

# Planning for a sustainable future



2004–2005  
Performance Summary

 Southern  
Water

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## Introduction

We provide wastewater treatment and sludge recycling services for nearly two million properties across Kent, Sussex, Hampshire and the Isle of Wight. We also provide drinking water to one million properties within this area.

In this summary report we explain our approach to managing our business and show our performance against targets set in the previous year. We highlight operational and performance issues relating to governance and risk management, corporate social responsibility and environmental performance. The report quantifies our performance over a broad range of social and environmental risks and key issues related to our business, our stakeholders and the environment. A full report of our performance over the last year is available at [www.southernwater.co.uk/sustainability](http://www.southernwater.co.uk/sustainability).

The report summarises our performance over the last year and demonstrates this through a combination of 2004 calendar year and 2004-2005 financial year data. We are required to retain data particular to each performance year by our business regulators as a water supply, wastewater treatment and sludge recycling operator. All information presented is for Southern Water Services Ltd operations only, unless otherwise stated.



Our vision of sustainability reporting incorporates all information fundamental to our business. Our public report is designed to show accountability to our stakeholders through the transparent reporting of our performance in as many contexts of sustainability to which we have efficient access.

The process of producing this report is designed to support and strengthen our company's information handling to guide performance management.

This report is one of the ways through which we publicly account for our performance. Further information and details of all of our reports and key policies can be found at [www.southernwater.co.uk](http://www.southernwater.co.uk).

Our report consists of this paper-based Performance Summary document and nine web-based Technical Performance sections. The full report can be viewed on our website at: [www.southernwater.co.uk/sustainability](http://www.southernwater.co.uk/sustainability)

The report is broken down into the following sections:

<b>Performance Summary</b>	
<b>Wastes</b>	
<b>Water</b>	
<b>Energy and Atmosphere</b>	
<b>Materials and Resources</b>	
<b>Land, Conservation, Access and Recreation</b>	
<b>Community, Education and Skillsharing</b>	
<b>Employees</b>	
<b>Customers</b>	
<b>Economy and Key Performance</b>	
<b>Performance Targets</b>	

### Key:



Available in Performance Summary (paper-based document)



Available on Southern Water website

*We welcome your views on this report and other aspects of our company performance.*

*You can feedback your comments in the following ways:*

*Email: [communications@southernwater.co.uk](mailto:communications@southernwater.co.uk)*

*Phone: 0845 278 0845*

*Write: Sustainability  
Communications  
Southern Water  
Southern House  
Yeoman Road  
Worthing  
BN13 3NX*

# Chairman's Statement

I am pleased to present *Planning for a Sustainable Future*, our fourth annual corporate sustainability report. A major focus for us over the last year has been to finalise our business plan for 2005-2010 and ensure a smooth transition to this period.

2005-2010 will be dominated by a huge programme of investment in environmental and service improvements totalling £1,563 million. A total sum equivalent to over £900 for every household in the region. We will manage the delivery of this programme against a comprehensive set of performance indicators. These include long-term efficiency considerations and sustainable development principles throughout design and delivery briefs.

Our programme of work will further improve the quality of our drinking water, rivers and bathing water, and will deliver the environmental improvements required by our regulators. It will ensure that we give a reliable service to our customers into the future across our region. Our programme will also address specific customer concerns, including flooding from sewers and odour from wastewater treatment works. We will also seek to continue to maximise the efficiency of our operating costs.

We recognise that we operate in a region of major housing growth. The South East already has significant environmental and social pressures and we also expect tightening environmental controls throughout our five-year investment programme. We are ready for these challenges.

In keeping with our Sustainable Development policy, we have developed five-year environmental and social performance targets linked to the expected outcomes of our capital programme. These include targets relating to efficiency, expansion of our renewable energy programme, process optimisation and a reduction in pollution incidents.

Delivering our service to customers and safeguarding the environment in the long-term remain our major priorities. As part of this we continue to take a partnership approach with our customers and local communities so we can all be efficient in the way we use water and all help protect the environment in the recycling of wastewater.

This year we published a Corporate Social Responsibility Policy. Sitting alongside our Environment policy and connecting to our Sustainable Development policy, this formalises our approach to meeting the commitments we have to our business, our employees, our regulators, the environment, our customers, local communities and to broader society.

Key to this is engagement with our employees and we continue to consult and involve them fully in our business activities. This, in turn, helps us support our staff as the business moves forward and changes take place.

Finally, I would thank our employees for their work. In a challenging year, I fully appreciate the dedication and diligence they have shown.



*Bob Thian*  
Chairman



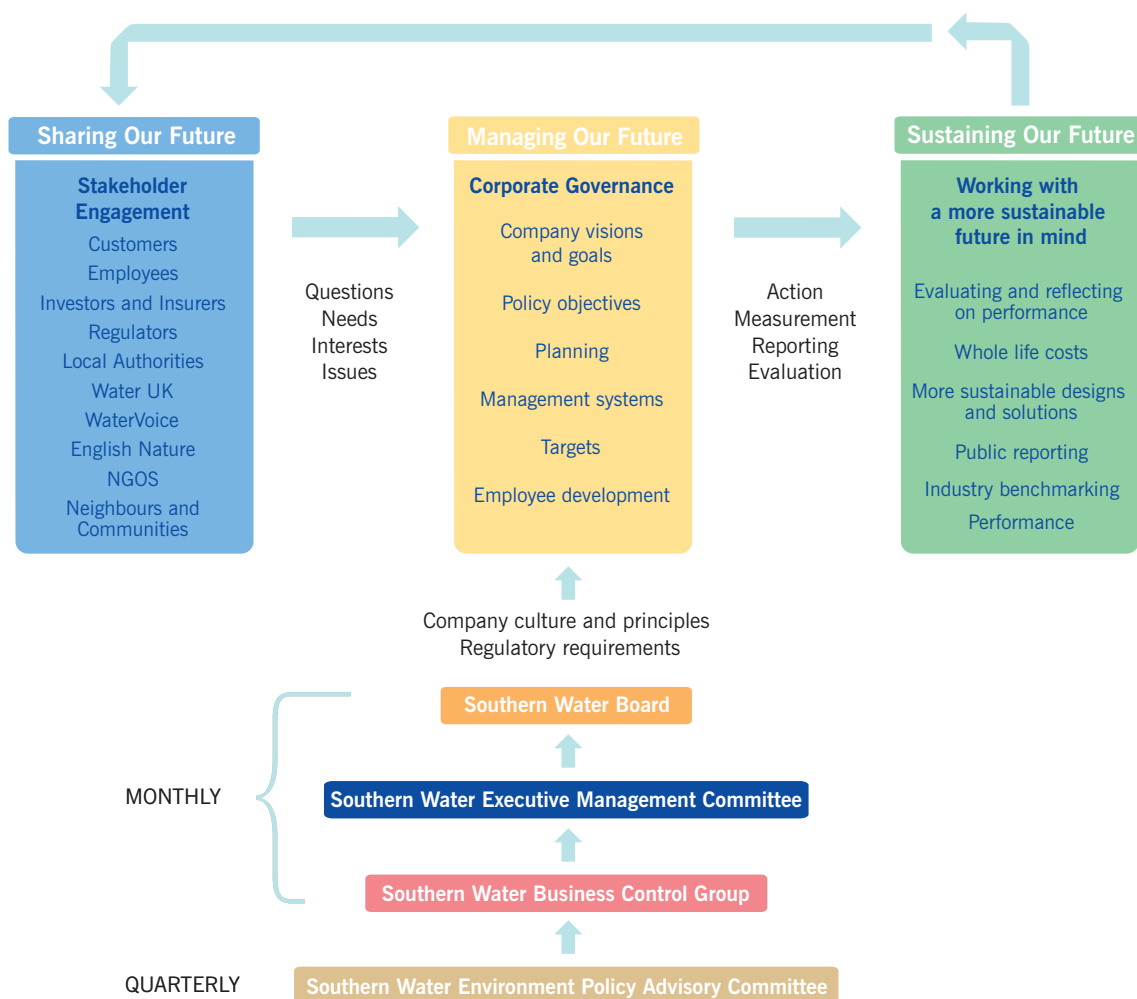
*Our Corporate Social Responsibility policy is shown in full on page 5.*

# Corporate Governance

“The companies and authorities that make up the UK water industry provide reliable and safe water supplies and sewerage services to UK citizens. The task is underpinned by strong regulation that covers all aspects of the industry’s core business, drinking water quality, wastewater quality and price control. The industry also has much wider responsibilities: to employees, shareholders, suppliers and contractors, neighbours, the community in general, and the environment.”

Water UK, Towards Sustainability 2003-2004

Our core systems involved in governing company operations are shown below:



# Corporate Social Responsibility Policy



*Our award-winning Drips in Schools play has been delivering water efficiency messages to primary school children since 1998*

## Our Principles

We recognise that we must integrate our business values and operations to meet the expectations of our stakeholders. They include customers, employees, regulators, investors, suppliers, the community and the environment. We recognise that our social, economic and environmental responsibilities to these stakeholders are integral to our business. We aim to demonstrate these responsibilities through our actions and within our corporate policies.

We take seriously all feedback that we receive from our stakeholders and, where possible, maintain open dialogue to ensure that we fulfil the requirements outlined within this policy.

We shall be open and honest in communicating our strategies, targets, performance and governance to our stakeholders in our continual commitment to sustainable development.

The Managing Director is responsible for the implementation of this policy and will make the necessary resources available in order to realise our corporate responsibilities. The responsibility for our performance to this policy rests with all employees throughout the company.

## Our Partnership Focus

- We shall strive to improve our environmental performance through implementation of our Sustainable Development and Environmental policies.
- We shall ensure a high level of business performance while minimising and effectively managing risk.
- Through effective partnerships we shall continue our initiatives on water efficiency, safe recreational use of water, education and environmental improvement within the community.
- We shall encourage dialogue with local communities for mutual benefit.
- We will register and resolve customer complaints in accordance with our published standards of service.
- We shall support and encourage our employees to help local community organisations and activities in our region.
- We shall operate an equal opportunities policy for all present and potential future employees.
- We will offer our employees clear and fair terms of employment and provide resources to enable their continual development.
- We shall maintain a clear and fair employee remuneration policy and shall maintain forums for employee consultation and business involvement.
- We shall provide safeguards to ensure that all employees are treated with respect and without sexual, physical or mental harassment.
- We shall provide, and strive to maintain, a clean and healthy working environment.
- We shall uphold the values of honesty, partnership and fairness in our relationships with stakeholders.
- Our contracts will clearly set out the agreed terms, conditions and the basis of our relationship.
- We will operate in a way that safeguards against unfair business practices.
- We shall encourage suppliers and contractors to adopt responsible business policies and practices for mutual benefit.

 To view Southern Water policies and reports visit [www.southernwater.co.uk](http://www.southernwater.co.uk)

# Sharing Our Future

We work alongside other water companies in our efforts to move towards more sustainable operations and businesses. Our performance against water industry sustainability indicators is benchmarked on page 23 of this report.

“The industry works together through Water UK on policy and strategy issues of common interest. Water UK and its members participate fully in international water organisations.”

Water UK, Towards Sustainability 2003-2004

## Key Performance

- **Our Business Involvement Groups continued to meet over 2004-2005**
- **We continued to meet with WaterVoice Southern quarterly over 2004-2005 to discuss customer issues and feedback**
- **Our programme of partnering with suppliers to improve environmental performance continued**
- **We commissioned independent research to assess customer perceptions on our services**
- **We were nominated for a 2005 Considerate Construction Scheme Award for our Lewes (East Sussex) Sewerage Improvement Scheme**

*Our Business Involvement Groups involve employee and management representatives who meet to discuss company and employee issues*

*WaterVoice is an organisation representing customers in England and Wales. (Known as the Consumer Council for Water from 1 October 2005)*

*The Office of Water Services (Ofwat) is the key regulator for the water industry (Known as the Water Services Regulation Authority from 1 April 2006)*

*We produce an annual magazine for our customers, called Splash with facts and figures about our business, our work in the community and water-saving ideas*

## Stakeholder Engagement

Our stakeholder engagement processes are mostly based on directed one or two-way dialogue, rather than full open dialogue. Our stakeholders are representative groups of customers, regulators, investors and others. Our engagement processes cover a diverse range of issues, and are managed from many different locations and operational perspectives across our business. We represent our engagement with our stakeholders in the table opposite.

Central engagement processes that are key to informing our business are mainly managed through our Corporate Strategy department. These focus on

discussions with our regulators and their various steering groups and forums. Also key to our business is customer feedback managed through:

- Our Customer Service Centre
- A variety of questionnaires
- Market research
- Liaison with WaterVoice

## Managing Future Demand

Managing feedback to our business from the variety of people and organisations with whom we engage (our stakeholders) is a complex operation.

## Case Study

### The Lewes Sewerage Improvement Scheme

We completed a sewerage improvement scheme in Lewes, East Sussex in 2005. A 1,150 metre long sewer tunnel was constructed up to 14 metres beneath Lewes town centre. The construction works were concentrated in the streets of the town, close to residential and commercial properties, and passing through a Local Nature Reserve.


We worked with our scheme partners to consult and involve a wide range of stakeholders throughout scheme developments:

- We worked with the local authority for Lewes to agree routes for heavy goods vehicles through the narrow streets prior to works
- We made visits to local schools to explain the scheme and warn pupils, parents and teachers of the dangers associated with construction sites

- We involved schoolchildren in the scheme to maintain awareness of issues by running an art competition. The winning entries were converted into small murals and fixed to our site hoardings. We also ran a naming competition for a tunnel-boring machine
- We staged an exhibition at Lewes Town Hall early on in the scheme to outline the full extent of the works and provide an opportunity for the public to ask questions of us directly. We also set-up a scheme forum with representatives of residents groups, local councillors, environmental health and planning officers. The forum met every six weeks at the Town Hall to discuss the scheme
- We gave presentations to resident's associations and other local groups and provided short site tours

- We prepared a remedial plan with the Junior Management Board for the Local Nature Reserve and laid footpaths, constructed a small planting area, installed timber seats and landscaped some areas
- We managed a community query/complaint logging and response system. We routinely sent issues raised to the East Sussex County Council planner responsible for the scheme. We also maintained close contact with the planner throughout the scheme, arranging regular site visits

Both Lewes District Council and Lewes Town Council were impressed with the way the project was carried out.

 See the Wastes and Economy and Key Performance sections of this report at [www.southernwater.co.uk/sustainability](http://www.southernwater.co.uk/sustainability)

Southern Water's Dialogue Processes:		Investment, pricing and insurance	Legislation and quality standards	Risk and management control	Emergency planning	Works/site development	Social impacts e.g. sewer flooding	Population growth	Customer services	Water quality and resource management	Wastewater treatment, biosolids and waste	Research and development	Emissions to atmosphere and climate change	Community, education and skills sharing	Conservation and heritage	Employee issues
<b>Stakeholder groups:</b>																
<b>Government and regulators:</b>																
	Regulators	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	County and local authorities		✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	
	Government agencies		✓	✓	✓	✓				✓	✓				✓	
<b>Investors and insurers:</b>		✓		✓												
<b>Industry groups:</b>																
	UK water industry	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	
	Research groups			✓		✓			✓	✓	✓	✓	✓			
<b>Employees:</b>																
	Individual employees			✓						✓	✓	✓			✓	✓
	Employee groups			✓						✓	✓			✓		✓
<b>Customers:</b>																
	Customers	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	
	WaterVoice								✓	✓						
<b>Community:</b>																
	Community groups			✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	
	Members of local community		✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	
<b>Non-government organisations:</b>				✓		✓	✓			✓	✓			✓	✓	✓
<b>Suppliers:</b>		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓

This forms part of the daily roles of many employees across different functions of our business. Every year in our annual Sustainability Report we highlight examples.

New housing developments bring additional flows of wastewater to our treatment works and can create or increase the risk of sewer flooding. These new properties also increase demand for water supply, and, in turn, increase the risk of inadequate water pressure and loss of supply. Our existing infrastructure is utilised to full capacity. Major resource developments are required to maintain current levels of service and meet future demands.

We assessed major new development plans for our region to quantify the impact on our assets. We identified several areas where existing infrastructure is insufficient to meet future demands. We presented this information to Ofwat in our Final Business Plan in 2004. Consequently, we will be investing £55 million to address water resources and housing growth and a further £57 million to address sewerage new development and growth over 2005-2010.

The Government identified Ashford as an area with potential to grow significantly. Over 2004-2005 we continued to partner with organisations working to plan delivery of future growth in Ashford, Kent.

## Sewer Flooding

Investment allocated to reduce sewer flooding over 2005-2010 forms a principal part of the £86 million Ofwat allowed us to improve service provision. This is a substantial increase from the £1 million we were allocated in the 1999 price determination. Our proposed programme of work includes 125 individual schemes that will remove 259 properties from our register of properties that are at frequent risk of internal flooding. The schemes will also prevent a further 400 external areas from flooding, the majority of which are gardens. Schemes have been identified through a prioritisation system approved by our WaterVoice Southern customer committee. This system considers the frequency, severity, persistency and cost resolution of different schemes. Customer consultation formed a key part in the research that supported our business planning case submitted to Ofwat.

## Wastewater Treatment

We continued to work on the developments for the wastewater treatment works we are required to deliver under European Law, specifically the Urban Waste Water Treatment Directive.

We continued to consult on our scheme for the Brighton and Hove area, and we held a public exhibition in Peacehaven attended by over 650 visitors in 2004. We explained the constraints we faced and why Peacehaven was selected as the proposed location. The process provided useful feedback highlighting particular concerns and enabling these to be considered in the design process. Exhibition attendees completed over 150 questionnaires. Press coverage generated further letters from the public, local interest groups and the local Member of Parliament.

We also held exhibitions in the Thanet, New Romney and Greatstone areas in Kent to allow local residents, organisations and interested parties to view our Margate and Broadstairs, and New Romney and Greatstone scheme proposals.

## Key Performance

- We delivered 74 Water Wise (water efficiency) community talks over 2004-2005
- We delivered 52 school talks (water efficiency) over 2004-2005
- We helped 449,750 children via Learn to Swim in our region over the last 13 years, 39,200 over the last year
- We trained 69 Pond Wardens in our region in 2004
- We promoted water efficiency at 24 public events in 2004-2005
- We promoted water efficient gardening at 14 of the 51 B&Q stores participating in this water company initiative

## Working in the Community

We ran a broad range of community partnering and educational initiatives over 2004-2005. Many related to core operational issues such as water resources and water efficiency. We continued to raise awareness of safety needs associated with the recreational use of water through our Learn to Swim scheme.

Our work with our community also extended to:

- Fundraising for local charities
- Supporting Young Enterprise in our region
- Producing a variety of educational materials, events and aids
- Supporting community habitats through training pond wardens across our region
- Offering environmental grants to schools in our region
- Supporting Prince's Trust programmes in our region

In 2004-2005 we promoted water efficiency at a number of community events, constructed water efficient gardens and promoted water efficient gardening through partnership with others.

We maintained our sponsorship of the South and South East in Bloom awards, stressing the importance of water efficient gardening.

We continued to partner with community organisations to promote water efficiency to our business customers and to housing groups. We trained several of our employees to conduct water audits.



Newly qualified trained pond wardens

We continued to work with schools in our water resource-stretched areas. We continued to deliver our award winning Drips in School water efficiency play. We also continued to give water efficiency talks to school audiences.

Ponds are one of the most important habitats for wildlife in the British landscape and thousands are lost each year. Our Pond Warden scheme continued over 2004-2005 with courses at five centres across our region.

*We encourage our employees to volunteer for up to two working days each year at a charity or community project close to where they live or work*

*Our award-winning Drips in Schools play has been delivering water efficiency messages to primary school children since 1998 and features the Drip Family characters*

*Our Pond Warden scheme trains individuals to restore and develop ponds in their communities*

*Young Enterprise aims to inspire and equip young people to learn and succeed through enterprise*

## Case Study

### Working Together to Save Water

*Our partnership work with stakeholders is particularly evident through our water efficiency programme. Customer participation and feedback is crucial to the success of our programme.*

*This year alongside our other water efficiency initiatives, we worked towards our region's biggest ever water efficient gardening promotion. Partnering with Charlie Dimmock, the Royal Horticultural Society, B&Q, the Environment Agency and eight other water companies, we delivered water efficient gardening advice to the public for the second year running.*

*We spoke to customers at 14 of the 51 B&Q stores involved in the programme. We handed out leaflets detailing how best to care for plants without wasting water. Tips included how to feed soil, use garden mulches and care for a lawn in dry weather. We also advised on the best watering times and techniques.*



**For more information about water efficiency visit [www.southernwater.co.uk](http://www.southernwater.co.uk)**

# Managing Our Future

“The UK water industry is made up of 12 water and wastewater service providers and 13 water suppliers. It collects, treats and then supplies over 16 billion litres of high quality water per day to domestic and commercial customer and then collects and treats over 10 billion litres of the resulting wastewaters, returning them safely to the environment.

There are many geographical, cultural, geological, climatic and other variations that affect the industry’s nation-wide operations. Regional and structural differences can be very significant. Every year around £3 billion is invested to improve water supply and sewerage services. The industry employs around 35,000 people directly and many thousands more through the contractors and suppliers it uses.”

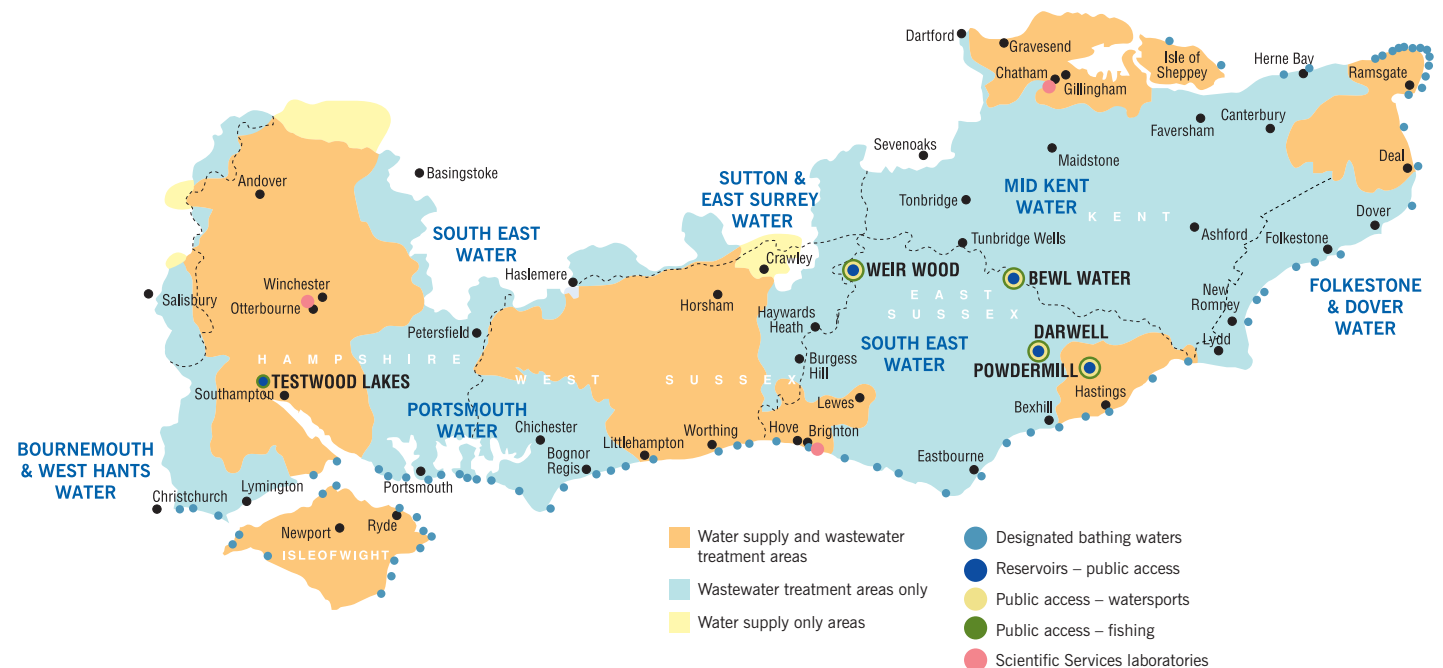
Water UK, Towards Sustainability 2003-2004

## Key Performance

- Regulatory Capital Value for 2004-2005 was £2,389 million
- Interest Cover for 2004-2005 was 1.8

Our area of operations map, below, illustrates the regions in which we provide water supply and wastewater treatment services. In the areas within our overall region where we do not supply drinking water, we work alongside other suppliers to ensure

appropriate management of water resources across the South East. Joint water resource planning meetings consider long-term supply-demand balances and shared resources for the region in light of future population growth and potential erratic weather conditions.



We produce a business plan to the Office of Water Services (Ofwat) every five years. This defines what capital work we need to undertake over a five-year period, the running costs for the company and customer revenue. Our business plan for 2005-2010 was agreed over the last year

As part of our water supply and wastewater treatment services we:

- Operate from 11 river abstraction points, 95 borehole abstraction points and four reservoirs, taking two thirds of water supplied to customers from groundwater sources
- Operate 94 water treatment works, 3.8% of the UK total
- Have over 13,400 kilometres of water mains connecting our region
- Have over 21,200 kilometres of sewers across our region
- Operate 366 wastewater treatment works, 4% of the UK total
- Have 1,595 intermittent discharges from our wastewater system

## Key Performance

- We were awarded our first gold medal from the Royal Society for the Prevention of Accidents
- We gained a 32% reduction in employer's liability insurance premium due, in part, to our health and safety strategy
- We reviewed our Environmental Management System this year
- We established five-year performance targets for sustainability in line with our 2005-2010 programme of delivery
- We introduced environmental management training courses through our Open Learning facility. Further training specific to environmental auditing will be available later this year
- We added our sustainable development and environmental policies to our induction programme for employees
- We continued to conduct environmental audits of our suppliers and our operational sites

## Informing Control and Managing Risk

Our Risk and Control Framework is focussed around our Business Control Group's monthly review of key business risks and their relative priorities, together with a full quarterly review with all risk owners.

Our internal audit programme, generated annually for the year ahead, supports our Risk and Control Framework. Our Audit Committee comprises a minimum of three non-executive directors and follows the principles of company law requirements for UK listed companies of our size.

We maintain formal environmental, quality and health and safety management systems within our business. Key targets for sustainability are detailed against progress later in this report.

## Risk and Control Framework Process



2004-2005 Target	Progress Against Target	2005-2006 Target
<b>Management Systems</b>		
Maintain bi-annual and annual audits of water supply and laboratory operations.	Target met.	Maintain target.
Annual review of Environmental Management System (EMS).	Target met.	Maintain target.
Review EMS target progress quarterly.	Full target progress updates were formally reported to senior management twice over 2004-2005 financial year.	Maintain target.
Continue the annual review and planning of our Health and Safety management system.	Target met.	Maintain target.
		Maintain twice-yearly reviews of prioritisation component of our Asset Planning System.

KEY: Target met In progress Target not met Not applicable



*Southern Water qualifies for the ROSPA Gold Award for Health and Safety*

We continued to review and develop our Health and Safety Management System over the year. We issued three formal updates over 2004-2005, including the annual review of our company policy for health and safety. We subjected the system to external audit.

Our participation in the European Week of Health and Safety was once again recognised by the Health and Safety Commission. We also supported Water UK and the Health and Safety Executive (HSE) to produce industry standards for working in confined spaces and basic safety awareness training for the utilities sector.

We reviewed our environmental management system in detail to define future direction in line with our

2005-2010 programme of work. We will be implementing review recommendations throughout 2005-2006. Key to these changes is the inclusion of five-year targets within our environmental plan for 2005-2010. We will survey employee attitudes to environmental management over the coming year.

We maintained quality management systems over the year, with feedback via internal and external audits. Responsibilities for maintaining our quality management system for project delivery operations moved to the joint venture company appointed to deliver much of our capital programme over 2005-2010.

*Our water supply operations continued to be certified to the International BS EN ISO 9001:2000 quality standard*

*Our scientific services continued to be certified to the ISO quality standard 17025*

*Our project delivery services, covering the design, procurement and project management of wastewater and potable water projects, continued to be certified to the ISO 9001:2000 quality standard*

## Case Study

### Investing in Our Future

*Our 2005-2010 business plan agreed by Ofwat defines a much larger programme of capital investment than we have delivered previously. The programme is equivalent to over £900 of new investment per household in our region. We reviewed delivery mechanisms over the last year to define a new model of capital delivery. A joint venture between leading companies in the industry established a new company to deliver much of the programme.*

*Our delivery strategy priority objectives include:*

- *To implement a programme of asset maintenance improvements aimed at ensuring the delivery of a stable, reliable and sustainable service to customers and meet regulators' expectations*
- *To target water infrastructure improvements to hotspots of problems with leakage, pressure, bursts, taste and odour*
- *To improve sewerage infrastructure performance to reduce flooding and blockage risks*
- *To deliver the required environmental improvement programme and ensure a high quality secure supply of drinking water*

- *To start to address the strategic water and wastewater infrastructure needs required to facilitate the major housing growth in the South East driven by Government policy*
- *To maximise future efficiency of operating costs and capital scheme delivery*

*Across the region in 2005-2010 we will:*

- *Renew 145km of water mains*
- *Renovate or renew 169km of sewers*
- *Refurbish 97 wastewater treatment works*
- *Refurbish 35 water supply works*
- *Deliver 125 flood alleviation schemes*
- *Deliver eight major growth area schemes*
- *Improve 69 wastewater treatment works to deliver environmental improvements*
- *Improve six water supply works to deliver quality improvements*



**See the Economy and Key Performance section of this report at [www.southernwater.co.uk/sustainability](http://www.southernwater.co.uk/sustainability)**

## Regulation, Pollution Incidents and Risk Management

Our record of self-reporting pollution incidents to the Environment Agency (EA) remains one of the highest in the industry. Throughout 2004, we worked with the EA to reduce the total number of pollution incidents by 25% (the industry total reduced by 29% over the same period). This year, the EA ranked our 2004 performance poorly for serious pollution incidents caused by water companies in its Spotlight report. We accept that we faced an unacceptable number of prosecutions and we continue to work to improve our performance in this critical area.

Prevention of pollution incidents relating to sewer collapses requires capital maintenance.

“Many of the sewerage systems around the UK are old and dilapidated and would be enormously expensive to upgrade.”

*Corporate Environmental Crime,  
House of Commons Environmental Audit Committee,  
Second Report of Session 2004-2005,  
January 2005*

However, the Audit Committee stated that this upgrade was necessary in order to deliver the desired level of performance and fully address the issue of pollution incidents from such old systems.

We analysed asset condition against sewer material type to identify those pipe materials at high risk of failure. We developed a prioritised programme of works to replace these materials. We shall phase the programme over several investment periods. We are also enhancing our telemetry protection of our works and pumping stations with capital expenditure focused on the reduction in number and severity of pollution incidents.

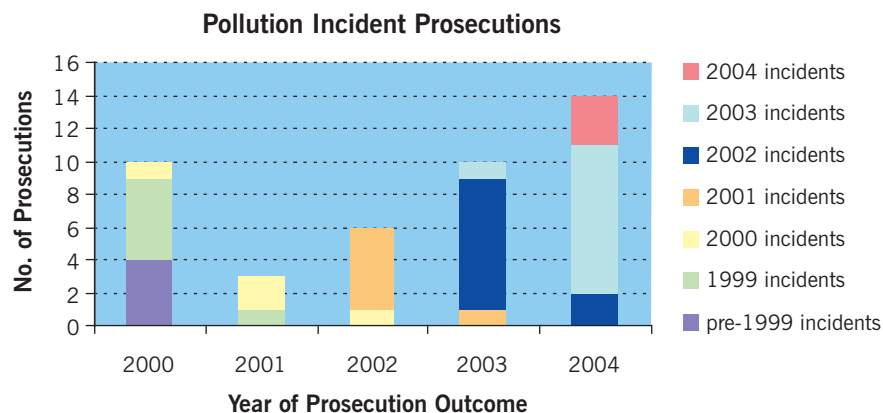
### Case Study

## Working to Reduce Incidents of Pollution

In 2003, we experienced a significant increase in the number of pollution incidents and prosecutions compared with the previous two years. In 2004, our prosecution rate continued to rise. We subsequently implemented a strategy for the reduction of pollution incidents arising from the failure of our wastewater assets. Our strategy is cross-functional, including sewers, pumping stations and wastewater treatment works, and comprises three main strands:

- Review of operational practice
- Investigation of historical pollution clusters
- Identification and maintenance of high risk assets

Our review of operational practice includes appointment of several additional wastewater process operators and maintenance assistants across our region. Through these resources we will implement



Ofwat determines what future obligations should be funded by water and wastewater customer charges and considers a number of factors in making its final determination. We were awarded an increase in expenditure for capital maintenance for 2005-2010 compared with funds we were allocated in 2000-2005. A lack of allowed capital maintenance investment over the 2000-2005 period contributed to a decline in the performance of our wastewater treatment works.

We continued to develop the Asset Planning System that we case-studied in last year's report. Over 2004-2005 we thoroughly reviewed our system and used the experience we gained through its application in business planning to improve its prioritisation mechanism. We now also consider the severity of impact of growth through testing the benefits of different schemes on the performance of our infrastructure. Using the system in this way helps us to prioritise delivery of our schemes to locations where growth will have the most significant impact.

*Our industry is heavily regulated. Many regulations that directly affect the water and wastewater industry are based on European Union Directives – for example, drinking water, urban wastewater treatment, sewage sludge, groundwater protection, and health and safety at work. Others, for example economic regulation, are specific to England and Wales:*

- *The Office of Water Services (Ofwat) has the duty to protect our customers' interests whilst ensuring that we carry out our functions properly and have access to sufficient finance to do so. Ofwat carry out a periodic review of prices every five years that agrees investment and sets limits on customers' water and sewerage bills*
- *The Drinking Water Inspectorate (DWI) ensures that the quality of our tap water meets statutory standards*
- *Our industry is the major client of the agencies responsible for environment protection. In our case, the Environment Agency regulates water abstractions and discharges to water, air and land. English Nature and English Heritage have responsibilities for the natural and built environment*

enhancements to our maintenance and checking processes, like testing our telemetry equipment to ensure its consistent functioning.

Sewer blockages are a major cause of pollution incidents and we have an ongoing programme of blockage reduction investigations. We identified and prioritised pollution cluster zones for investigation over 2004-2005 and established a database to monitor actions in these zones. The outcomes will comprise a large number of initiatives, each with a relatively minor effect, but with significant cumulative impact. We are also implementing a telemetry enhancement capital scheme over 2005-2010. This will provide additional early warning indications of potential pollution incidents and further assist us to protect our environment.

 See the Wastes section of this report at [www.southernwater.co.uk/Sustainability](http://www.southernwater.co.uk/Sustainability)

## Mitigation

Our Pollution Standby Team respond to pollution incidents, take water and biological samples from any affected watercourses and produce a post incident report to highlight issues to address or for further investigation. We continued to monitor our performance in this area closely. We undertake transparent public reporting of this information.

The Environmental Audit Committee report on Corporate Environmental Crime was published in early 2005. The report states that “with just one exception, all of the companies on the Agency’s list of top ten highest fines in 2003 were waste and water companies”. The report also confirms that the majority of incidents appear to have been committed by the unregulated sector.

The nature of our business means that although we have no control over what goes into our systems when it comes to waste, we have an obligation to treat what does enter our systems, and to do so in a manner that protects the environment. Polluters can therefore influence our sewerage and wastewater treatment performance, as well as the frequency of pollution incidents. We are introducing catchment inspector

roles into our operations. The inspectors will maintain an active presence across our region, liaising with trade customers and undertaking proactive and reactive sampling of discharges to our systems.

Our customers, domestic and commercial alike, can work with us and other community partners to protect the environment by disposing of wastes and chemicals safely and appropriately. We promote a Bag it and Bin it campaign to this end. We also aim to explore avenues of community partnering to increase awareness of these issues.

## Managing Opportunity

We continued to identify new ways of working and opportunities for improved business performance. We review our activities and benchmark our performance against other companies. We encourage new ideas throughout our business to ensure we continue to deliver effective customer service while making our processes more efficient.

*At five-year intervals, Ofwat consult with other regulators, the Environment Agency and the Drinking Water Inspectorate, to determine with the Secretary of State for the Environment, Food and Rural Affairs the future quality obligations that should be funded by water and sewerage customer charges*

*Our current five-year investment period is April 2005 to March 2010*

*Ofwat has now made its final determination on levels of investment and resulting customer charges. More details are available from our Monitoring Plan at [www.southernwater.co.uk](http://www.southernwater.co.uk)*

*Telemetry is the automatic measurement and transmission of data by wire, radio or other means from remote sources to receiving stations for recording and analysis*

2004 Enforcements	Prosecution date	Fine (£)	Details
<b>Prosecutions</b>	25/02/04	8,000	Watercourse pollution arose from unknown persons believed to have made unauthorised access to a wastewater treatment works pressing an emergency stop button
	29/03/04	6,000	Watercourse pollution occurred when jetting a blockage at a wastewater treatment works
	02/04/04	10,000	Pollution of watercourse caused by pumping equipment failure
	26/04/04	15,000	Watercourse pollution arose through a spill from an underground oil pipe
	16/06/04	9,000	Watercourse pollution occurred when sewage overflowed from a wastewater treatment works storm tank due to a blockage caused by a build up of debris during storms
	02/07/04	3,000	Watercourse pollution caused by a partial blockage at a wastewater treatment works
	03/08/04	7,500	Pollution of a watercourse occurred following a sewer blockage
	17/08/04	5,000	Pollution of a watercourse occurred following a rising main failure
	27/08/04	4,000	Watercourse pollution following an electrical power disruption that disabled a pump control system
	03/09/04	7,500	Watercourse pollution followed a syphon sewer burst caused through corrosion
	25/10/04	3,500	Pollution of a watercourse following three exceedences of discharge consent conditions
	25/10/04	4,000	Pollution of a watercourse through exceeding a discharge consent
	25/10/04	500	Failure to control waste through treated sewage effluent escaping onto farmland
	13/12/04	7,500	Pollution of a watercourse through an oil spill from a generator tank following failure of a faulty seal
	<b>Formal Cautions</b>	29/06/04	
15/07/04			Pollution of a watercourse due to a sewer collapse
17/08/04			Pollution of a watercourse due to sewer blockages
17/08/04			Pollution of a watercourse due to inadequate sewer capacity during heavy rain
17/08/04			Pollution of a watercourse due to pump control system failure
11/11/04			Pollution of a watercourse due to a blocked sewer
06/12/04			Pollution of a watercourse caused by wastewater discharging from a sewer
06/12/04			Pollution of a watercourse caused by discharge of wastewater from an inspection chamber

# Sustaining Our Future

“By supplying clean water and by collecting and treating sewage, the industry is helping to meet public health needs today and, through its infrastructure, for future generations. These activities also support a huge range of other businesses and employ a large direct and indirect workforce. Through its engagement with other stakeholders, the industry helps sustain and enhance local communities. The water industry remains at the forefront of sustainability.”

Water UK, Towards Sustainability 2003-2004

## Key Performance

- We established five-year social and environmental targets for our business
- We developed our value management guidelines for capital delivery from a sustainability perspective over 2004-2005
- During 2000-2005 we delivered high quality water and wastewater services. Customers benefitted from price reductions as average bills fell from £278 to £247
- The Ofwat determination of our total investment for 2005-2010 is £1,563 million
- We lead the industry in our record of reducing leakage from the water distribution system
- We placed no customer restrictions on water use in 2004-2005
- We reduced flooding incidents due to overloaded sewers to 15
- We continued to benchmark our performance against UK industry sustainability indicators

*We need a variety of assets to meet our service duties. Assets are the infrastructure and plant needed to run our business operations. They deteriorate with age and use and can require maintenance, repair, refurbishment or replacement*

*The Office of Water Services (Ofwat) is the key regulator for the water industry (Known as the Water Services Regulation Authority from 1 April 2006)*

*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 taken into account in its setting of price limits for each company*

## Case Study

### Understanding Whole Life Costs

*Whole life costing is a technique that quantifies financial values for assets from their inception throughout their life to decommissioning and disposal.*

*We worked on an approach to whole life costing over the last year. We are seeking a stronger understanding of buying and owning our business assets.*

*The majority of the life of most assets is spent in operation and this is where the asset creates the value to our business. This phase is also where the asset absorbs many costs through power consumption and maintenance needs.*

*The water industry recognises the importance of whole life costing and has established a working group to develop a whole life costing model for the industry. We have an active role in this group and our work will provide essential information to it.*

*We are currently developing a model for whole life costing based on costs relating to pumps. Findings from this development work will be used to improve links between different operational and data systems in our business. They will also contribute to the development of our whole life costing strategy.*



Maintenance of equipment



*See the Materials and Resources section of this report at [www.southernwater.co.uk/sustainability](http://www.southernwater.co.uk/sustainability)*

*“Hotter and drier summers are likely to result in a seasonal reduction in available water resources and an increased risk of drought”*

*The Independent on Sunday, 6th February 2005*

## Key Performance

- **We continued to make progress with our wastewater treatment schemes for the Brighton and Hove area and Margate and Broadstairs, as necessary under the European Union Urban Waste Water Treatment Directive**

*Our 2005-2010 investment programme incorporates appropriate funding to cover population growth*

## Housing Growth

The South East region of England covers more than 19,000km<sup>2</sup> with an estimated population of 8.1 million. This is 13.5% of the UK population and makes-up some three million households. Our region is one of the driest areas in Britain. Major new development and growth is planned throughout the region and the implementation of Government housing policy is forecast to increase the current rate of house building by some 50 per cent.

As a consequence, we look to the future with increased energy consumption and other treatment costs, additional infrastructure needs, increased water demand and consequent water resource planning needs. With this in mind, we defined a five-year programme of sustainability targets. We devised these targets in consideration of our corporate priorities

and risks, our 2005-2010 business plan and our company policy commitments to sustainable development, corporate social responsibility and the environment.

The variety of issues affecting availability of water resources in the South East are well documented throughout this report. Our approach to ensuring continuity of water supply to our customers combines managing water resources to maintain availability of supply, as much as it is within our power to do, and a variety of customer demand management initiatives, these include metering in areas of deficit supply. We are seeking to improve the quality of our wastewater treatment services to the benefit of our environment, and to work with our customer community to improve our performance in this area further. Our drive to reduce internal sewer flooding in customer

properties is also evident in these five-year targets, as is our intention to make more use of renewable energy sources.

Our future water efficiency strategies will focus on building on existing work to strengthen the message of not wasting water and to use it wisely. Our campaigning will also focus on water efficient building designs and retrofitting of dual flush devices in toilets. We are members of ecoSE, a strategic partnership of private and public organisations in the South East, working towards the common aim of ensuring housing development takes place in a planned, sustainable manner. To this end, ecoSE promotes environmentally responsible design standards for homes planned across the region.

## Wastewater Treatment

Over 2004-2005 we submitted planning applications for the construction of three wastewater treatment works:

- Margate and Broadstairs
- Brighton and Hove area
- New Romney and Greatstone-on-Sea

As part of the Environmental Impact Assessments for these schemes we carried out environmental surveys and proposed mitigation to protect valuable habitats and species.

Our approach to the wastewater treatment scheme for the Brighton and Hove area is to implement the Best Practicable Environmental Option in compliance with the Urban Waste Water Treatment Directive. The Margate and Broadstairs Wastewater Treatment Scheme is part of our continuing investment programme of major infrastructure improvements along the South Coast. When operational, this works will result in significant environmental improvements to the marine environment, also benefiting residents, visitors and the local economy.

Five-year Targets	
<b>Water Resources</b>	Increase water available for use to 721.12 megalitres (MI) per day by year 2009-2010
<b>Water Efficiency</b>	Install 62,968 meters in households of areas in deficit supply by year 2009-2010
	Increase percentage of households metered in our region to 42.6% by year 2009-2010
	Maintain level of total leakage at 92.00MI/day through 2005-2010
	Achieve 500,000m <sup>3</sup> internal water savings through 2005-2010
<b>Wastewater Quality</b>	98% wastewater treatment works compliant with Water Resources Act (WRA) numeric consents by year 2009-2010
	96.4% wastewater treatment works compliant with Urban Waste Water Treatment Directive (UWWTD) consents by year 2009-2010
	99.9% population equivalent served by WRA sanitary compliant wastewater treatment works by 2009-2010
	100% population equivalent served by wastewater treatment works compliant with UWWTD specifications for parameters measured statistically (known as look-up table) by 2009-2010
	Achieve 97.4% satisfactory intermittent discharges by year 2009-2010
<b>Energy</b>	Meet UK water industry average for percentage of renewable energy used (of total energy used) by year 2009-2010
<b>Community</b>	Remove 259 properties from the internal flooding at risk register by year 2009-2010
	Include wastewater messages into our community programme over 2005-2010
<b>Transport</b>	Research car sharing opportunities and alternatives to travel, for example, telephone-conferencing meetings, over 2005-2010

## Key Performance

- We exported 950 megawatt hours of electricity generated from renewable sources to the grid
- We used 56.7% of biogas generated in our treatment operations as a source of fuel for boilers, producing heat in digesters and dryers, and as a fuel for Combined Heat and Power
- We brought four new Combined Heat and Power installations on-line over the year, bringing our current total to six
- We continued to find ways to expand our renewable energy generation capacity



Our Combined Heat and Power Plant at Goddards Green

## Research and Development

In looking to the future we continued our programme of research and development. Over 2005-2006 we will sponsor a variety of projects, including:

- Evaluation of optimum operating conditions at activated sludge plants (part of our wastewater treatment process)
- Hydro-recovery options - recovering energy from existing site operations
- Odour control operational practice guidance

We continued to research new water efficient products to understand their longer-term cost benefits. We also undertook studies into domestic demand and developed performance indicators for water use in buildings. We continued to research the costs and benefits of water efficiency during 2004-2005 with the following projects:

- The effect of water butts on water consumption and peak demand
- Customer water use annual survey
- Key performance indicators for water use in buildings
- The effectiveness of low flush toilets and dual flush retrofit devices

*Since 1950, global water use has more than tripled*

*The average person in the South East uses 160 litres of water a day, or two baths full of water*

## Case Study

### Using Renewable Energy

Across our region we have wastewater treatment sites of various sizes, in both suburban and rural areas, treating normal wastewater flows ranging between 1.9 to 44,000 cubic metres per day. Instrumentation that monitors and logs the flows at each site enables us to determine how well each site is operating.

A number of our smaller rural, wastewater treatment sites operate without electricity. We installed flow monitoring and logging equipment at some of these sites. This equipment required an electricity supply for operation.

At one site we considered a number of electricity supply options, we reviewed longer-term need and found that no anticipated development on site would require grid-supplied electricity. The option of using a solar-powered photovoltaic (PV) system was then explored. This would provide the power demand for the flow monitoring equipment. This proved to be more cost effective than grid electricity options.

Electricity from a PV system relies on natural light reaching the PV panel. Natural light is at its peak in the summer, but reduces rapidly in the winter. The battery bank sizing and surface area of the PV panel were designed to ensure sufficient power be generated and stored to operate the monitoring equipment year-round.

We mounted the PV panel on the roof of the building on our site. The use of PV cells, charging an array of 12 volt batteries and providing a standard UK electricity supply, means we can monitor and log flow information without consuming additional grid-supplied electricity.

 See the Energy and Atmosphere section of this report at [www.southernwater.co.uk/Sustainability](http://www.southernwater.co.uk/Sustainability)

# Statement of Verification

## Verification Objective

To provide independent and autonomous assurance that statements and data used within the 2005 Southern Water Sustainability Report, Planning for a Sustainable Future, are factually correct and quoted in context.

## Assurance Provision and Scope

Southern Water, in line with best industry practice on corporate governance, has an Audit Committee to which Internal Audit reports, enabling it to act independently of the business providing autonomous assurance to the Board. Acting on this basis Internal Audit has reviewed and challenged:

- Business controls established for the gathering of data and information
- The quality of supporting information collated by the business
- The transposing of data into this report

## Opinion

Having reviewed the complete document Internal Audit has drawn the following opinions:

- Management has established a comprehensive data gathering process that records and indexes all facts and figures used within the report
- The system for recording of data and information collected is robust
- Statements and case study information are supported by assessed evidence
- Quantitative data has been transposed from sources into the body of the report accurately
- Management has promptly resolved issues identified during the verification process

It is therefore the considered opinion of the Audit Committee that the statements contained within this report are a true and accurate representation of the company's performance.



Donald Workman  
*Audit Committee Chairman*

# Water UK Sustainability Indicators

KEY: No Change ► Increase ▲ Decrease ▼

Our industry sector produces aggregate sustainability indicators annually through the Water UK Sustainable Development Network. A selection of these is shown below for the latest reported data, 2003-2004. Alongside we have benchmarked our company results for both 2003-2004 and 2004-2005 reporting years. These indicators should be interpreted in the context of industry confidence levels (not all of those printed are based on 100% data across our industry sector). For further information on this and other aspects of the indicators please go to Water UK's report Towards Sustainability 2003-2004, at [www.water.org.uk](http://www.water.org.uk).

Water UK Sustainability Indicator	UK Progress Towards Sustainability	UK 2003-2004	SW 2003-2004	SW 2004-2005
<b>Governance</b>				
Number of operators with management systems for sustainability:				
Environment	►	20	Yes	Yes
Quality		20	Yes	Yes
Health and Safety		24	Yes	Yes
Convictions (total number)	▲	71	9	15
<b>Environment</b>				
Sludge management: (% reused)	▲	77	96	93
Energy used per million litres water supplied (kWh)	▼	663	781	801
Energy used per million litres wastewater treated (kWh)	▲	645	613*	622*
Renewable energy as percentage of total energy used (%)	▼	6.1	0.91	0.96
Carbon dioxide fixed site emissions (tonnes/head of population served)	►	0.057	0.040	0.039
Carbon dioxide road transport emissions (tonnes/head of population served)	▼	0.0026	0.00126	0.00162
Compliance with abstraction licences:				
(Number of exceedences)	▼	512	6	5
(Total water abstracted in excess of licensed volume, million litres)		3,750	5.6	106
Rivers in Environment Agency classes 'good to fair' % for:				
Chemical water quality	►	95	90	N/A
Biological water quality	►	95**	N/A	N/A
Designated bathing waters. % achieving:				
Mandatory European standards	►	98	100	98.7
Guideline European standards	►	75	77.2	69.6
<b>Society</b>				
Security of supply index score	▲	100 to -24	28	51
Water demand:				
Domestic water demand (litres/person/day)	▼	150.3	162	157
Total water consumed domestic and non-domestic (million litres/day)	►	12,886	497	485
Tests complying with drinking water standards (%)	►	99.825	99.86	99.89
<b>Workplace</b>				
Employee turnover rate (%)	▼	9.7	6.8	7.9
Workforce with access to formal bargaining arrangements (%)	►	98.6	100	100
Working environment – average days lost through sickness (days/person/year)	▼	9.3	9.3	8.9
<b>Infrastructure</b>				
Properties with low pressure supply	▲	23,408	537	502
Performance of supply infrastructure – interruptions to supply:				
number of properties	▲	845,350	24,457	19,716
% of properties	▲	3.69	2.41	1.92
Population served by wastewater treatment works meeting numerical standards (%)	▲	93.7	99.9	99.9
Sewer Flooding:				
Properties at risk of flooding (%)	►	0.047	0.028	0.027
Properties flooded (%)	►	0.016	0.013	0.016
Actual leakage – total volumes lost from supply (million litres/day)	▼	5,023	91.6	91.6








\* These figures include a factor for infiltration, this is largely leakage of groundwater.

\*\* This figure is based on the latest Environment Agency biological quality data for 2000.







N/A = Not available.

# Performance Targets







For further detail see our full performance report at [www.southernwater.co.uk/sustainability](http://www.southernwater.co.uk/sustainability)

CALENDAR YEAR PERFORMANCE TARGETS					
	2002 progress	2003 progress	2004 target	2004 progress	2005 target
WATER	<b>Water Quality</b>				
	Zero treatment works failing. Target reached.	Zero treatment works failing. Target reached.	Zero treatment works failing coliform standard with enforcement action.	Target met. 	Zero treatment works failing coliform standard resulting in enforcement action.
	Zero service reservoirs failing. Target reached.	Zero service reservoirs failing. Target reached.	Zero service reservoirs failing coliform standard with enforcement action.	Target met. 	Zero service reservoirs failing coliform standard resulting in enforcement action.
	99.8%	99.5%	99.7% of customer taps samples with no coliforms.	99.8% Target met. 	Maintain target.
WASTES	<b>Wastewater Quality</b>				
	91%	86%	95% population equivalent served by Water Resources Act compliant works.	99.9% (look up table sanitary substances only). 	Maintain target.
				76.4% (look up table sanitary substances, including Upper Tier sanitary and non sanitary substances). 	
	98%	96.9%	95% population equivalent served by Urban Waste Water Treatment Directive compliant works.	91.7% 	Maintain target.
<b>Bathing Water Quality</b>					
98.7% Defra report 99% for the Southern region and 98% for the UK.	100%	95% Bathing waters compliant with mandatory standard of EU Bathing Waters Directive.	98.7% Defra report 99% for the Southern region and 98% for the UK. 	Maintain target.	

KEY: Target met  In progress  Target not met  Not applicable 










FINANCIAL YEAR PERFORMANCE TARGETS					
	2002-2003 progress	2003-2004 progress	2004-2005 target	2004-2005 progress	2005-2006 target
WATER	<b>Water Quality</b>				
	99.8%	99.8%	Physico-chemical compliance customer taps 99.8% compliant.	99.9% Target met. 	Maintain target.
	<b>Water Resources</b>				
	Completed audit of meters at abstraction points.	Water production management tool target deferred. Informal source optimisation has taken place as a pre-cursor to the successful future delivery of the production tool.	Implement optimal refill operations at key reservoir refill sites within the Bewl-Darwell system.	Target met. 	Implement company policy on abstraction alarms and auto shut-downs on all our groundwater sources.
			Implement groundwater monitoring at priority sites across the region.	Target met. 	
					Increase water available for use to 697.6 MI/day.
	<b>Water Efficiency</b>				
	Established a data set of our sites where water consumption was recorded.  Introduced and maintained water efficiency measures in our offices and in project planning	Internal water use data for wastewater sites serving a population equivalent above 25,000 input to our Optima6 management system.	Undertake quarterly reporting to compare water use between sites serving populations above 25,000.	Annual reporting complete and 207.8 megalitres of water savings delivered over 2004-2005. 	Identify 200,000 m <sup>3</sup> /year water savings from sites.
			Carry out audits of sites with high water consumption compared to the populations they serve, and on sites with deteriorating trends in consumption.	Target met. 	
					Install 7,136 meters in households in areas of deficit water supply.  Increase to 30.3% the ratio of households metered. Maintain total leakage at 92MI/day.
WASTES	<b>Wastewater Quality</b>				
		220 completed to the end of 2003-2004.	Install flow monitoring devices on 355 wastewater treatment works by April 2005.	351 completed to the end of March 2005. 	93.2% intermittent discharges satisfactory (protecting river and bathing water quality).
		209 turbidity monitors installed and monitored.			
				Reduce Category 1 and 2 pollution incidents by 10%.	

# Performance Targets

	2002-2003 progress	2003-2004 progress	2004-2005 target	2004-2005 progress	2005-2006 target
<b>WASTES</b>	<b>Waste Management</b>				
	Target to develop company wide waste exchange not completed, emphasis placed instead on waste minimisation. A gap analysis for waste recycling and minimisation was produced.	Two targets withdrawn in year due to operational changes.	Develop integrated waste framework agreement for efficient management of waste streams.	Target met. 	Implement an integrated waste data recording system.
	Highest waste producing sites identified for grits and screenings. The potential for efficiency savings is being taken forward.	Grits and screenings composting research and development project completed.	95% sewage sludge produced as biosolids recycled to land (agriculture).	Target met. 	Maintain target.
	Target met.	One prosecution for failing to prevent the escape of controlled waste.	Zero prosecutions for waste management offences.	Target met. 	Maintain target.
<b>ENERGY AND ATMOSPHERE</b>	<b>Energy</b>				
	Flow data for 16 water supply and 12 wastewater treatment sites added to energy management system. Water supply pumping system efficiency study under way.	Users, auditors and estimators set up and active on the energy management system. We improved efficiency at a number of sites. Our efficiency study monitors 74 sites.	Carry out water and wastewater works optimisation to save 400 megawatt hours.	Achieved power saving of 1,178 megawatt hours. 	Investigate minimisation of energy consumption in wastewater operations.
	Seven (target ten) wastewater sites showed energy efficiency improvements compared with 2001-2002.	A total of 114 sites monitored to enable energy efficiencies to be carried out.	Deliver four new biogas fuelled Combined Heat and Power (CHP) electricity generation systems.	Four new CHP systems installed and brought on-line during 2004. 	Reduce imports of brown electricity (fossil-fuel generated) via delivery of CHP.
	Biogas fuelled microturbine trial planned. Working to install intelligent motor control units to regulate pump electricity.	Feasibility study carried out into the opportunities for energy generation from wind at our sites.			
<b>Air</b>					
Operational reports produced in a shared location for key wastewater process employees.	Training carried out on operation and maintenance of an odour treatment technology with operational staff.	Develop periodic Regional Control Programme for the maintenance of odour control units to ensure efficient and effective operation.	Information on odour control units has been gathered and will be implemented into a controlled maintenance programme during 2005-2006. 	Develop odour management guidance to specific timescale criteria for responding to customers.	












# Performance Targets

KEY: Target met  In progress  Target not met  Not applicable 

	2002-2003 progress	2003-2004 progress	2004-2005 target	2004-2005 progress	2005-2006 target
ENERGY AND ATMOSPHERE	<b>Transport</b>				
	Alternative methods of transport target incomplete. Videoconferencing facilities are in use at our headquarters.		Continue to assess the benefits of alternative fuels.	Trial of a hybrid vehicle has commenced and we are reviewing liquid petroleum gas as a fuel option. 	Assess the benefits of alternative fuel-powered vehicles.
MATERIALS AND RESOURCES	<b>Materials and Resources</b>				
	Completed target of six procurement audits.	Procurement audits of preferred contractors completed for key contractors.	Continue to assess key contracts and undertake risk-based comparative procurement audits of key framework suppliers.	Target met. 	Maintain target.
	Identified sites where major chemicals stored and used. Detailed major chemicals used. Implemented a system for reporting chemical use and supply for water supply works, work under way for wastewater.	Study completed to review consumption of dosed chemicals at wastewater treatment works.	Undertake audits to optimise chemical use at major surface water supply works.	Target met. 	Maintain target.
		Audits undertaken to optimise chemical use at major surface water supply works.	Conduct a review of all chemical contracts and chemical use across the business.	Target met. 	
		Chemical use data for wastewater treatment works enhanced.	Maintain and further develop chemical use database.	Monitoring updates continue, spreadsheet methodology sufficient to meet need. 	
	Established measurable indicators to compare chemical and oil use between sites for water supply works.	Oil use monitored across water supply sites.	Monitor oil use between water supply works.	Target met. 	
Optimise chemical dosage at all newly commissioned sites following takeover.			Several sites have been optimised, this target is ongoing. 	Maintain target.	
LAND, CONSERVATION, ACCESS & RECREATION	<b>Land, Conservation, Access and Recreation</b>				
	Integrated generic risk data into our Environmental Geographic Information System (EGIS).	Procedures established for using and updating risk data to EGIS.	Develop technical guidance notes for environmental screenings on contaminated land.	Target superseded as the new Single Entity Contractor is responsible for environmental screenings on contaminated land. 	
	Conservation management plans completed for 40 most sensitive sites. Trial biodiversity index incomplete. Analysis of Environmental Geographic Information System site data identified key habitats and species on our sites.	Desk-based phase of status review of designated landholdings completed. 18 barn owl boxes erected.	Undertake survey of Biodiversity Action Plan priority species (butterfly) at Powdermill and Darwell reservoirs.	Target met. 	Develop a Sites of Special Scientific Interest (SSSI) land management plan.

# Performance Targets

KEY: Target met  In progress  Target not met  Not applicable 

	2002-2003 progress	2003-2004 progress	2004-2005 target	2004-2005 progress	2005-2006 target
COMMUNITY, EDUCATION AND SKILLSHARING	<b>Community</b>				
					Remove 51 properties from the internal flooding at risk register.
	Total of 148 WaterWise community talks were given over the year.	80 WaterWise talks given to community groups in our region.	Maintain WaterWise talks programme.	Target met. 	Maintain target.
	2002 Drips in Schools play toured 39 schools reaching some 4,500 pupils in our region.	Water efficiency programme in schools continued.	Create water efficient gardens at three locations.	Target met. 	Continue to promote water efficiency for home and garden.
	System introduced to record environmental initiatives supported.	Continued to support employee fundraising activities and community initiatives for our region.	Promote water efficiency at 15 public events.	Target met. 	
		Water efficient home and garden promotions continued.	Continue to promote water efficient gardening.	Target met. 	
	<b>Education</b>				
	Education service: 32 general information packs 30 schools packs 26 CD-rom sent 12 school water audits completed.	15 schools received water audits from our employees and 110 water audit packs sent out on request.	Send water efficiency newsletter to all primary, secondary and sixth form schools in our region every term.	Target met. 	Provide further training for school speakers. Achieve 50 school talks by March 2006.
					Provide subsidised drinking water bottles for school children.
	We continued to support employee fundraising activities and community-based charities.	Continued to seek partner funding for our Learn to Swim scheme.	Continue to support Learn to Swim scheme.	Target met 	Maintain target.
<b>Employees and Health and Safety</b>					
100% achieved across the business.	Target met.	100% site safety/ workplace inspections of total planned by department manager.	100% 	100% site safety/ workplace inspections of total planned by department manager.	
100% delivery (100% target) and 84% delegate attendance rate (90% target).	87% delegate attendance rate of H&S training as a percentage of delegates proposed to attend.	100% of training delivered as a percentage of training identified in the Annual Training Plan.	92.5% 	90% of training delivered as a percentage of formal training identified in the Annual Training Plan.	
		95% of training attended as a percentage of total delegates proposed to attend.	95% highest attendance rate. 91% average attendance rate. 	90% of training attended as a percentage of the total number of delegates expected.	
	Employee and management Business Involvement Groups (BIGS) established company wide.	Maintain BIGS process to consider issues that go across the business.	Target met. 	Maintain Business Involvement Groups process.	
	Various aspects of Human Resources Integrated Framework (HRIF) introduced throughout the year with more planned.	Continue to implement the HRIF for employees.	Target met. 	Carry out full employee welfare opinion census and review results.	
EMPLOYEES					

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