

Economy and key performance

Water and wastewater companies need a variety of physical assets to meet their statutory duty to provide water and wastewater services to the public and to protect the environment. The assets that we frequently refer to here comprise the infrastructure and plant needed to run our business operations. These assets deteriorate with age and use and require maintenance and over time, repair, refurbishment or replacement. Sometimes alternative or additional assets may be needed to meet new demands for quality or capacity of services.

Background

- Our current five-year investment period is April 2000 – March 2005
- We submitted our business plan for the next five-year period of investment (2005-2010) to Ofwat in April 2004
- 2003-2004 Regulatory Asset Value was £2,335 million
- 2003-2004 Interest Cover was 1.9



Drinking water quality will continue to be a priority in the future

Funding, investment and planning for the future

At five-year intervals, the Office of Water Services (Ofwat) seeks guidance from the Secretary of State for the Environment, Food and Rural Affairs, on the quality obligations that should be funded by future UK water and sewerage customer charges. This involves consultation with, among others, the Environment Agency regarding water resources and wastewater treatment issues and the Drinking Water Inspectorate on drinking water quality. The costs of schemes required to deliver the quality improvements are estimated within water and wastewater company business plans. The methods used to make these estimations are drawn into a formal structure by Ofwat. The structure provides a common framework for all water and wastewater companies to work to.

Our company Business Plan for 2005-2010 has been submitted to Ofwat. Ofwat has set out a draft determination of our customer price limits for 2005-2010, our service levels and investment budgets. Our business plan accounts for costs in relation to investment needs, operating costs and financing.

During the current investment period, 2000-2005, we have continued to deliver high quality water and wastewater services to customers. Customers have benefited from price reductions, with average water and sewerage bills falling from £278 to £247, despite an investment programme of over £1 billion in the period.



CASE STUDY

Planning ahead

The water industry commissioned a study via Water UK to develop a Capital Maintenance Planning Manual: Current Methods and Good Practice Guidance.

Our study aim was to establish a consistent approach and method for business planning. The main focus of the project was operational assets, such as water mains, sewers, wastewater treatment works.

We contributed to the study as members of its steering group. In particular, we contributed by production of the Wastewater Treatment Works Investment Requirements component of the manual.

Our aim was to generate a credible forecast of the future performance of wastewater treatment works. The forecasting method was developed within the structure set out by the common framework planning process established by the Office of Water Services (Ofwat).

LINKS: www.ofwat.gov.uk | www.watervoice.org.uk | www.environment-agency.gov.uk | www.water.org.uk | www.mori.com |

Our key improvements over the current, 2000-2005, investment period are:

- improved quality of treated wastewaters from our wastewater treatment works, particularly along the coast.

For more information
See the *Wastes* section of this report at www.southernwater.co.uk/sustainability.

- safeguarding tap water supplies
- improved sewerage systems contributing to improvements in river water quality

We also yielded significant efficiency savings over the period helping to reduce customer bills. We are committed to driving further efficiencies, although the scale of past achievements will mean the scope for further major efficiencies is more limited.

An independent study commissioned by the Office of Water Services (Ofwat) reported that for our business, “the indicators at the time” of the five-yearly review in 1999 “pointed to the need for a significant increase in the capital maintenance provision and Ofwat failed to make adequate provision for this in the Final Determination.” Since the five-year review in 1999 our wastewater treatment works compliance declined. Improvements in the overall performance levels of our wastewater treatment plants are required and these can only be delivered through investment in refurbishment of equipment and assets at these works. The Government and Environment Agency have defined environmental improvements for us to meet for wastewater quality over 2005-2010. We identified a number of treatment works for improvements in relation to minimisation of odour currently affecting nearby areas. Population growth will result in increased loading to our treatment works. We must invest in capacity of our treatment processes to ensure we can meet future demand.

For more information
See the *Energy and Atmosphere* section of this report at www.southernwater.co.uk/sustainability.

We have agreed programmes of work with the Drinking Water Inspectorate to carry out timely improvements to meet new and existing standards of water quality. Our investigations showed that the additional strain put on these assets during periods of high demand leads to deterioration in water quality. We need to make improvements to ensure water treatment remains within acceptable parameters.

For more information
See the *Water* section of this report at www.southernwater.co.uk/sustainability.

Our strategy put forward to Ofwat for the coming 2005-2010 investment period is summarised in the following key objectives, to:

- Address the most urgent asset maintenance performance issues as a priority. Deliver a stable, reliable and sustainable service to customers. Meet regulators' expectations and comply with their formal consents
- Target water infrastructure where our analysis of performance showed improvements in sewerage performance through investment in problem hotspots. For example, addressing leakage, pressure and bursts in our water infrastructure to reduce flooding and blockage risks in our wastewater infrastructure
- Deliver to our required environmental improvement programme and ensure a high-quality, secure supply of drinking water
- Start to address the strategic water and wastewater infrastructure needs required to facilitate the major housing growth now being implemented in the South East by the Government. We also need to ensure that the coming period is a platform for this ongoing growth.
- Maximise future efficiency of operating costs and capital scheme delivery that can be sustained without adversely affecting customer service. Ensure the long term financial stability of our company

Across our region for our 2005-2010 investment period we plan to (subject to Ofwat approval):

- Renew 224km of water mains to continue to minimise water leakage across our supply network. In setting out our programme of mains renewal we paid particular attention to working in defined localities to deliver maximum overall burst (and consequent interruptions to supply) and leakage reduction.

For more information
See the *Water* section of this report at www.southernwater.co.uk/sustainability.

- Renew or renovate 184km of sewers to prevent an increase in flooding or pollution incidents associated with failure of the sewerage system.

For more information
See the *Wastes* section of this report at www.southernwater.co.uk/sustainability.

- Deliver 152 flood alleviation schemes benefiting those that have suffered the negative social impacts of sewer flooding. In total these schemes would remove sewer flooding-risk from nearly 300 properties and prevent over 600 external areas from sewer-flooding.

For more information
See *Sharing our Future in the Performance Summary* section of this report at www.southernwater.co.uk/sustainability.

- Deliver eight major growth area schemes.

For more information
See *Managing our Future and Sustaining our Future in the Performance Summary* section of this report at www.southernwater.co.uk/sustainability.

- Refurbish 151 sewage treatment works and enhance 132 sewage treatment works to deliver environmental improvements.
- Upgrade six water supply works to deliver required improvements.

Key Performance

The Office of Water Services (Ofwat) has a method for assessing overall service to customers so that it can compare different water companies across the UK. Performance against Ofwat criteria is also taken into account in its setting of price limits for each company. Ofwat has reviewed our annual customer charges against our investment needs, and determined, in draft, what our annual charge to customers will be for the 2005-2010 period. This is subject to final Ofwat approval.

Overall, our performance to Ofwat key outputs indicators is improving year on year.

Our compliance with drinking water standards was high with 99.87% of samples tested meeting the required quality standards over the current period (2000-2005) to date. We met customer demand for water, despite its increase and a record hot dry summer, without imposing customer restrictions on water use. We implemented water resource investment schemes in order to improve security of supply to areas of high demand. We continued our twin track approach to meeting future demand through promoting the more efficient use of water, alongside planning the development of water resources. Analysis showed us to be below our true economic level of leakage. We have the lowest leakage rate of the ten water and sewerage companies.

Over the last five years, levels of service indicators showing the number of properties suffering poor water pressure has shown gradual improvement. We have reduced the number at risk in our region by almost 30%. Our customers do not support additional investment to reduce this number further, nor to reduce the number of interruptions to supply. However, we need to maintain current levels of performance and will work to ensure low pressure does not occur through growth in demand across our region. We will address the need to reduce the number of customers potentially affected by a burst water main. This requires additional isolation valves to be provided across our distribution system and we plan to address this.

The number of properties at risk of internal flooding in our region have followed a declining trend since 2001. Our proposed programme of work for 2005-2010 will reduce the number of properties at risk of internal flooding by 60%. We have identified schemes using our prioritisation system and taking account of the frequency and severity of flooding and the cost of resolution.

The Environment Agency Southern region, where we operate, was found to be 100% compliant with European Union mandatory standards for bathing water quality. However, our compliance with wastewater discharge consents has been challenging.

We invested significantly more than determined by Ofwat in the last five-year review. Obtaining a satisfactory standard has proven difficult. We require increased asset maintenance funding for the next five-year period to ensure satisfactory performance into the future.

Our key quality and service improvements for the coming 2005-2010 period are to:

- reduce flooding risks and impacts through delivery of a significant sewer improvement plan
- reduce leakage and bursts in defined areas by renewing 224km of water mains
- complete our mandatory programme of environmental improvements. In particular, the delayed schemes for the Brighton and Hove area and Margate and Broadstairs will be prioritised. Newly defined improvement schemes for the coming five-year period, delivering 132 improved wastewater treatment works and six improved water works, will also be taken forward
- reduce areas with vulnerable water resources through targeted enhancements
- refurbish 151 wastewater treatment works to reduce the risk of compliance failures and deal with odour where it is a significant issue

KEY OUTPUTS MONITORED BY OFWAT

Service Indicator	1997-1998	2001-2002	2002-2003	2003-2004
Water Pressure: % properties receiving low water pressure	0.08	0.06	0.05	0.05
Supply interruptions (aiming for low score)	0.40	0.67	0.30	0.38
Restrictions on water use	0	0	0	0
Billing contacts (% dealt with in five working days)	95.7	98.4	98.3	99.3
Response to written complaints (% dealt with in 10 days)	99.2	99.8	99.9	100
Bills for metered customers (% with reading)	99.7	99.8	99.7	99.9
Telephone contact (% calls answered in 30 secs)	88.4	91.6	92.6	95.31
Properties flooded due to overloaded sewers (number of incidents)	N/A*	42	40	28
Properties flooded due to other causes (number)	300	233	299	202

*Not Applicable; indicator not then used by OFWAT. 130 properties flooded due to overloaded sewers in 1997-98.