporter and assessor are combined in the reporter role. Reporters are usually consulting engineers. They examine the non-financial elements of the information that companies submit to us.

Each company's licence sets out the framework for independent scrutiny and certification of the different types of regulatory information. For example, companies must:

- give reporters reasonable access to their premises, staff, books and records; and
- allow them to carry out any inspections, measurements and tests required to complete their reports.

The reporters' primary duty of care is to us. They also have a duty of care to the water companies. This is set down in our letter to Managing Directors of water companies, MD 185 – reporter protocol issue 2, March 2003 and covers the following items:

- the role of the reporters and the reporting process, and the scope and content of their reports;
- how the relationship between reporters and auditors should operate;
- the management of external reviews of the reporters' arrangements, and for our reviews of reporters' performance; and
- the contractual arrangements between the reporters and the companies, and guidance on how reporters should be appointed.

Water companies appoint and pay reporters following our approval. Reporters must be demonstrably independent of the company and able to provide us with a professional, independent opinion.

We produced guidance for each company to follow in completing its strategic business plan and also produced joint guidance with the Environment Agency for Water Resource Plans. At the same time we set out guidance for reporters to scrutinise the whole of the plans on our behalf.¹⁶ We rely on the technical and engineering expertise that informs the reporter's work.

We appointed a team from Babtie Group to carry out an external review of the reporter process for the 2004 periodic review draft business plan. Babtie confirmed that¹⁷:

- reporters had scrutinised the detail and the commentary in the companies' draft business plans, and were likely to have identified and commented on the key issues and assumptions for each company;

¹⁵ Instrument of Appointment by the Secretary of State for the Environment of Thames Water Utilities Limited as a water and sewerage undertaker under the Water Act 1989, Condition B, Section 18

¹⁶ PR04 business plan reporting requirements, 16 January 2004

¹⁷ External review of the Reporters' audit of water company draft business plans – Summer 2003, Babtie Group.

- the different working practices between reporters had not materially affected the quality of their reports or costs due to the deployment of mature experienced individuals; and
- Ofwat could have confidence that the reporters' work had followed the draft business plan information requirements.