



*Portsmouth Water Ltd*

# **Activity Report**

*2008/09*



*incorporating the Conservation, Recreation and Access Report 2008/09  
and information from the Water Quality Report 2008*

## F o r e w o r d

This Activity Report sets out the standards of service we provided to our customers in the 2008/09 year and also looks at our principal activities over the past year.

I have been delighted in recent years that our efforts in respect of Health and Safety have been recognised externally through the RoSPA Health and Safety Award Scheme. Having received a Gold award in each of the last 3 years, this year the Company applied for the prestigious RoSPA Sector award which requires a Gold award level as a minimum entry qualification. It was very pleasing to be awarded the second place 'highly commended' Sector award. This recognises the initiatives and achievements of the Management and Staff across all parts of the Business.



I am pleased to report that our customers continue to receive a high level of service in terms of pressure of mains water, interruptions to supply, responding to billing queries, dealing with complaints, meter reading and answering the telephone. All these key aspects of our service qualify for the highest possible rating by Ofwat, the Government's water industry regulator.

It is also pleasing to report that Ofwat's 2007-08 Assessment on water and sewerage service unit costs and relative efficiencies once again cited Portsmouth Water as one of only five water companies in England and Wales to achieve leading band A status for operating efficiency. For our customers, this means that they continue to receive the best value for money in the country. It is a credit to our staff that we continue to maintain this position.

Portsmouth Water customers have for many years enjoyed very high standards of drinking water quality and customer service, together with the lowest charges for water supplies in England and Wales. In 2008 water quality remained of the highest level with 99.98% of our water samples meeting the prescribed concentration or value (PCV) designated in the Water Quality Regulations.

During 2008 the Company prepared its Business Plan which is a requirement of the industry regulator, Ofwat, who uses the proposals to determine the prices for water and sewerage companies. The Plan was submitted to Ofwat in April 2009. It sets out how we intend to maintain safe, secure and reliable water supplies, whilst maintaining the service provided to customers, taking a 25 year strategic view. Climate change is likely to have a major impact on the Company's availability of water in the future. However at the current time, there is insufficient robust evidence available to estimate the impact accurately. With Ofwat's endorsement, the impact of climate change has been excluded from the Business Plan for the period 2010-2015. However, new climate data evidence due in 2009 is highly likely to predict significantly less water availability for abstraction by the Company, particularly at times of drought. A further submission will be made to Ofwat when the new data becomes available.

During 2008 we contacted stakeholders and undertook research to understand our customers' views regarding hosepipe bans, how quickly to introduce metering, at what rate we should renew mains and customer concerns about taste and odour. In each case we asked for their preferred options, having provided brief information and indicative impacts for bills. The outcome of the research helped the Company formulate its Business Plan for the period 2010-2015.

The Company also prepared, for consultation, a 25 year Draft Water Resources Management Plan which determines how to ensure customers can continue to enjoy secure and reliable water supplies while minimising any adverse effect on the environment. This plan is based on best available evidence at the time of preparation and does incorporate an estimate of the impact of Climate Change. To overcome the expected deficits, the Company will have to invest in new resources, predominantly continuing with the plans for the development of a winter storage reservoir at Havant Thicket.

During the year much detailed work has been undertaken upon the Havant Thicket Winter Storage Reservoir focusing on the preparation of documents necessary to support a planning application and on consultation with the community and statutory consultees. A draft planning strategy was produced and agreed with the Local Planning Authorities, including an Environmental Impact Assessment scoping report which sets out the detail of potential environmental impacts which could arise from the development. A geomorphological and habitat survey was completed for the rivers on the site and those affected by the proposal. Additional survey work was completed, and continues, upon invertebrates, reptiles, birds, bats and vegetation.

In 2005/06, the Company let contracts, of a total value £11m, to Trant Construction Ltd for three membrane filtration plants, at our River Itchen, Soberton and Fishbourne water treatment works. These were completed in the spring of 2008 and provide treatment to reduce the risk of cryptosporidium in treated water.

During the year the Company spent a total of approximately £11.7 million on the maintenance of operational assets to ensure customers continue to enjoy safe, secure and reliable water supplies, including nearly £5 million upon renewing old water mains and a further £2 million on a trunk mains scheme required to blend water from the Company's Northbrook source with other sources at Hoads Hill Reservoir, thereby ensuring nitrate quality standards are maintained.

It is essential we continue to plan to meet the challenges for the future including how to meet increasing demand for water whilst protecting the environment by ensuring we all use water more efficiently. The Company plans to meet this challenge recognising the impacts of climate change and the affordability problems faced by some parts of the community. The Company believes it can meet these challenges and the aspiration of customers by continuing to follow the key principles that have guided it throughout its long history together with a sustainable and innovative approach to its activities.

**N.J. Roadnight**  
Managing Director

# C o n t e n t s

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<b>1. Levels of Service</b>	2 - 3
<ul style="list-style-type: none"><li>• Pressure of Mains Water (DG2)</li><li>• Interruptions to Supply (DG3)</li><li>• Billing Contacts (DG6)</li><li>• Written Complaints (DG7)</li><li>• Meters Read (DG8)</li><li>• Telephone Contact (DG9)</li></ul>	
<b>2. Water Supply</b>	4 - 11
<ul style="list-style-type: none"><li>• Rainfall</li><li>• Groundwater Levels</li><li>• Abstraction</li><li>• Service Reservoirs Storage</li><li>• Treated Water Distributed</li><li>• Leakage</li><li>• Burst Mains</li><li>• Water Consumption</li><li>• Water Efficiency</li></ul>	
<b>3. Capital Works Improvements</b>	12 - 15
<ul style="list-style-type: none"><li>• New Connections</li><li>• Membrane Plants at the River Itchen, Soberton and Fishbourne</li><li>• Mains rehabilitation in Portsmouth</li><li>• Nitrate Reduction</li><li>• Borehole Remedials and Improvements</li><li>• Local Mains and Services Renewals</li><li>• Havant Thicket Winter Storage Reservoir</li></ul>	
<b>4. Annual Report on Conservation, Recreation and Access</b>	16 - 19
<ul style="list-style-type: none"><li>• Conservation</li><li>• Biodiversity Action Plan</li><li>• Carbon reduction Strategy</li><li>• Sustainable Procurement</li><li>• Other Environmental Projects</li><li>• Havant Thicket Winter Storage Reservoir</li><li>• Recycling of materials</li><li>• Amenities and Recreation</li></ul>	
<b>5. Annual Water Quality Report</b>	20 - 25
<ul style="list-style-type: none"><li>• Water Quality Standards</li><li>• Microbiological Quality</li><li>• Physical and Chemical Quality</li><li>• Cryptosporidium monitoring</li><li>• Other Quality Issues</li></ul>	
<b>6. Work in the Community, Personnel and Training Health and Safety</b>	26 - 27
<ul style="list-style-type: none"><li>• Employees</li><li>• Work in the Community</li><li>• Health &amp; Safety</li></ul>	
<b>7. Company Supply Area</b>	28
 <b>Advice and Information</b>	 back cover
<ul style="list-style-type: none"><li>• Helpful Advice</li><li>• Information About Your Water Supply</li></ul>	

# 1 Levels of Service

The Water Services Regulatory Authority (Ofwat) collects information on water company performance on an annual basis. The data is published in a series of reports and used by Ofwat to measure companies' overall performance.

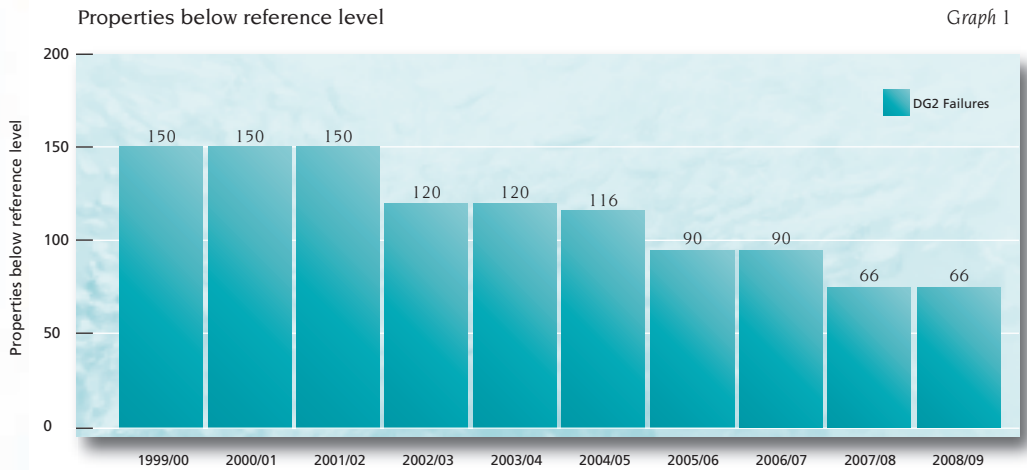
Our performance in all these areas falls in Ofwat highest categories.

## Pressure of Mains Water (DG2)



Checking water pressure flow

In 2008/09, only 66 properties experienced water pressure that was less than Ofwat DG2 reference level of service, equivalent to 15 metres mains pressure. This means that only 2.2 in 10,000 of the 301,207 properties in our supply area receive inadequate pressure. The 2008/09 figure maintains the already high level of service provided in previous years. The small number of affected properties are generally located on higher ground relatively close in elevation to the service reservoir supplying their water. Our level of service is classified by Ofwat as 'Good'.



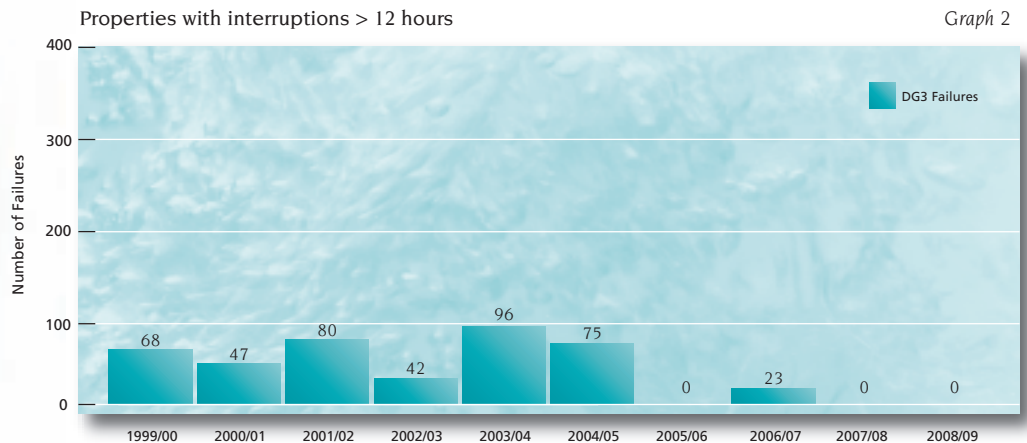
Our level of service is classified by Ofwat as 'Good'

## Interruptions to Supply (DG3)



Repairing a water main

Interruptions to supply usually result from burst mains, which can sometimes take a number of hours to repair, especially if the water main concerned is of large diameter or is in a location where repair is obstructed. One property experienced an interruption of their water supply in excess of 12 hours, which is the reference time period for Ofwat's DG3 level of service for interruptions to supplies. This level of service is classified by Ofwat as 'Good'.



This level of service is classified by Ofwat as 'Good'

# 1 Levels of Service



## Billing Contacts (DG6)



The Company dealt with 187,925 contacts from customers regarding their water bills, compared with 187,127 in 2007/08. A summary of our performance in handling contacts during 2008/09 is shown below and maintains the previous year's high level of service, which is classified by Ofwat as 'Good'.

Dealt With in:-	Number	Percentage
5 working days or less	187,919	99.99
6 to 10 days	5	
More than 10 days	1	
<b>TOTAL</b>	<b>187,925</b>	<b>100</b>

Table A

*Our service is classified by Ofwat as 'Good'*

## Written Complaints (DG7)



The number of written complaints received increased from 175 in 2007/08 to 197 in 2008/09. While one complaint is too many, this performance indicates that fewer than 1 in 1500 of the Company's customers found cause to complain to us in writing about any aspect of our service. This is the lowest level of complaints to water companies in England and Wales. Every complaint is treated seriously and is investigated individually to identify the cause. A separate company complaint review board, chaired by a Director, is held monthly to assess our responses and evaluate the effectiveness of corrective action taken and improvements if needed. Response times are shown in the table below. Our service in this area is classified by Ofwat as 'Good'.

Dealt With:-	Number	Percentage
10 working days	196	99.5
11 to 20 days	1	0.5
More than 20 days	0	0
<b>TOTAL</b>	<b>197</b>	<b>100</b>

Table B

*Our service in this area is classified by Ofwat as 'Good'*

## Meters Read (DG8)

The Company billed 54,291 metered accounts in the year. Within the year, 4 customers failed to receive a bill, largely due to access to read the meter being denied. This performance is classified by Ofwat as 'Good'.



## Telephone Contact (DG9)

The Company received 179,527 telephone calls from customers in the year. 1,244 callers received an 'all lines busy' response and 5,036 calls were abandoned. Our service in this area is classified by Ofwat as 'Acceptable' (there is no 'Good' category for telephone contact).

All calls to the Company are answered promptly by a member of staff. Automatic queuing systems are not used.

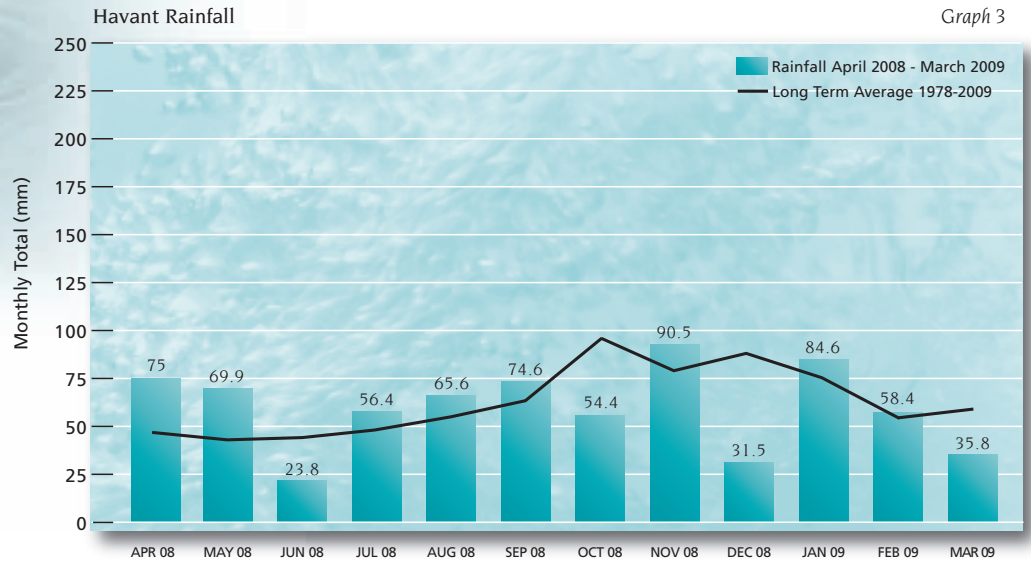


# 2

## Water Supply

### Rainfall

Between April 2008 and March 2009, the rainfall recorded at Head Office Havant exceeded the 30-year average in the months of April, May, July, August, September, November, January and February. The summer of 2008 was wetter than average. A variable autumn was followed by a variable winter. In the whole 12-month period to March 2009, the total rainfall was 720 mm, compared with the 30-year average of 702 mm.



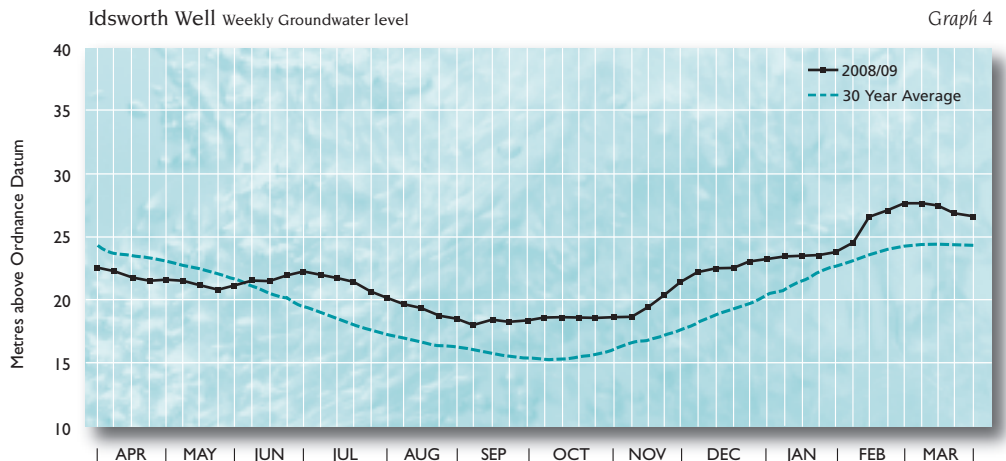
### Groundwater Levels



The Lavant at Lavant Water Treatment Works

The Company has monitored the groundwater level at Idsworth Well, Rowlands Castle, for many years since the well is unaffected by abstraction and is representative of groundwater conditions in the South Downs chalk. Around 85% of Portsmouth Water's abstractions are from underground sources and so groundwater levels are critical to maintaining supplies.

At the start of the 12-month period beginning in April 2008, ground water levels were slightly low at 1.5 metres below the 30-year average. Following above average rainfall in April and May, there was limited groundwater recharge in June, a fairly unusual phenomenon for this time of year. The wetter than average summer and variable autumn and winter resulted in groundwater levels above the long-term average for the months of July to March 2009, with groundwater levels finishing 2.2 metres above the long-term average at the close of the year.



## 2 Water Supply

### Abstraction



Springs at Head Office, Havant

Abstraction from the Company's various sources in 2008/09 was as shown in the table below:-

Table C

Source	Type	Licensed Annual Abstraction (Million Litres)	Actual 2008/09 Abstraction (Million Litres)
Northbrook	Boreholes }	7487	5117
Lower Upham	Borehole }		82
West Street	Boreholes	3327	3168
West Meon	Boreholes	160	21
River Itchen	River	16636	6868
Maindell	Wells & Adits	2491	291
Soberton	Wells & Adits }	3294	1197
Newtown	Borehole }		0
Worlds End	Boreholes	8295	3897
Lovedean	Boreholes	4148	2307
Havant & Bedhampton	Springs	42732	19352
Walderton	Boreholes	9955	6227
Woodmancote	Boreholes	1364	555
Fishbourne	Wells	3741	992
Funtington	Wells & Adits	2920	2142
Lavant	Boreholes }	9950	5103
Brickkiln	Boreholes }		1132
Eastergate	Well/Borehole }		2599
Westergate	Boreholes }		2431
Slindon	Boreholes }	10358	585
Aldingbourne	Boreholes }		2575
<b>TOTALS</b>		<b>126858</b>	<b>66641</b>

Abstraction is drawn from three groups of sources, the River Itchen Works which treats surface water, the boreholes and wells which abstract groundwater from the underground chalk and the Farlington Works which treats spring water from Havant and Bedhampton.

The Company's largest source utilises water from a group of natural springs at Havant and Bedhampton. Water from the springs is treated at Farlington Water Treatment Works and provides up to 40% of the Company's requirements.

The nature of the chalk aquifer of the South Downs ensures that at many sites high quality water is produced which requires only minimal treatment.

### Service Reservoirs



Water mains alterations at Shedfield Reservoir

Short-term local storage of treated water is provided in underground service reservoirs. Most are fully enclosed reinforced concrete structures. Their functions are to economise on pumping by evening out daily peaks and troughs in demand and to provide a consistent pressure in the distribution system. In addition they provide security of supply in the event of plant, power or source failure.

Table D

Service Reservoir Site	Number of Reservoirs	Capacity (Million Litres)	Top Water Level (Metres above Ordnance Datum)
Appledown	1	2.10	173.97
Canada	1	0.10	155.45
Catherington	1	5.00	133.30
Clanfield	2	14.54	161.54
Farlington	5	173.24	44.64
Fir Down	2	5.91	140.51
Fort Southwick	1	4.54	124.66
George	1	8.78	87.88
Highdown	1	3.00	129.27
Hoads Hill	3	71.38	59.44
Lavant	3	57.24	70.83
Littleheath	2	31.84	51.82
Nelson	1	44.66	90.00
Racton	2	33.62	67.06
Shedfield	1	16.06	80.56
Street End	2	5.29	117.65
West Meon	2	1.11	151.28
Whiteways Lodge	1	4.8	114.00
<b>TOTAL</b>	<b>32</b>	<b>483.21</b>	

# 2 Water Supply

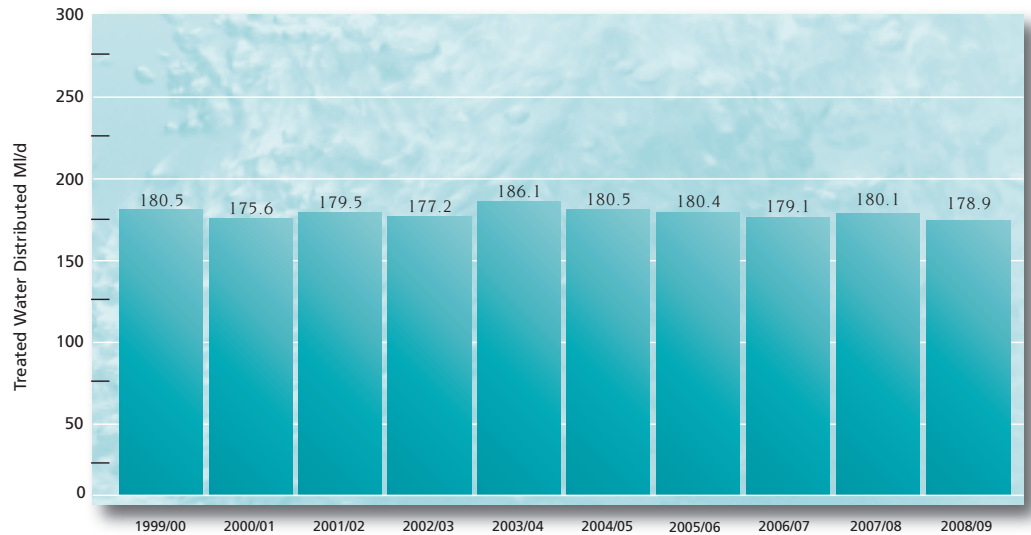
## Treated Water Distributed



Chemical storage at a treatment works

Annual Average Treated Water Distributed

Graph 5

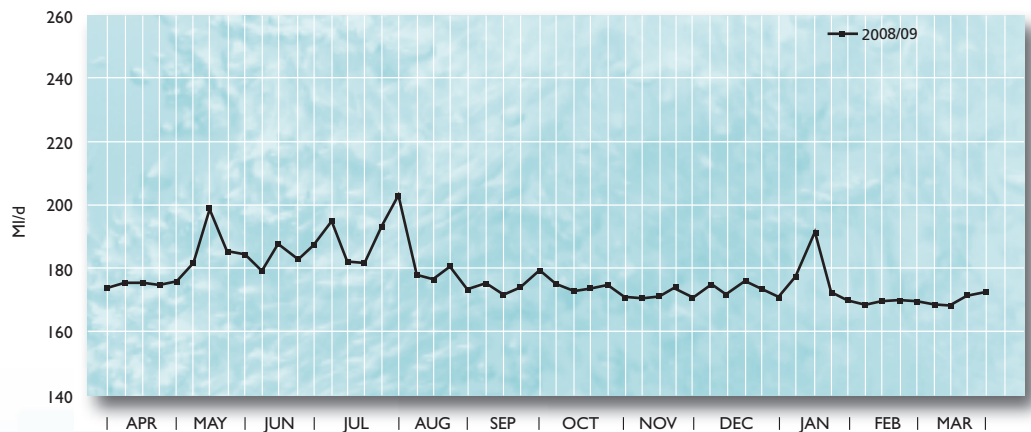


The annual average treated water distributed fell slightly from 180.1 million litres per day (M/d) in 2007/08 to 178.9 M/d in 2008/09. These figures exclude the volume provided via the bulk supply to Southern Water.

Peaks in weekly distribution input are usually triggered by periods of hot weather combined with low rainfall and generally experienced in June, July and August. The higher than average rainfall experienced in the months of July and August in 2008 saw lower demands for water.

Weekly Treated Water Distributed

Graph 6



River Itchen Membrane Filtration Building

Distribution input in 2008/09 was unusually characterised by a peak of water demand in January. The high January demand was associated with a severe cold period which saw a high number of burst water mains and broken domestic plumbing.





# 2 Water Supply



## Leakage



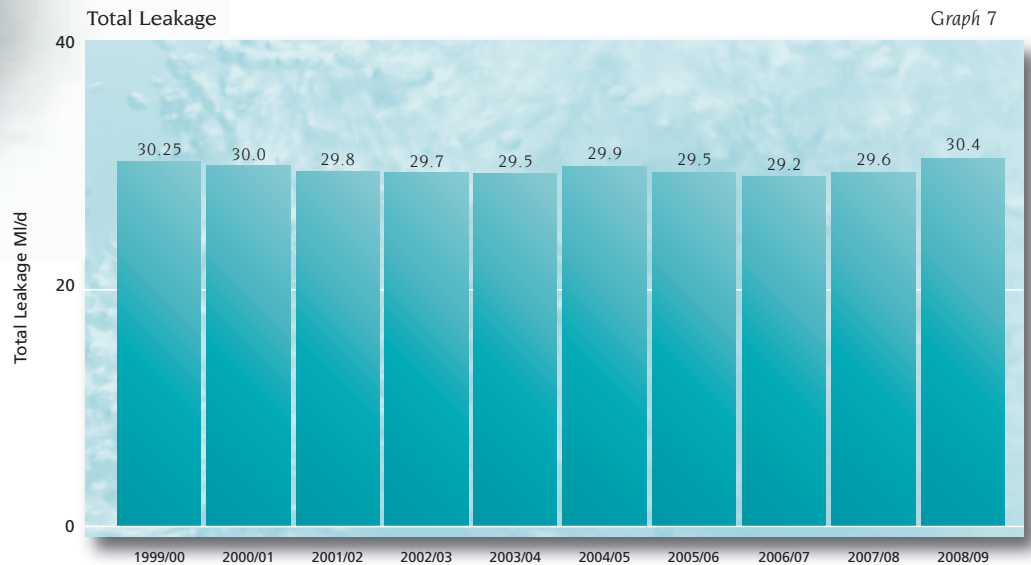
Inspector installing leak location sensors

Leakage levels rose marginally from 29.6 Ml/d in 2007/08 to 30.4 Ml/d in 2008/9 and may be partially attributed to the very low temperatures recorded in January 2009 which resulted in a high incidence of burst mains, many of which were not visible and required active detection to locate and repair.

Total leakage has fallen by more than 40% compared to the 1990/91 level, largely due to:-

- the determined efforts of leakage detection and repair staff
- the Company's continued drive to replace old corroded water mains and services
- the introduction of pressure control to reduce excessive pressures in mains and services

The Company will continue to make reductions in leakage where they are shown to be economic.



## Burst Mains



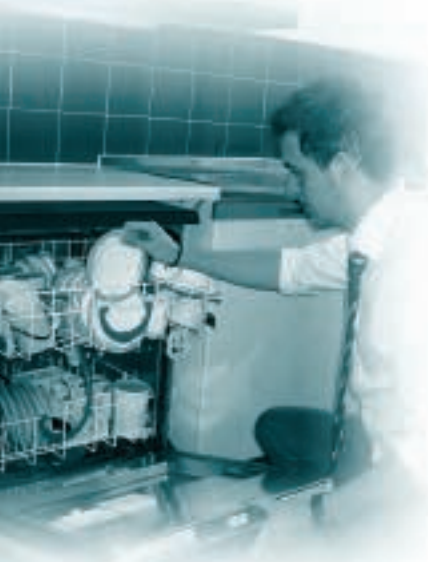
Mains leak

The number of burst mains experienced in 2008/09 was 372, compared to 311 that occurred in 2007/08. The majority of the bursts occurred upon 3"-6" cast iron mains and were generally associated with the swelling and shrinking of clay due to changes in soil moisture and temperature. This was particularly evident in December 2008 and January 2009 when monthly bursts jumped to 76 and 104 respectively due to the unusually severe weather experienced in the south of England. The sudden increase in bursts demonstrates, despite a programme of mains renewals, that the network continues to deteriorate and it is vital that the Company continues to invest in mains renewals at the appropriate rate as identified in its Business Plan.



# 2 Water Supply

## Water Consumption

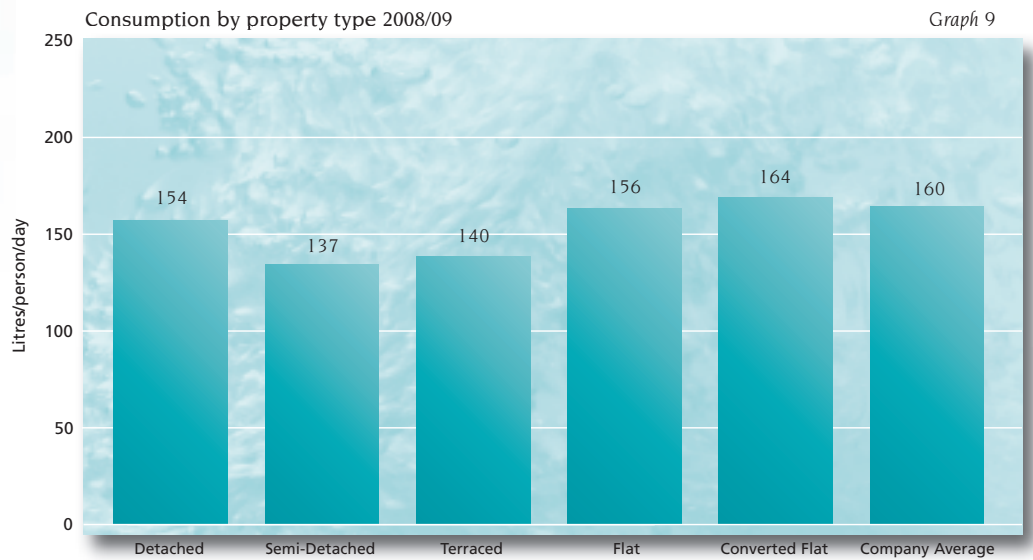


Domestic water use

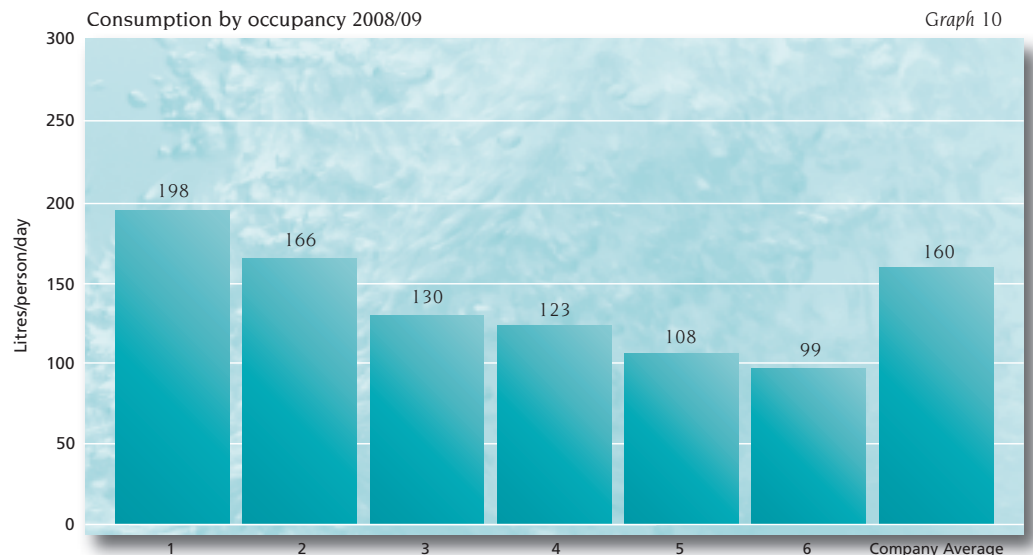
It is very important to have a reliable and sound means of determining the average water consumption for each person living in households in the Company's area of supply. This is a fundamental measure that helps to explain how water is used and also forms a basis on which to forecast future demand for water.

In the Company's supply area, there are some 453 householders who have a meter fitted to their property to measure water consumption, but who pay their water bill on an unmeasured basis. From a questionnaire provided to each householder, the Company is given information about the type of house, the number of occupants and the water appliances installed.

The Company collects water consumption data and the results for 2008/09 are presented in the graphs below. The consumption figures include all water use in the property including drinking, washing and garden watering.



This graph above shows how consumption varied according to the type of property. Occupants of Semi Detached and Terraced houses for 2008/09 have similar consumption but Detached houses demonstrated higher consumption due most probably to garden watering. Purpose-built flats have consumption that is higher than houses, possibly because they are fitted with a wider range of water-using appliances. Converted flats also have a higher than expected consumption per head.



## 2 Water Supply

A simple water butt installation can collect substantial quantities of rainwater for watering the garden



More significant still is the graph opposite, which shows the substantial differences in personal water consumption according to the number of occupants in a property. Single person households in our survey used 198 litres per day, while each person in a household of 6 occupants used 99 litres per day. The Company average was 160 litres per person per day. For occupancies between 1 and 6, consumption decreased as occupancy rate increased. The reason for these differences is primarily that domestic appliances such as washing machines are used on full loads, whereas in single person households, appliances tend to be used on part-loads. In addition, garden watering is of course divided among the greater number of occupants and has more significant impact on personal consumption as occupancy falls.

These differences have very important implications for future water use, because the number of single person households has increased in recent years and is likely to continue to do so, as more people choose to live alone for personal or social reasons as well as a rising divorce rate. With this increase will come increased water consumption and abstraction, adding to pressures on the environment.

This key factor adds more weight to the need for water efficiency in households to be addressed by the Government through planning and building regulations and statutory design standards for water using appliances.

### Water Efficiency

It is important that water is used wisely and efficiently to ensure that no adverse effects on the environment result from unnecessary abstraction. A number of initiatives were carried out during the year and are described below. It remains the Company's view that, despite these initiatives, significant savings from water efficiency will not occur unless regulations for the planning and design of new houses are modified to make water efficiency a statutory obligation upon housing, as well as developers and manufacturers of water-using appliances, such as washing machines and dishwashers.

#### Cistern Devices

In 2008/09 approximately 14,200 'Save-a-Flush' bags were issued to individual customers, to Councils and to schools, 3,800 more than the previous year. These simple devices comprise perforated bags containing a gel which, when the bag is placed in a toilet cistern, absorbs water and expands to a volume of 1 litre and then at each flush, 1 litre of water is saved.

In 2008/09 Portsmouth Water started a water efficiency project with Radian Housing Association. So far 800 'Save-a-Flush' bags have been delivered to tenants.



'Save-a-flush' bags





Customer information on water meters

### Measured Customers

In 2008/09 a total of 5,219 meter optants received a 'Saving Water at Home' information pamphlet as part of their start-up pack. This ensures that the customers most likely to benefit from water efficiency are reminded of the advantages of saving water.

### Free Supply Pipe Replacement

When leaks are identified on a supply pipe, the customer is offered a number of options. One is for the leak to be repaired free of charge by Portsmouth Water. Another is to engage a Contractor to repair or replace the entire supply pipe at their cost. The Company has undertaken 466 free repairs or replacements this year.

### Water Audits

Each year Portsmouth Water produces a Company Newsletter which is sent to all household customers. It is delivered by hand with other free newspapers as it is believed to be more effective than including the information with the bill. In preparation for the Business Plan, articles were included on water quality, customer service and the Draft Water Resources Management Plan. There was insufficient space to include the Water Audit in this year's Newsletter.

### Water Regulations Inspections

When Water Regulation Inspectors visit commercial premises their primary task is to ensure that the water supply cannot be contaminated. If they see examples of waste, such as dripping taps or overflows, they recommend improvements and provide a copy of our Self Audit leaflet. They do not conduct a separate water audit unless specifically requested as many larger organisations have already carried these out for themselves. In the past, non-household demand has fallen partly because the economic situation has driven companies to be more efficient in their use of water.

### Water Efficient Gardens

In 2008 Portsmouth Water was one of a group of companies which sponsored 'Ratty's Refuge' which was a show garden at the Chelsea Flower Show. The garden highlighted the habitat required for water voles but also covered water efficiency advice. The companies formed a partnership with the Environment Agency called 'Water in the South East'. This partnership also sponsored a water efficiency website.



Inspecting plumbing for water regulation compliance



### Other Initiatives

Portsmouth Water uses local radio and newspaper interviews to spread the water efficiency message whenever possible. This is also the case with talks to local groups and societies and for school visits. Portsmouth Water welcomes parties to its Visitor Centres at the River Itchen and Farlington Water Treatment Works.



In other water efficiency initiatives Portsmouth Water has:-

- a) Worked with Hampshire County Council and the George Staunton Country Park to produce education facilities for schools and colleges. This will link in with further work on Havant Thicket Winter Storage Reservoir which will be located nearby.
- b) Worked with Hampshire County Council on the Water Festival at Romsey.
- c) Supported the Government's 'Envirowise' organisation and provide their website address on the 'Saving Water in Your Business' leaflet.
- d) Supported the UK Water Industry's 'Waterwise' initiative and the Government's Water Saving Group.



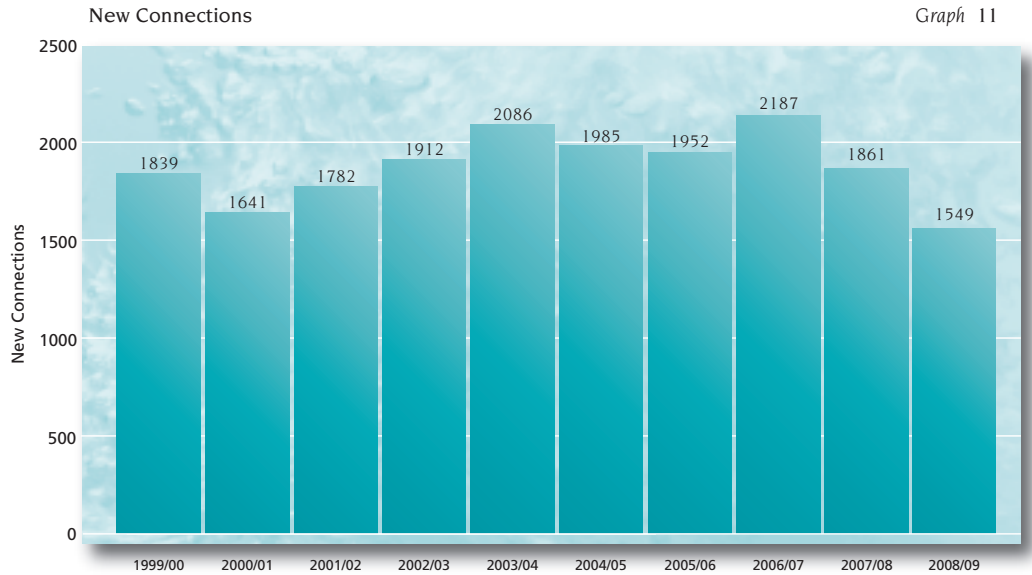
Drought Tolerant Garden  
at Portsmouth Water  
Head Office

# 3

## Capital Works Improvements

### New Connections

There were 1,549 new connections to our mains in 2008/09. The graph below illustrates that this activity is lower than normal due to the general economic downturn.



### Membrane Filtration Plants



In 2005/06, we let contracts of total value £11m to Trant Construction Ltd for three membrane filtration plants, at our River Itchen, Soberton and Fishbourne water treatment works. These plants will provide treatment to reduce the risk of cryptosporidium in treated water. The Soberton and Fishbourne plants were commissioned in the spring of 2008.

Slip lining a new water main at Highland Road, Southsea



Soberton membrane filtration plant

### Mains Rehabilitation in Portsmouth

Since 1997 there have been a number of incidents of discoloured water in Portsmouth, affecting substantial numbers of customers. After completion of investigations, such as hydraulic modelling and sampling, it was established that this was due to the deposition of iron sediment in some larger trunk mains. A rehabilitation scheme, valued at £1.8m, was developed and included a number of different techniques such as mains replacement, provision of flushing facilities and, in some cases, abandonment of mains. A contract with Durkin & Sons Ltd started in October 2005 and was completed in March 2009.

### Nitrate Reduction

Work continues upon a scheme to reduce the concentration of nitrate in water supplied to customers from our Northbrook Water Treatment Works at Bishop's Waltham, Hants. On occasions in the past, the nitrate content at Northbrook has risen to a level close to the permitted maximum concentration. The proposed scheme involves laying an 11-kilometre long pipeline to enable water from Northbrook to be pumped direct to service reservoirs at Hoads Hill, Wickham. Here the water will be blended with treated water from other sources with lower nitrate content. Ecological surveys have been completed along the proposed route of the main and pipeline construction has commenced in a phased manner.

## 3

## Capital Works Improvements



Additionally work has begun on a scheme to reduce the concentration of nitrate in water from our Maindell Water Treatment Works, near Fareham, Hampshire. The proposed scheme involves inserting a plastic water main into an old abandoned water main for a length of approximately 3.5 km to enable water from Maindell to be pumped direct to the Hoads Hill Service Reservoir.

### Borehole Remedials and Improvements

The Company operates 22 water abstraction sources. In 2008 as part of its maintenance programme it completed a programme of CCTV surveys of boreholes. As a result of the survey a scheme to replace a borehole at Lavant Water Treatment Works and to reline three boreholes at Walderton and two at Woodmancote Water Treatment Works has begun. Borehole drilling and refurbishment is relatively specialised and the contract was therefore awarded in March 2009 to G. Stow plc.

### Local Mains and Services Renewals

During the year, the Company replaced 24.32 km of mains and associated service pipes throughout its area. The work is necessary owing to the structural deterioration and increased burst frequency that results in some parts of the Company's area of supply. In such areas, where old iron mains are laid in clay soils, they are prone to bursting either as a result of ground movement or corrosion.

'Trenchless' mainlaying techniques are used by Portsmouth Water to renew mains wherever they are economical and practical. One method used is directional drilling, while another method that avoids the disruption that comes from digging up the road is pipe bursting of old cast iron mains. This necessitates first laying a temporary overground main to maintain supplies to customers. The old cast iron main is taken out of service and then a heavy steel arrowhead-shaped swage is pulled through it, causing it to split. As the steel swage is pulled through the old main, a new polyethylene main of similar size is drawn through behind it. The new main is then flushed, swabbed, disinfected and brought into service. This technique was employed at a scheme in Hunston, near Chichester, which commenced in March 2007.



Pipe jacking a new water main under railway at Fareham



Main laying at Hayling Island bridge

Renewing a Main in Fareham



### Havant Thicket Winter Storage Reservoir



An aerial impression of what the reservoir may look like

Despite efforts to manage future demand for water, our current projections show that a new resource will be required by about 2020. The lowest cost solution is to build a winter storage reservoir on land close to Havant known as Havant Thicket. This is part of our 'twin-track' approach to balancing supply with demand, an approach in which new resources are developed whilst water efficiency measures are also put in place.

The reservoir will hold more than 8 million cubic metres of water, surplus water from the Company's Havant & Bedhampton Springs being pumped to the reservoir during the winter. The stored water would then be used during dry summers to augment the springs. Overall the reservoir is expected to measure approximately one mile by half a mile.

As well as providing a substantial new water resource to meet growing demand, the project offers a number of exciting opportunities for creating new freshwater habitats, education facilities and recreation opportunities, such as walking, cycling, horse riding, bird-watching and fishing.

Work on the project during 2008/09 has been focused on preparing the documents necessary to support a planning application and on consultation with the community and statutory consultees. A summary of the project activity over the past year is provided below.

#### Planning Strategy

A draft planning strategy was produced and circulated to the local authorities for comment. Meetings were held with the Local Planning Authorities (LPA) to discuss the draft strategy, the proposed hybrid application approach and what documents will need to be prepared to support the application.

#### Environmental Impact Assessment (EIA)

An EIA Scoping Report was submitted to the LPAs in January 2009. It was copied to the statutory consultees and a number of other interested parties for comment. This sets out in some detail all of the potential environmental impacts which could arise from the development, then set out the approach for assessing each potential impact. A noise survey was completed in 2008 around the perimeter of the site. This will inform the noise impact assessment.

#### Engineering

Evaluation of existing site investigation data, drainage issues, embankment and spillway design are ongoing.

#### Traffic studies

The Transport Assessment Scoping was agreed with the Highway Agency and Hampshire County Council. Traffic surveys were completed in July and August 2008 at key locations close to the site.

#### Ecology

A geomorphological and habitat survey was completed for the rivers on the site and downstream from the reservoir site. Additional survey work was completed for invertebrates, reptiles, birds, vegetation and bats. Following a meeting with Natural England the bat survey work was extended to include woodland blocks within 3 km of the reservoir site. This will enable the significance of the bat population in the vicinity of the reservoir to be better understood before submitting a planning application. The findings from the ecological surveys are being used to inform the mitigation strategy for the site.

#### Water quality

In July 2008 a water quality monitoring programme was established. Samples were collected from streams which will flow in to the reservoir. This information is being used to test and calibrate the water quality model being developed to assess any change in water quality which will result from the development of the reservoir.

#### Archaeology

Desk study and historic aerial photograph interpretation commenced.

#### Peer review

Independent consultant commissioned to undertake a review of the planning application strategy and documentation produced by Arup to date. Review completed September 2008.

#### Expert panel

The Panel met in October 2008 to review aspects of the engineering design and site investigation strategy.



# 3

## Capital Works Improvements

A Stakeholder Group was established in 2004 and met twice in 2008/09. The Group is chaired by Portsmouth Water and comprises of local community representatives (including councillors), local authorities, the Environment Agency, wildlife organisations, the Consumer Council for Water, Staunton Country Park and the Forestry Commission.

The role of the Stakeholder Group is to ensure that all relevant issues are identified and addressed at each stage of the scheme, provide input and advice on the scope of various studies, give feedback on report outcomes, as well as ensuring that the views of the community and organisations represented are taken into account as far as possible as the scheme evolves.

In 2008 the Strategy for Community & Stakeholder Involvement was reviewed in the light of the public consultation exercise carried out in March 2008, as well a discussion with the local authorities and the need to extend the strategy to cover the life of the scheme. A report was published on the project website and provides a strategy for the involvement of the local community and other stakeholders during the process of developing the design for the Havant Thicket Winter Storage Reservoir.

In October 2008 an Interim Report on Community & Stakeholder Involvement was published on the project website. The report set out the details of the consultation undertaken, summarised the feedback received, and then described how Portsmouth Water had taken on board the feedback. The report included a revised outline plan illustrating the range of features that the Company propose to take forward.

In 2008 the Company published an 8 page newsletter setting out the outcomes from the public consultation exercise, the need for the reservoir, plans for the pipeline, embankment location, access and car parking. Information was provided on the land / water based activities to be pursued, alternative energy and the next steps, along with a provisional timescale. The newsletter was distributed to more than 1000 people via local libraries, a project mailing list, at the Staunton Country Park reception and at the Company head office reception.

# 4

## Annual Report on Conservation, Recreation and Access



### Conservation

The Company's total licensed area of supply covers 868 sq km of an attractive part of Southern England between the South Downs and the coastal areas of Hampshire and West Sussex. It includes the historic cities of Portsmouth and Chichester, and the popular holiday resorts of Bognor Regis, Selsey and Hayling Island. The harbours of Portsmouth, Langstone, Chichester and Pagham have a number of important environmental designations under the EU Habitats Directive and are popular water activity venues.

### Biodiversity Action Plan - Policy and Practice

The Company's policy is to conserve and enhance the natural environment of its land and water areas and to preserve historic buildings and equipment, so far as is consistent with the primary duty of providing a sufficient supply of wholesome water at reasonable cost. Where possible the Company explores opportunities to encourage recreational use.

The Company has a long history of good practice in consultation and development in an area with many important wildlife sites and with landscape appreciated by residents and a large number of visitors. When new structures and buildings are required, the Company's policy is to ensure that, by careful design and landscaping, they blend into their surroundings. We continue to give full consideration to the environmental aspects of all our activities throughout our area of supply.

### Carbon Reduction Strategy

It is now recognised that climate change represents the single greatest threat to our way of life and the world's ecosystems. There is clear international consensus that climate change is happening and that human activities are responsible. The UK water industry contributes towards the UK's carbon footprint.

Portsmouth Water recognises the need to address climate change within their business and has developed a Carbon Management Plan.

The Carbon Management Plan considers existing measures currently being applied and proposes medium and long-term measures to reduce the company's carbon emissions. The measures are split into those that affect the operation of the business and those that affect customer behaviour.

Operational measures relate to the measures Portsmouth Water can influence with regard to service delivery. Customer behaviour relates to the measures that require action to be taken in collaboration with Portsmouth Water's customers.

### Sustainable Procurement

In procuring goods and services, the Company's practices are as follows:-

- 1) The environmental impact of new capital schemes are investigated as appropriate and sensitive sites are either avoided or mitigation measures carried out, subject to independent ecological advice.
- 2) New capital schemes are designed and constructed so as to blend with their existing surroundings as far as is economic and practicable.
- 3) Opportunities for environmental enhancement are taken where it is economic and practicable to do so.
- 4) The potential archaeological impact of new capital schemes is investigated prior to commencement of work and monitored during implementation, subject to independent advice.
- 5) Recycling or re-use of excavated materials is carried out whenever economic and practicable.
- 6) All vehicles used have diesel engines with Euro IV reduced emissions.
- 7) Diesel fuel has a low sulphur content, with benefits to exhaust emissions.
- 8) Timber used is from replanted forests.
- 9) 85% of reinstatement material is recycled.
- 10) We ensure that our pipe suppliers have suitable policies for control of pollution, resource management and material selection.



# 4

## Annual Report on Conservation, Recreation and Access



### Other Environmental Projects

A study into the **sustainability of abstraction from the River Itchen** was undertaken to establish whether Habitats Directive species were adversely affected by the activities of the company.

The outcome for the abstraction licence at Gaters Mill, the point of abstraction for the River Itchen Treatment works, is a reduction in summer monthly abstraction or peak deployable output, and imposition of a minimum residual flow or 'hands off' flow condition which restricts abstraction from the River Itchen when flows fall to a specified level, together with an annual licence reduction. The implications of the sustainability reductions have been included in the company's Business Plan for the period 2010-2015.



**Chichester and Langstone Harbours** are Special Protection Areas (SPAs) under the Habitats Directive. A study into the sustainability of abstraction from the Company's West Sussex sources was undertaken to establish whether wading birds were adversely affected by the activities of the company. As a result of this study the Company has agreed a variation to the licence affecting six sources in West Sussex which will reduce overall licenced abstraction by 15%.

At Havant and Bedhampton Springs, the application of a minimum residual flow condition for the Hermitage Stream and the Hampshire Lavant will ensure that freshwater flows are maintained to Langstone Harbour. The new condition has been included in a licence variation which has also reduced the licenced abstraction at Havant and Bedhampton by 16%.

Looking SE across Langstone Harbour

### Havant Thicket Winter Storage Reservoir

Construction of a winter storage reservoir at Havant Thicket is part of the Company's 'twin track' approach of both demand management and resource development measures which over the long term will continue to maintain supplies whilst minimising costs and charges to customers.

The reservoir is needed from 2020. Planning permission is to be sought for which baseline ecological surveys have been completed. Further ecological studies are in progress and planned to provide supporting evidence for the Environmental Statement required to support the planning application.

Notable species found in and around the proposed site include Dormice, many species of Bat, Adder, Slow Worms and lizards together with many birds. Plans for the reservoir include habitat enhancement to adjacent woodland, new tree planting and seeding the new embankment with wild flowers and creating a new wetland along the northern shore of the reservoir.

### Recycling of Surplus Excavated Material

Maintenance of the Company's underground pipe network generates waste material, which in the past has been placed in an inert waste tip owned by the Company. Existing tipped material and future waste material is now being reprocessed to extract secondary aggregates and a high quality sub base material produced for reinstatement of the company's excavation work in the highway.

### Amenities and Recreation

**Staunton Country Park**, in conjunction with Portsmouth Water launched a 'Water is Life' Trail for visitors as part of the education programme. The trail continues to attract large numbers of visitors and reported to be successful by Staunton Country Park.

The Water Trail can either be guided or self-guided and is designed to help educate children and parents visiting the Park about the importance of water as a resource and encourage them to be more water efficient. The trail takes the form of a walk within the park searching for water information boards.

The 'Water Is Life' education programme provides school children of all ages the opportunity to learn about the world of water by completing practical tasks using resources provided by Portsmouth Water. The Company provides children at Key Stage 2 and 3 with water 'information boxes' containing a number of hands on experiments and activity sheets to assist the process of learning about the importance of water.

**The Country Parks at Havant Thicket** (in Staunton Country Park) and Highwood Reservoir (in the Itchen Valley Country Park) are open to the general public and managed by Local Authorities. At other sites there is limited access by public footpaths and bridleways.

**At the Clanfield Service Reservoirs** site, The Hampshire Astronomical Society has for many years operated a number of observatories for the benefit of its members. Small groups of members of the public are able to visit by prior arrangement with the Society.

Portsmouth Water's **River Itchen treatment works** is available for educational visits by schools, universities and other organised groups.

View from The Terrace at Staunton Country Park towards the site of the proposed Havant Thicket Winter Storage Reservoir



Little Egret, possible visitor to Havant Thicket Winter Storage Reservoir  
Photo Copyright D. Bright





Water quality regulations are in place to ensure that public water supplies are safe to drink.

1. There are 58 standards in the Water Supply (Water Quality) Regulations 2000 covering microbiological, chemical and physical parameters.
2. Standards apply at customers' taps.
3. Additional standards apply at treatment works and reservoirs.
4. Supply areas are divided into zones serving not more than 100,000 people from single or very similar sources.
5. Water quality information is recorded by supply zone of which Portsmouth Water has 13.
6. Relaxations, temporary or permanent may be granted by the Secretary of State but not for parameters considered to have implications for health.
7. Where it is evident that a standard is infringed regularly, remedial work must be put in hand to rectify the situation, usually by means of an Undertaking.
8. Results of compliance analyses must be kept on a public register available to all members of the public.
9. The results of all compliance analyses are supplied monthly to the Drinking Water Inspectorate (DWI).
10. The Chief Inspector of the DWI produces an Annual Report containing a section on each company.
11. Local Authorities must be satisfied with the sufficiency and wholesomeness of water supplies.
12. Local Authorities have an independent public health role.

**99.98%**  
met the prescribed  
standards



### Water Quality Standards

In 2008 Portsmouth Water carried out a total of 17,997 determinations against the 1998 European Drinking Water Directive parameters and additional UK national parameters in samples taken at our treatment works, service reservoirs and customers' taps in Supply Zones. Of these 99.98% (99.98% in 2007) met the prescribed standards. There were just four failures and each was individually investigated in order to identify any cause.

Directive & National Parameters	No. of Tests	No. of Failures	% Meeting the Standards
Treatment Works	4617	0	100
Service Reservoirs	3082	0	100
Supply Zones	10298	4	99.96
<b>Total</b>	<b>17997</b>	<b>4</b>	<b>99.98</b>

The Water Supply (Water Quality) Regulations 2000 require the Company to report against indicator parameters as well as directive and national parameters. Our performance against all parameters is outlined on the opposite page.

### Microbiological Quality

100%  
of samples from  
treatment works and  
reservoirs complied  
with the regulations

The microbiological standards for drinking water are based upon analyses for the presence of coliforms, a highly ubiquitous group of bacteria which are normally not pathogenic and which make excellent indicator organisms. Because they occur so widely in the natural environment and are extremely sensitive to modern detection methods, there are occasional spurious results often due to the difficulty in achieving a thorough sterilisation of some taps used for sampling. All positive results are separately investigated to identify any cause, as well as the need for any remedial works, to ensure the integrity of the supply.

For **Treatment Works** 100% of the samples were compliant with the microbiological standards with none of them containing coliform bacteria.

For all the **Company's Service Reservoirs**, as for treatment works, 100% of the samples were clear of coliform bacteria.

Of the **samples taken from customers' taps** in Supply Zones, 99.65% met the coliform standard. There were 6 exceedences of the coliform indicator value from customers' taps with one of those 6 samples containing E.coli. Each failure was thoroughly investigated with the customers' taps being identified as the source of the contamination in all 6 cases.

### Physical and Chemical Quality

In 2008 13,971  
analyses were  
carried out on such  
samples and of  
these  
99.96%  
met the standards or  
Specification

All the samples taken from customers' taps in zones for physical and chemical analysis required by the compliance monitoring programme are randomly selected by a computer programme. Physico-chemical analysis consists of directive, national and indicator determinands. In 2008, 13,971 analyses were carried out on such samples and of these 99.96% (6 failures) met the standards or specifications.

When a result exceeds the standard, indicator value or specification, a resample is taken as soon as possible after the result is known. All exceedences initiate an investigation into the cause and, where appropriate, action is taken to remedy the situation. In some instances remedial work may be of a longer-term nature and will need to be planned and budgeted. In such cases the Company will enter into a formal Undertaking agreed with the Secretary of State by which the remedial work is carried out to an agreed timetable.

Explanations of the failures that occurred in 2008 are as follows:

#### Aluminium

In Portsmouth there was one exceedence of the aluminium standard of 200µg/l at a level of 318µg/l. Aluminium is used on rare occasions at the treatment works to help clarify the water but dosing is carefully monitored to ensure no excess is added. Some aluminium can settle out in the water mains over a period of time and disturbances to the main can cause these deposits to be evident in the water. Flushing of the mains at these times clears these disturbances. The Company is aware of roadworks carried out in the vicinity of the sample location and it is possible that some mains disturbance may have resulted in this failure.

#### Lead

There was one exceedence of the standard for lead of 25µg/l at a level of 63.2µg/l. An internal inspection of this property revealed no presence of lead plumbing and further samples from the property were well below the lead standard. The cause of the failure remains unexplained.

#### Tetrachloroethene & Trichloroethene

A sample from a property in Portsmouth in October failed the PCV for the Tetrachloroethene / Trichloroethene parameter with a concentration of 13.11 µg/l. An in-depth investigation could not find conclusive proof of any cause.

*Gross Alpha*

Three samples from different zones failed the specification for alpha radiation. Additional investigation of the levels of radiation in all our raw waters was undertaken using two separate laboratories. All the results for these samples were either less than the limit of detection or revealed insignificant levels of radiation present. Consequently, no reason for the initial sample results could be found.

**Cryptosporidium monitoring**

The Water Supply (Water Quality) Regulations 2000 require compliance with a treatment standard of less than 1 oocyst per 10 litres of water. To demonstrate compliance with this standard, water companies had to carry out risk assessments at all sources. Those considered at 'significant risk' of containing cryptosporidium were required to have DWI approved sampling equipment installed and continuous monitoring instigated.

During 2008 a total of 633 compliance and operational samples were taken for cryptosporidium analysis. In only 3 were very low levels of cryptosporidium detected.

**Other Quality Issues****New Water Mains, Repairs and Connections**

All new water mains are tested for leaks before being sterilised. Following sterilisation, microbiological samples from each hydrant are examined in the Company's Laboratory and only if these are satisfactory is the new main commissioned. In the event of a failure the main is not assigned to service until a further three samples (taken on separate days) are shown to be clear and receive Laboratory approval.

Whenever the inside of a water main is exposed to the outside elements for any reason, it is disinfected and a water sample is sent to the Laboratory for microbiological analysis. As with new mains, one sample containing coliforms requires a further three consecutive, clear samples before receiving Laboratory approval.

**Public Register**

A record of all compliance sample results over the previous five years can be inspected during normal working hours in the public register, which is situated at the Company's Head Office in Havant. Customers can obtain water quality information for their water supply zone from the register, without charge, by contacting the Water Quality Department or by visiting the Company's website at [www.portsmouthwater.co.uk](http://www.portsmouthwater.co.uk).

**Enquiries and Complaints.**

Enquiries and complaints concerning water quality are handled by the Water Quality Department in the first instance. If a visit or samples are required, an appointment will be made for a staff member to call. If the situation requires immediate action, such as discoloured water, an Inspector will be sent the same day. Staff will take water samples, usually from the kitchen tap. In all cases the Company will provide the customer with written information concerning the laboratory analysis, along with any findings.

Portsmouth Water also has a policy of providing free analysis with a written report to all customers who are concerned about lead levels.





**Other Quality Issues**

(continued)

**Summary of Monitoring in 2008**

There were no authorised departures of any standards during 2008. Columns on the following tables that are headed 1 percentile (representing a minimum) and 99 percentile (representing a maximum) contain figures for the sample results except where less than 100 samples were taken, when the figures are the actual maximum and minimum results.

**ZONES 2008**

Quality of water at consumer's tap (zones) 2008 - EUROPEAN STANDARDS						
Parameter	Prescribed Concentration or Value	No. Tests	Tests Failed (%)	1 percentile	99 percentile	No. of zones with failures
1,2 Dichloroethane	3 µg/l	112	0	<0.1	<0.8308	0
Antimony	5 µg Sb/l	112	0	<0.1	0.607	0
Arsenic	10 µg As/l	112	0	<0.3	0.8	0
Benzene	1 µg/l	112	0	<0.03	<0.03	0
Benzo (a) Pyrene	0.01 µg/l	111	0	<0.001	0.00188	0
Boron	1 mg B/l	112	0	0.01991	0.07848	0
Bromate	10 µg BrO <sub>3</sub> /l	112	0	<0.8	1.187	0
Cadmium	5 µg Cd/l	112	0	<0.01	<0.2	0
Chromium	50 µg Cr/l	112	0	<0.1	12.61	0
Copper	2 mg Cu/l	113	0	<0.01	0.2958	0
Cyanide	50 µg CN/l	112	0	<0.7	1.387	0
E Coli	0 number/100 ml	1,714	1	0	0	1
Enterococci	0 number/100 ml	112	0	0	0	0
Fluoride	1.5 mg F/l	112	0	<0.02	0.61058	0
Lead	25 µg Pb/l	134	1	<0.2	47.7476	1
Mercury	1 µg Hg/l	112	0	<0.04	<0.04	0
Nickel	20 µg Ni/l	112	0	<0.1	13.392	0
Nitrate	50 mg NO <sub>3</sub> /l	113	0	18.4284	41.9001	0
Nitrate/Nitrite Formula	1 mg NO <sub>2</sub> /l	113	0	0.368711	0.838876	0
Nitrite (Consumers tap)	0.5 mg NO <sub>2</sub> /l	113	0	<0.005	0.009412	0
Pesticides - Total Substances	0.5 µg/l	111	0	0	0.04644	0
Pesticides (individual)	0.1 µg/l	3,441	0	<0.01	0.043	0
Polycyclic aromatic hydrocarbons	0.1 µg/l	111	0	0	0.005	0
Selenium	10 µg Se/l	112	0	<0.3	6.16073	0
Tetra/Trichloroethene	10 µg/l	111	1	0	11.5824	1
Total Trihalomethanes	100 µg/l	112	0	0.0611	83.6284	0
<b>TOTAL</b>		<b>7,865</b>	<b>3</b>			

Quality of water at consumer's tap (zones) 2008 - NATIONAL STANDARDS						
Parameter	Prescribed Concentration or Value	No. Tests	Tests Failed (%)	1 percentile	99 percentile	No. of zones with failures
Aluminium	200 µg Al/l	317	1	<1	141.63	1
Colour	20 mg/l Pt/Co scale	320	0	<1	1.8	0
Iron	200 µg Fe/l	349	0	<3	42.4	0
Manganese	50 µg Mn/l	249	0	<0.1	2.6	0
Organoleptic Odour	0 @ 25°C DN	282	0	0	0	0
Organoleptic Taste	0 dilution number	300	0	0	0	0
Sodium	200 mg Na/l	112	0	6.613	65.6784	0
Tetrachloromethane	3 µg/l	112	0	<0.04	0.4097	0
Turbidity	4 NTU	392	0	<0.1	0.4384	0
<b>TOTAL</b>		<b>2,433</b>	<b>1</b>			

ZONES 2008 *continued*

Quality of water at consumer's tap (zones) 2008 - ADDITIONAL MONITORING REQUIREMENTS					
Parameter	Prescribed Concentration or Value	No. Tests	Tests exceeding spec	1 percentile	99 percentile
Ammonium (Indicator)	0.5 mg NH <sub>4</sub> /l	281	0	<0.04	0.04536
Chloride (Indicator)	250 mg Cl/l	114	0	17.83	41.41
Clostridium Perfringens (Indicator)	0 number/100 ml	249	0	0	0
Coliform Bacteria (Indicator)	0 number/100 ml	1,715	6	0	0
Colony Counts After 3 Days At 22°C (Indicator)	No abnormal change	580	0	0	14
Colony Counts After 48 Hrs At 37°C (Indicator)	No abnormal change	580	0	0	12.19
Conductivity (Indicator)	2500 µS/cm	295	0	448.6	609.72
Gross Alpha Activity	0.1 Bq/l	112	3	<0.027	1.21117
Gross Beta Activity	1 Bq/l	112	0	<0.042	0.50739
Hydrogen ion (pH)	9.5 pH Value	323	0	7.01	7.7732
Residual Disinfectant - Free	No abnormal change	1,782	0	0.1	0.46
Residual Disinfectant - Total	No abnormal change	1,782	0	0.12	0.5
Sulphate (Indicator)	250 mg SO <sub>4</sub> /l	113	0	10.728	33.466
Total organic carbon (indicator)	No abnormal change	112	0	0.4	1.861
Tritium (Indicator)	100 Bq/l	112	0	<4	<4
<b>TOTAL</b>		<b>8,262</b>	<b>9</b>		

## SERVICE RESERVOIRS - 2008

Quality of water leaving service reservoirs 2008 - NATIONAL STANDARDS						
Parameter	Prescribed Concentration or Value	No. Tests	Tests Failed (%)	1 percentile	99 percentile	No. of reservoir failures
Coliform Bacteria	0 number/100 ml	1,541	0	0	0	0
E Coli	0 number/100 ml	1,541	0	0	0	0
<b>TOTAL</b>		<b>3,082</b>	<b>0</b>			

Quality of water leaving service reservoirs 2008 - ADDITIONAL MONITORING REQUIREMENTS					
Parameter	Prescribed Concentration or Value	No. Tests	Tests exceeding spec	1 percentile	99 percentile
Colony Counts After 3 Days At 22°C(Indicator)	No abnormal change	1,542	0	0	6.57
Colony Counts After 48 Hours At 37°C (Indicator)	No abnormal change	1,542	0	0	4
Residual Disinfectant - Free	No abnormal change	1,582	0	0.12	0.4817
Residual Disinfectant - Total	No abnormal change	1,582	0	0.14	0.5717
<b>TOTAL</b>		<b>6,248</b>	<b>0</b>		

## TREATMENT WORKS – 2008

Quality of water leaving service treatment works 2008 - EUROPEAN STANDARDS						
Parameter	Prescribed Concentration or Value	No. Tests	Tests Failed (%)	1 percentile	99 percentile	No. of works failures
Nitrite (Works)	0.1 mg NO <sub>2</sub> /l	230	0			
<b>TOTAL</b>		<b>230</b>	<b>0</b>			

Quality of water leaving service treatment works 2008 - NATIONAL STANDARDS						
Parameter	Prescribed Concentration or Value	No. Tests	Tests Failed (%)	1 percentile	99 percentile	No. of works failures
Coliform Bacteria	0 number/100 ml	2,007	0	0	0	0
Cryptosporidium	-(n/a)	371				
E Coli	0 number/100 ml	2,009	0	0	0	0
<b>TOTAL</b>		<b>4,387</b>	<b>0</b>			

Quality of water leaving service treatment works 2008 - ADDITIONAL MONITORING REQUIREMENTS						
Parameter	Prescribed Concentration or Value	No. Tests	Tests exceeding spec	1 percentile	99 percentile	
Colony Counts After 3 Days At 22°C (Indicator)	No abnormal change	1,430	0	0	2	
Colony Counts After 48 Hours At 37°C (Indicator)	No abnormal change	1,433	0	0	3	
Residual Disinfectant - Free	No abnormal change	2,091	0	0.2	0.91	
Residual Disinfectant - Total	No abnormal change	2,091	0	0.22	0.9816	
Turbidity (Indicator)	1 NTU	1,428	0	<0.1	0.3542	
<b>TOTAL</b>		<b>8,473</b>	<b>0</b>			



# 6

## Work in the Community, Personnel and Training, Health and Safety

### Employees

The Company employs 218 people and believes it recruits and retains the right people key to the successful performance of the business.

The Company is firmly committed to the development of its employees and that they all should have opportunities to reach their full potential. As a result, during the year, a number have undertaken Degrees, HNC's, NVQ's along with associated professional qualifications.

In line with this objective the Company fully supports the principle of Modern Apprenticeships. For example, all new employees within the Customer Services department aged under 25 are employed through the Modern Apprenticeship scheme which leads to a minimum NVQ level 2 qualification with many going on to achieve level 3.

A key part of staff development is the Company involvement with the Institution of Water Officers (IWO). The IWO is a professional body whose purpose is to promote the advancement of knowledge within the water industry. To this end, Area and National Committees organise meetings, seminars, technical visits and conferences, as well as a variety of social events. These activities provide a shop window for the latest technological developments in the industry and a forum for the discussion of major topics. The Company encourages its staff to belong to the IWO and gain the benefit for both their personal and professional development by attending these events.

Staff Turnover, excluding retirees was 7.5% in 2008/9 (2007/8: 8.1%), which compares favourably with the national average which was 15.7% in 2007 (Source – EEF Absence and Rehabilitation Survey 2008).

Total absence (days per employee per year) is just under 4.1. This figure compares with 4.48 for last year and is below the average for private companies of the same size at 7.1 (Source: CIPD: Annual Survey Report 2008).

### Work in the Community

#### Education

In September 2004 Portsmouth Water agreed an Educational Partnership with Staunton Country Park, initially a three year partnership, which has subsequently been extended for a further 3 years ending in August 2010.

This partnership has seen the creation of a curriculum linked water themed programme, 'Water is Life', suitable for primary aged children. The 'Water is Life' programme covers many aspects involving water, its role in the planet, the water cycle, as well as the treatment and supply process. A key element of water conservation underpins the whole programme. This is supported by water boxes (an educational source full of simple water related experiments), information sheets and activity instructions for teachers to use as a resource at school. The programmes are available by pre-arranged school trips and are guided with the help of the Park's Education Officer.

Since its launch nearly 5,000 school children have received either the complete 'Water is Life' programme or elements of the programme contained within their visit.

2008 also saw Staunton Country Park provide a Schools Water Festival Fortnight offering all Havant and Portsmouth schools a free 'Water is Life' session. One school that participated was for special needs teenagers and provided the education team with the first opportunity to deliver the session to this audience. During the fortnight all school groups received the water trail for free and were able to participate in activities from the Water Box. There was a total of 27 school visits (750 children).

2008 saw the addition of a water element to the already established 'eco-ranger' trail at the park which is now available to school trips or birthday parties as an activity for younger children.

As part of the Hampshire Water Festival a 'Water is Life' week has been created for visitors to participate in as part of their visit to the park. 2008 was the most successful so far with 24 volunteers from the Company assisting the Park's staff allowing over 2,000 visitors to participate in a variety of water experiments and activities.



Community event supporting  
Portsmouth Water



#### Water Bottles for Schools 'Be Cool, Stay Cool, Drink Tap Water at School'

The Company has continued to promote the benefits to children of drinking water and as part of our 'Water for Health' initiative offered a drinking water bottle at the subsidised cost of 30p per bottle for every child in a local primary, infant and junior school.

The Water Bottles for Schools offer has gone from strength to strength with 30,000 delivered last year which has seen nearly 190,000 water bottles through the schools being delivered to our local children over the last five years.

#### Community Talks

Employees continue to give community talks to local schools, colleges, clubs and groups such as Age Concern, Rotary and the Women's Institute. To cope with the increasing demand a community talk team has been set up with volunteers from the Company.

#### Festivals and Fairs

The Company, once again, sponsored the Primary Schools Science Fair which is promoted by the Portsmouth and South East Hampshire Business and Education Partnership. The three-day event held within the Historic Dockyard utilising the HMS Warrior and Action Stations to house the exhibitor's stands saw over 1,200 children from local schools visiting the exhibits.

The Company demonstrations this year included water treatment and how different filters operate, the sampling process and included a short session on the need to conserve water.

### Health and Safety

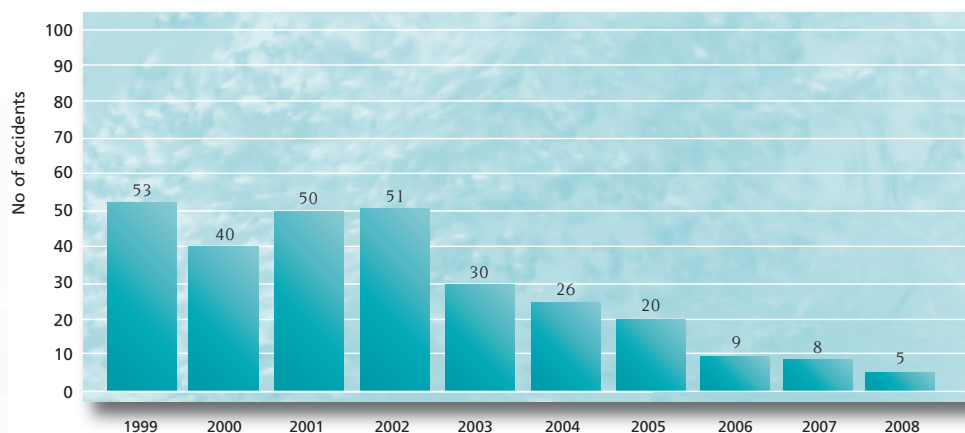
Health and safety of employees is fundamental to the success of the business and the Company is committed to achieving high standards across the organisation. It has been 5 years since the Company embarked on a mission to improve its health and safety culture and therefore the record in this area. To achieve the initial step change the Company put health and safety at the top of the agenda and from the Board down has made it a high priority.

Last year saw the Company implement a number of campaigns and initiatives, aimed at increasing staff awareness of health and safety issues.

The graph below portrays a positive picture in respect of the improvement in the Company's health and safety performance, notably a fall of over 80% in the number of total accidents to what they were in 2003. The improvement since 2003 reinforces the Company's decision to revitalise health and safety and the commitment of time and resources into that area.

Total Accidents

Graph 12



It is pleasing to report our efforts have again been recognised externally through the RoSPA Health and Safety Award Scheme. Having received a Gold award in each of the last 3 years, this year the Company applied for the prestigious RoSPA Sector award which requires a Gold award level as a minimum entry qualification. It was very pleasing to be awarded the second place 'highly commended' Sector award. This recognises the initiatives and achievements of the Management and Staff across all parts of the Business.

# 7

## Company Supply Area



Portsmouth Water has been supplying water to Portsmouth and the surrounding area since 1857. The area supplied by the Company extends through South East Hampshire and West Sussex from the River Meon in the West to the River Arun in the east encompassing 868 sq kilometres.

The Company provides high quality public water supplies to a domestic population of 657,000, as well as many important industries, large defence establishments and varied commercial businesses.

Our promise to all of our customers is 'We aim to supply drinking water of the highest quality, combining high levels of customer service with excellent value for money'.



# Advice and Information



## Helpful Advice

Visits to treatment works, talks and film shows can be arranged for school parties and local organisations. Our helpful staff are always available to give advice by contacting the address and telephone numbers given below:

**Portsmouth Water Ltd**  
**PO Box 8**  
**West Street**  
**Havant, Hampshire PO9 1LG**

### Telephone Nos.

<b>General Enquiries</b>	<b>023 9249 9888</b> (8.30 am to 4.30 pm, Monday – Friday)
<b>Emergency Service</b>	<b>023 9247 7999</b> (24 hours)
<b>Unmeasured Account Enquiries</b>	<b>023 9249 9666</b> (8.30 am to 4.30 pm, Monday – Friday)
<b>Measured Account Enquiries</b>	<b>023 9244 9090</b> (8.30 am to 4.30 pm, Monday – Friday)
<b>Water Quality Enquiries</b>	<b>023 9244 9083</b> (8.30 am to 4.30 pm, Monday – Friday)
<b>Freephone Leakline</b>	<b>0800 434 6104</b> (24 hours)

### Facsimile

**023 9245 3632**

### Website

**[www.portsmouthwater.co.uk](http://www.portsmouthwater.co.uk)**

### E-mail

**[head.office@portsmouthwater.co.uk](mailto:head.office@portsmouthwater.co.uk)**

## Information about your water supply



Site of the proposed Havant Thicket Winter Storage Reservoir



Typical wet land area

### ● Our Water Sources

Our water, of high quality, is derived from the chalk of the South Downs and is abstracted from wells, boreholes, springs and the River Itchen.

The springs at Havant and Bedhampton are thought to be the largest group of springs used for public supplies in Europe.

### ● Statistics

We serve 300,000 homes and businesses in an area covering 868 square kilometres (335 square miles) from the River Meon in Hampshire to the River Arun in West Sussex.

Every day we supply around 180 million litres (40 million gallons) of water to a population of more than 657,000 people at the lowest cost in England and Wales.

### ● Our Distribution Network

Water is supplied to our customers through a network of over 3300 kilometres of underground water mains and more than 299,000 individual service connections, all of which are continuously maintained by our distribution staff.



**Portsmouth Water Ltd**