



Portsmouth

water

Portsmouth Water Ltd



# ACTIVITY REPORT

2010/11

(Incorporating the Conservation, Recreation and Access Report 2010/11)

# About Portsmouth Water

For many years Portsmouth Water customers have enjoyed very high standards of drinking water quality and customer service, together with the lowest charges for water supply in the country.



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## Our achievements

The Company is one of the best performing in the water sector. Our performance in customer service, efficiency, and prices is measured independently and compared with other water companies.

We achieve:

- The lowest number of customer written complaints
- High levels of service for customers
- The lowest water supply charges
- The highest level of operating efficiency
- High standards of drinking water quality

## Our vision

At Portsmouth Water we recognise that to all but the very largest of our customers, we are a monopoly supplier of drinking water supply. However we have a clear vision to be:

“ **The Water Supplier of Customer Choice** ”

## Our aims

Throughout our long history of independent public water supply in South Hampshire and West Sussex we have remained focused upon the key principle of maintaining reliable water supplies to customers at prices that are affordable. That focus underpins our mission to customers which is to:

“ **Aim to supply drinking water of the highest quality providing high levels of customer service and excellent value for money** ”



## Our objectives

The Company has a well developed, focused strategy which we believe will meet the demands of customers and stakeholders. The key objectives are

- To ensure customers enjoy reliable and secure supplies meeting all water quality standards
- To maintain our standards of customer service as one of the highest in the industry
- To provide value for money by continuing to focus on operational efficiency
- Our approach to achieving our objectives will be balanced with minimising the impact on the environment to ensure we have a sustainable long term future
- Grow the business where appropriate utilising a good resource position to provide bulk supplies and trade water
- The Company will achieve returns consistent with retaining investor confidence

The strategy will be achieved by focusing on five key issues:

- Having a well developed and frequently updated long term water resources plan, which will meet the needs of the customer, through secure water supplies, whilst respecting the environment
- Putting customers at the heart of everything we do, and ensuring that they continue to receive excellent value for money
- Maintaining our asset base
- Setting goals for efficiency which out perform regulatory targets
- Maintaining a motivated workforce, whilst ensuring that the health and safety of employees is given the highest priority

The progress of the Company is measured by a number of key performance indicators (KPI) and these are highlighted in the following sections.

## Facts and Figures

We serve approximately 302,000 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 660,000 people at the lowest cost in England and Wales.

Water is supplied to our customers through a network of over 3,270km of underground water mains and more than 302,000 individual service connections.

We have:

- 21 Water Sources
- 19 Water Treatment Works
- 32 Service Reservoirs
- 24 Booster Pumping Stations
- 3,270Km of Water Mains
- 224 Employees
- 660,000 Population



# Introduction

**Welcome to our annual Activity Report which sets out the standards of service we provided to our customers in the past year, 2010/11. This year we have added to our Activity Report summary information on standards of service.**



As a society we are becoming more aware of health and safety, climate change, sustainability and the environmental impact of our activities. We recognise as a responsible company the important role we play. We seek both to enhance the

environment and to avoid any adverse impacts from our activities. Throughout this report we highlight the relationship between our activities and the environment and provide an insight into the way we approach the challenges we face and the progress we are making.

Our staff, and the methods of work they employ, are essential in successfully supplying drinking water

of the highest quality, combining high levels of customer service with excellent value for money. I am therefore delighted to report for the sixth year in succession that RoSPA have recognised our commitment to safety in all aspects of our business and awarded a Gold Medal in Occupational Health and Safety to us.

I am delighted once again 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. Ofwat, the Water Industry Financial Regulator through its independent service incentive mechanism survey, via customer feedback, placed Portsmouth Water as second out of all the Water and Sewerage Service Companies. A significant achievement considering this excellent service is delivered at the lowest level of water supply charges in England and Wales. The service provided to customers qualifies for the highest possible rating by Ofwat.

“ 99.97% of our water samples meet the standards designated in the Water Quality Regulations ”

Our own customer feedback always highlights the importance placed upon safe, high quality drinking water. In 2010 the high standards of service provided were matched by high water quality standards with 99.97% of our water samples meeting

the standards designated in the Water Quality Regulations.

During the year the Company spent approximately £10m on the maintenance of operational assets to ensure customers continue to receive a stable level of safe, secure and reliable water supplies. This included nearly £5m on renewing old water mains and services. In undertaking our programme



of mains renewals we have listened to customer feedback and worked hard to improve customer communication about our works. We also promoted greater use of “no dig” techniques to minimise the amount of excavation thereby reducing the disruption to customers and local road users.

Unfortunately the planning application for a new winter storage reservoir at Havant Thicket has been delayed by revisions to the Company Water Resources Management Plan. The latest update to our Draft Plan suggests that development of the reservoir is not likely to commence until 2025 with completion expected by 2035. The Company remains confident that the provision of a reservoir at Havant Thicket provides a robust, sustainable and cost effective part of the solution to meeting the increasing demands on our water supply infrastructure in the longer term. We are committed to a major review of the key assumptions for our next Draft Plan due in 2014. It is possible that climate change, the need to reduce abstractions at the River Itchen, and the impact of the Water Framework Directive may well have an

influence upon that Plan and possibly the timing of the need for the reservoir but this is unlikely to be confirmed until 2015.

“ *the Company spent approximately £10.0m on the maintenance of operational assets* ”

Portsmouth Water is an important part of the community it serves and strives to contribute by supporting education in local schools, promoting the benefits of safe and secure drinking water with the need to use water wisely and efficiently whilst minimising the environmental impact. The Company sponsored the Primary School Science Fair at the Royal Naval Dockyard, Portsmouth and contributed to the Hampshire Water Festival.

This report highlights the activities of the Company and its employees during 2010/11. I hope that you will find it informative.

N.J. ROADNIGHT  
Managing Director

# Highlights and indicators 2010-11

## Highlights

- Key aspects of service qualify for the highest possible rating by Ofwat
- Received RoSPA Gold Medal Award for the sixth consecutive year
- Lowest level of written complaints per 10,000 properties of any water company in England and Wales
- Maintained leakage within target level despite increased bursts caused by the coldest winter for many years
- Maintained the number of properties at risk of receiving low pressure at only 66 properties, equivalent to approximately 1 in every 4,600 properties supplied
- Entered into an Educational Partnership with Staunton Country Park for a further three years
- Took part in the Hampshire Water Festival at Staunton Country Park attracting 12,000 visitors

## Indicators

Ofwat monitors the performance of all water companies and makes comparison across the industry. Once again our customers continue to receive a high level of service in terms of water pressure, interruptions of supply, responding to billing queries, dealing with complaints, meter reading, answering the telephone and maintaining assets in a stable condition. Our performance on the key Ofwat indicators is summarised below.

Performance review based upon the last five years.

✓ stable or improving

~ variable trend

✗ deteriorating trend

### CUSTOMER

Drinking water compliance with prescribed standards	✓	99.97%
Water supply restrictions	✓	Nil
Properties at risk of low pressure	✓	66
Properties with unplanned interruptions lasting more than 12 hours	✓	Nil
Percentage of billing queries answered in 5 days of receipt	✓	99.99%
Number of written complaints per 10,000 connections	✓	7
Percentage of written complaints responded to within 10 days	✓	99.50%
Meters read at least once in the year	✓	99.99%

## ENVIRONMENT

Compliance with abstraction licences	✓	100%
Compliance with discharge licences	✓	100%
Pollution incident	✓	Nil

## EMPLOYEES

Employee turnover	✓	3.6%
Total accidents	✓	6

## ASSET CONDITION

Leakage from supply network	✓	29.6 MI/d
Bursts per 1000km	✓	100
Mains renewed	✓	18km

## SUPPLY

Annual average treated water distributed	✓	180.9 MI/d
Average daily consumption	✓	167 Ltrs

# Customer Service

**Portsmouth Water is proud to have served the local community for over 150 years. We aim to provide water of the highest quality whilst providing a continuous supply at the lowest price in the country.**

With no hosepipe ban for over 35 years, an average bill of £88 compared with the industry average of £165 and a strong service ethic we aim to be the water company that customers would choose, if they had a choice.

## Service Standards

Given that the vast majority of our customers have no choice as to who supplies their water, we support Ofwat's desire to independently survey customers regularly to measure and compare levels of service within the industry.

Over the last financial year hundreds of customers from all 21 water and sewerage companies have been independently surveyed, following contact with their water supplier; to assess their satisfaction with the way the Company dealt with their issue.

Pleasingly, we were joint 2nd in the industry, customers being especially appreciative of our lack of automation in our telephone answering, all calls normally being answered by a locally based member of staff.

## Billing System

Whilst customers rate our service highly, increasingly we are having requests for more billing information and the ability to do things, such as signing up for a Direct Debit, over the telephone. Accordingly, we are in the process of installing a new billing system to allow us to provide high levels of service and maintain holistic customer records into the future.

The project, is due to complete early in 2012. Whilst we are looking forward to the benefits that it will deliver; such a project requires significant levels of work to ensure that the transition is smooth and we are working hard to deliver a seamless change.



## Key Account Management

Over recent months, we have established a key account management role within our Customer Services Department. The Account Manager is a named point of contact for all billing and operational matters, who will liaise with the customer and internally to ensure that issues and queries are quickly and effectively resolved. Whilst principally designed with larger customers in mind, this service is open to anyone that wishes to benefit from it.



## Complaint Handling

For many years we have been working hard to ensure that we maintain our record of having the lowest number of written complaints, per 10,000 properties, within the industry.

Annually, the Consumer Council for Water; the independent water consumers' representatives, visit our Head Office to undertake an assessment of our written complaint answering. This year all responses to the 25 complaints reviewed were classified as good, with praise for the quality of company responses.

Written complaints are taken very seriously and each one helps us to review and improve processes and change policies where required. All complaints are reviewed and discussed monthly by our Complaints Review Panel, which is always chaired by a Director of the Company.

## Training

We see training as a key component in providing high levels of service. This year we have put all of our staff that deal with billing queries through training in operational activities so that they have a much better overview of what happens in other parts of the business.



## New Connections

In 2010/11 the Company connected 1,353 new properties for customers, compared with 1,014 in 2009/10. This was significantly below the ten year average of 1,797 per annum reflecting the slow down in the house building industry.

## Free Supply Pipe Replacement

When leaks are identified on a supply pipe, domestic customers are 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 251 free repairs or replacements this year. Where the customer arranges for replacement of the supply pipe under their home insurance, the Company pays the insurance excess, making replacement more economical. In 2010/11 27% of customers, suffering a supply pipe leak took advantage of this offer.

# Community Engagement

**Portsmouth Water has a long history of independent public water supply in South Hampshire and West Sussex. We are proud to have served the local community for over 150 years and recognise as a responsible company the important impact we have on the population of 660,000 living in our area. We value the opportunity this provides to work with our customers, school children and local communities.**

During the year we continued to work with local communities by promoting water efficiency, educating children and supporting environmental projects. Some of the activities we have been involved in are described in more detail below.

## Water Efficiency

Water efficiency is of paramount importance to the environment and sustainability of our service to customers this is reflected throughout our community activity. Ofwat the Water Industry Regulator has recently set formal efficiency targets and in order to exceed these targets we have recently appointed a dedicated Water Efficiency Officer to develop a proactive approach with our customers.

In 2010/11 we introduced a number of new water efficiency initiatives including:



### Save Water Save Money

We entered into a partnership with the website provider "Save Water Save Money" to promote water efficiency and provided customers with free water efficiency devices such as save-a-flush bags, shower timers, tap insets and flow regulators. Contacts with the website resulted in nearly 1,000 products supplied to customers.

### Littlefoot Campaign

In conjunction with other water companies and Sainsbury's Stores the Company endorsed a water saving information pack incorporating a save-a-flush bag which was distributed to 18,666 customers in the Company's area.

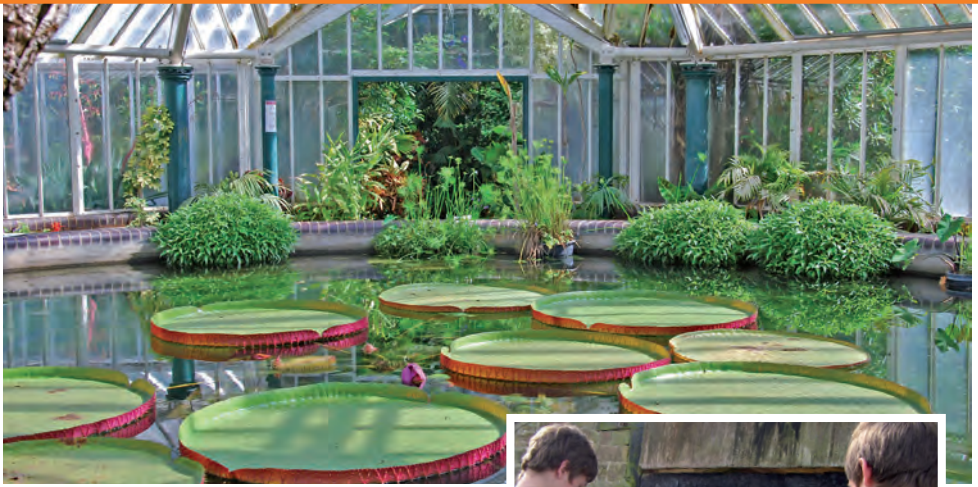
### Meter Welcome Pack

The meter welcome pack was improved with the inclusion of a shower timer and distributed to 3,611 customers. The pack ensures customers are aware of the advantage of saving water, including the financial benefits.

### Community Talks

A total of 50 community talks were given which included advice upon water efficiency and the provision of free water saving devices.





### Shower Timer Mail Shot

One thousand domestic customers received a free shower timer and leaflet providing additional water efficiency information.



### Save-a-Flush Bags

In 2010/11 we improved the promotion of save-a-flush bags and distributed approximately 26,000 “save-a-flush bags” to individual customers, councils and schools compared with 11,800 in the previous year.

The Government’s Water Industry Regulator Ofwat has set water efficiency targets for all water companies together with guidance for calculating savings derived from water efficiency activities. The target set by Ofwat for us is an average of 0.29 MI/d each year for a five year period. In 2010/11 we achieved a saving of 0.25 MI/d and confident the overall target will be met as we continue to enhance our water efficiency activities.



## Working With Staunton Country Park

We are pleased to have extended our education partnership with Staunton Country Park for a further 3 years. The partnership, which involves funding a full time education post at the Park and supporting a number of Park activities, aims to promote water efficiency, as well as delivering a “Water is Life” programme to schools which covers the water cycle, supply and treatment as well as water conservation. Both organisations are committed to deliver a variety of fun and interesting activities to spread the word that everyone can do something to save water now and save the environment for tomorrow.



## Hampshire Water Festival

Hampshire Water Festival held at Staunton Country Park, an important community activity in 2010, saw more than 12,000 visitors over a single weekend. The Company contributed to the overall success of the event by assisting with the management, production of publicity material and promotion of the event across the community including utilising water bills for advertising. Many of our staff assisted in delivering a water efficiency message in an entertaining way for visiting families over the weekend event.

## Drinking Water Bottles

As part of our "Water for Health" initiative, which promotes the benefits to children of drinking water, for the tenth year we have made available drinking water bottles at the subsidised cost of 30p per bottle to every child in a local infant, primary and junior school. This initiative remains very popular with 30,000 delivered last year. Overall a total of nearly 260,000 water bottles have been delivered to local school children over the past ten years.



## Horizon Angling Club

We have been actively involved with various charitable bodies within the local area for many years. One such Club is the "Horizon Angling Club". The Club promotes the sport of angling for the disabled and is supported by Portsmouth City Council.

The objective of the Club is to get people with a physical disability from Portsmouth and the surrounding area to use their recreational and leisure time in the pursuit of angling.

Following a request from the Club we offered them sole use of our West Lake. We now have a thriving community angling club for the disabled at our Head Office.

## The Blendworth Centre

The Blendworth Centre was set up in the early 1980's to help local people with learning difficulties. Initially with just eight youngsters the Centre started by looking after private gardens with the help of Government subsidies. There have been difficult periods over the years when the subsidies were reduced, however the Centre has managed to secure contract gardening work which contributes greatly to their annual revenue. The Centre now employs 12 paid members of staff and has 38 people, with learning difficulties regularly attending the Centre on either a full or part week basis with ages ranging from young to middle aged.

The maintenance of the grounds at our Head Office in Havant and other sites is carried out by the Blendworth staff.



## Wateraid

Over the last 30 years donations from our customers, together with fundraising efforts of our employees have raised £400,000 for WaterAid.

Water Aid uses practical solutions to provide clean water; safe sanitation and hygiene education to the world's poorest people across 26 countries. Just £15 can enable one person to access a lasting supply of safe water; improved hygiene and sanitation. Our customer and employee contributions made a significant contribution to Water Aid's success.

The Company has also:

- Co-sponsored the **annual Schools Science Fair** with the Employee Business Partnership which has over 2,000 Portsmouth school children participating in a science based activity day at the Royal Naval Dockyard
- Co-sponsored the **Portsmouth in Bloom competition** run by Portsmouth City Council
- Supported local schools such as **Warblington School**, in activities, such as **science days**
- Engaged with our customers through local **community groups by offering free talks** about our work. This year we carried out over 50 community talks

# Employees

**Since privatisation of the water industry the Company has faced many challenges. In recent years, climate change, sustainability and the environmental impact of our activities have been successfully managed against a backdrop of increased customer expectation. Our high level of performance is testament to the dedication and commitment of our employees in meeting customer expectation in an increasingly challenging market.**

The Company employs 224 people and strives to recruit and retain the right people key to the successful performance of the business.

The Company is firmly committed to the development of its employees and believes they all should have the opportunity to reach their full potential. As a result a number, during the year, have undertaken Degrees, HNC's, and 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 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's involvement with the Institute of Water. The Institute of Water 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 be members of the Institute of Water and gain the benefit for both their personal and professional development by attending these events.

Staff Turnover, excluding retirees was 3.6% in 2010 (2009: 6.8%) considerably less than the national average of 6.1% (Source: CIPD: Annual Survey Report 2010).

Total absence (days per employee per year) was 3.86. This figure compares with 4.92 for the previous year and well below the national average of 7.7 (Source: CIPD: Annual Survey Report 2010).

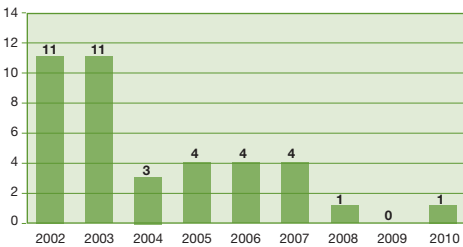
## Health and Safety

In 2002 and 2003 the Company recorded 51 and 30 accidents respectively with a reportable accident rate of 11 in each year. It was decided that these statistics along with the overall Health and Safety performance were not acceptable. Led by the Board, the Company embarked on a mission to improve its health and safety performance. Health and Safety was put at the top of the agenda and resources were allocated to ensure the performance in this area improved.

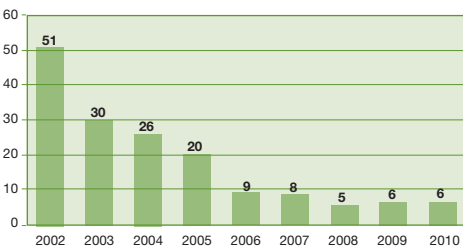
It is evident from the statistics provided below that significant improvements have been achieved. A continuous and sustained health and safety awareness campaign has resulted in a safer working environment where safe working has become a routine of our daily operations ensuring a safe working environment for both our employees and visitors alike.



### Reportable Accidents



### Total Accidents



Continuous improvements in Health and Safety are essential, and our success in this regard has once again been recognised by being awarded the GOLD MEDAL in Occupation Health and Safety by RoSPA. The Gold Medal is awarded for companies that have achieved the Gold Award standard for 6 consecutive years. This Award is a testimony of continued high level performance by the Company in respect of Health and Safety.

# Sustainable Future

## Sustainability

Innovation and improved working practices will be required in order to further improve the sustainability of services we provide to our customers. In 2010/11 the Company was actively engaged in the national debate about how to achieve a more sustainable future by responding to the Department of the Environment and Rural Affairs consultations on Water and Shaping the Nature of England.

The current national approach to water industry funding and regulation effectively encourages companies to adopt short term solutions which can be delivered quickly using traditional engineering or end of pipe solutions. We believe by adopting longer term planning cycles, with more flexible and different drivers, the Government could actively encourage companies to take a more sustainable approach.

Such an approach could include the creation of national or regional drivers for regulators and industry which encourage options appraisal to consider more natural solutions to address water quality, flood defence and water storage issues. With the aim of enhancing the capacity of natural systems and catchments to address problems

in a more natural way, thereby benefiting the environment. More natural solutions could include; habitat restoration programmes in catchment source areas, bio-engineering solutions and adapting to climate change by storing winter rainfall within the catchment.

The Company has also suggested that the Government review the manner in which charges are made for water abstraction. Proposing that charges could be based on the volume of water abstracted, as opposed to the existing licensed volume. This would provide a clear incentive to water companies to reduce abstraction wherever practicable. The Company suggested licensing arrangements could be made more flexible to provide mechanisms and incentives to manage abstraction in a way which will help to minimise impacts on the environment.

We look forward to working in an open and positive way with our regulators and other stakeholders to achieve sustainable long term solutions to the many challenges that the Company faces in the years ahead.







## Sustainable Water Resources:

The EU Water Framework Directive and the Habitats Directive Review of Consents have required the Company to conduct environmental studies into the impact of Company abstractions on ecology. The rivers implicated in the Company's area are the Rivers Hamble, Wallington, Ems and Lavant, as well as the estuarine reaches of the Hamble, Meon, Wallington and Titchfield Haven National Nature Reserve. During 2010/11 the Company appointed a specialist consultant to assist with the work and agree the approach with the Environment Agency. Contracts for detailed studies will be awarded soon and will include a two year programme of ecological and hydrological monitoring and modelling. The work will assist the Environment Agency in determining revisions of abstraction licences to protect local ecology.

## Carbon Management Strategy

2010/11 was the first year of the UK's Carbon Reduction Commitment Energy Efficiency Scheme (CRC). The Company implemented a number of improvements to carbon emissions monitoring in order to ensure compliance with the scheme. The Company also established an internal Sustainability Group comprised of representatives from across the business, further embedding carbon and sustainability into Company activities.

The latest Water UK Sustainability Indicators report confirms that Portsmouth Water has maintained its position as the lowest carbon emitter per megalitre of the water companies in England and Wales, although there was a slight increase in total emissions. The Company is conducting feasibility studies into the potential for small to medium scale renewable energy generation, with conclusions expected in early 2011/12.

# Environment

**Portsmouth Water operates within an environmentally sensitive area. We face major challenges at a time when customer expectations are also rising. The requirements of new European legislation provide further challenges, in addition to climate change, extreme weather events and the day to day operating challenges of supplying water to 660,000 people, while minimising our environmental impact.**

## Water Abstraction

Water is a precious resource which should be used wisely. Taking water from rivers and aquifers for public supply has the potential to impact the environment. All of the Company abstractions are licensed by the Environment Agency, who take into consideration the potential effects when determining licence conditions.

In 2010/11 the Company embarked upon further work aimed at ensuring the long-term sustainability of our abstractions.



## Post Implementation Monitoring

In the future abstraction licences will become renewable provided we are able to demonstrate that habitats are not adversely affected. This will be achieved by assessing the abstraction effects at six of our Hampshire sites potentially affecting the following locations:

- Solent and Southampton Water (Special Protection Area)

- Solent Maritime (Special Area of Conservation)

- Portsmouth Harbour (Special Protection Area)

## Water Framework Directive – River Basin Management

The Directive has resulted in the Environment Agency preparing a programme of investigation to restore sustainable abstraction by delivering good ecological and chemical status to all waters through three stages of measures by 2015, 2021 and 2027. The proposals resulting from the investigations are required to be cost beneficial.

## Habitats Regulation

These Regulations are aimed at protecting habitats and species designated by European legislation. The Company has continued discussions regarding the Gaters Mill Abstraction licence from the River Itchen with the Environment Agency and Southern Water (who also abstract water from this river) with the purpose of agreeing amendments to the licensed abstraction.

## Water Resources Management

Every five years the Company has a statutory obligation to publish a Draft Water Resources Management Plan for public consultation which demonstrates how we plan to meet customers' water supply needs over the following 25 years. Our current draft plan identified a future deficit in supplies and proposed a twin track approach of demand management together with resource development.

Our plan for 2010-2035 takes into consideration the environmental impacts of resource management and includes the following measures:

- *Protecting our existing water sources from pollution, particularly from nitrates through our catchment management activities*
- *Encouraging and enabling our customers to use water wisely*
- *Reducing the total amount of water taken from the Havant and Bedhampton Spring source together with maintaining a minimum residual flow to Langstone Harbour*

The final planning solution proposed includes the following elements:

- *A compulsory metering programme utilising automatic meter reading (AMR) technology over a 15 year period from 2015 to 2030*
- *A programme of leakage savings delivering a 3Ml/d leakage reduction between 2015 and 2020*
- *The construction of a Washwater Recovery Plant at Farlington Water Treatment Works in 2017/18*
- *The development of Havant Thicket Winter Storage Reservoir filled by surplus yield from the Company's Havant and Bedhampton Springs between 2025 and 2035*

A prescribed consultation process which includes the public, interested bodies and Environment Agency has been followed concluding in March 2011 with the submission of a Draft Final Water Resources Management Plan to the Secretary of State for Defra. The Secretary of State is now considering the plan and in due course will direct us either to publish the Plan, provide further information or require a public examination of the Plan.



## Conservation and Biodiversity

We are committed to ensuring compliance with all environmental legislation and obligations, carefully assessing the impact of our activities, especially construction projects, to ensure the impact of such schemes is minimised. We strive to ensure our staff are aware of detailed legislation and in 2010 ran courses on specialist topics such as water voles and otters. Staff learnt about the life cycle and habits of these endearing creatures and how to avoid causing harm throughout their daily work activities.

As part of our wider commitment to improving environmental quality, we have responsibility to conserve and, where possible, enhance biodiversity on our landholdings. The Company owns and manages 44 operational sites throughout the region, including 19 water treatment works. Sites are located in a variety of habitats including chalk downland, river catchments and coastal margins. In 1999 we appointed an independent ecologist to review the habitats and species present on all operational sites. This information was used to produce a Biodiversity Action Plan with site specific advice and it is currently under review to ensure it remains appropriate and up to date.



A site of Special Scientific Interest (SSSI) extends on to the Itchen Water Treatment Works and a number of sites owned by us contain Sites of Importance to Nature Conservation (SINC). We have liaised with Hampshire County Council to provide information for their database on the status of SINC's.

In 2010/11 we provided funding to two community wildlife partnership projects to support water vole conservation on the River Meon in Hampshire and on the Selsey peninsula in West Sussex. The Company is an active corporate member of the "Hampshire and IOW Wildlife Trust" as well as the "Water for Wildlife" organisation.



**Hampshire & Isle of Wight  
Wildlife Trust**

*Protecting wildlife. Inspiring people.*

**water for wildlife**



## Improving the Habitat at Highwood Reservoir

In preparation for a construction project at our Highwood raw water reservoir, near our abstraction site on the River Itchen, it was necessary to remove young trees and gorse. We took the opportunity to complete this

work in accordance with our biodiversity plan creating large open areas encouraging a more diverse woodland edge habitat with sunny slopes to encourage plants, reptiles, butterflies and birds.

## Recreation and Access

**Staunton Country Park:** The proposed Havant Thicket Winter Storage Reservoir site is owned by the Company but managed through an agreement with Hampshire County Council as part of the Staunton Country Park. The 160 hectare site includes a public bridleway and network of permissive paths through woodland and grassland, linking the Country Park to the Forestry Commission land at Havant Thicket to the north.

In 2010/11 we extended our education partnership with Staunton Country Park for a further 3 years. Both organisations are committed to delivering a variety of fun and interesting activities to spread the word that everyone can do something to save water now and save the environment for tomorrow. The partnership aims to promote water efficiency and to deliver a curriculum linked “Water is Life” programme to schools which incorporates the water cycle, water supply and treatment, as well as water conservation.

In addition to supporting an education officer post we provided £89,000 funding to help deliver new projects at the park including:

- *A water themed toddler trail around the farm*
- *Creation of a water zone*

**Highwood Reservoir:** This raw water storage reservoir site owned by Portsmouth Water is located within the popular Itchen Valley Country Park operated by Eastleigh Borough Council. The site is not fenced and is open to the general public, with a circular permissive path around the reservoir. In 2011 scrub clearance work has helped to open up the circular path and improve the habitat for wildlife.

At other company owned sites there is limited access via public footpaths and bridleways. Special arrangements have been made for access at:

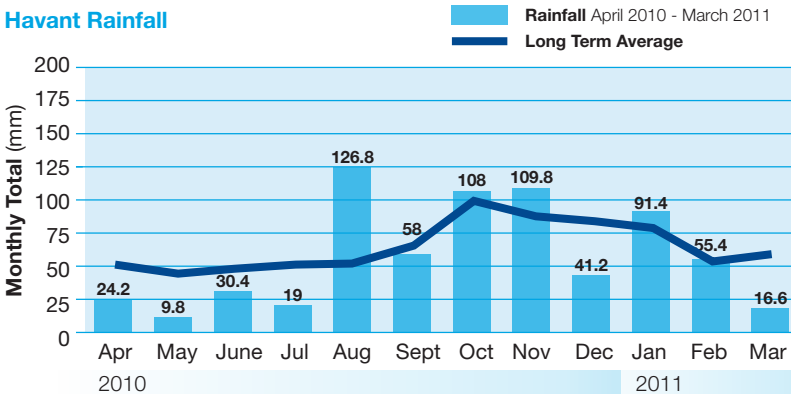
- *The Itchen Water Treatment Works to enable schools, universities and other organised groups to participate in educational visits.*
- *The Clanfield Service Reservoir site for the Hampshire Astronomical Society who organise a number of visits for the benefit of its members. Small groups of members of the public are able to visit by prior arrangement with the Society.*

# Water Supply

## Rainfall

The Company has recorded rainfall at its Havant Office for over 120 years. Last year's rainfall was characteristic by its variable nature when compared with the long term average with six month's rainfall considerably less than the long term average. In the year 690 mm fell in comparison with a long term average of 756 mm.

### Havant Rainfall

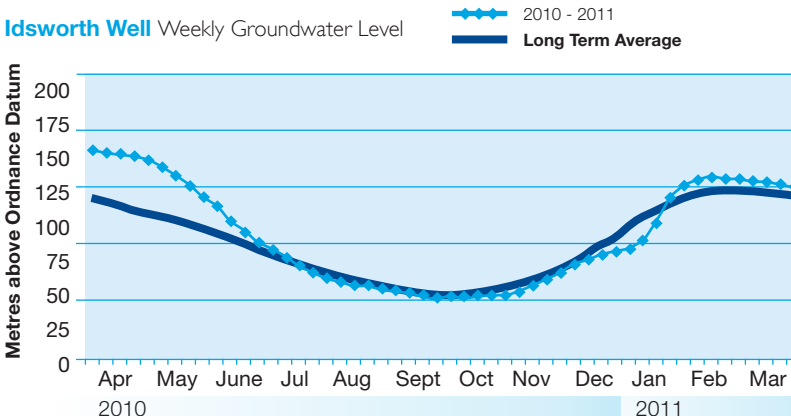


## Groundwater Levels

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.

Despite the slightly less than average annual rainfall and variable rainfall pattern groundwater recharge resulted in levels marginally above the long term average in April 2011 ensuring adequate water availability for the summer.

### Idsworth Well Weekly Groundwater Level



## Abstraction

Abstraction from the Company's various sources in 2010/11 was as shown in the table below:

Source	Abstraction Type	Licensed Annual Abstraction (Million Litres)	Actual 2010/11 Abstraction (Million Litres)
Northbrook	Boreholes }	7,487	5,247
Lower Upham	Borehole }		88
West Street	Boreholes	3,327	3,133
West Meon	Boreholes	166	21
River Itchen	River	16,638	8,380
Maindell	Wells & Adits	2,491	10
Soberton	Wells & Adits }	3,294	822
Newtown	Borehole }		14
Worlds End	Boreholes	8,296	3,746
Lovedean	Boreholes	4,148	2,142
Havant & Bedhampton	Springs	35,770	17,631
Walderton	Boreholes	9,955	7,874
Woodmancote	Boreholes	1,364	0
Fishbourne	Wells	3,741	426
Funtington	Wells & Adits	2,920	1,598
Lavant	Boreholes }	9,950	5,920
Brickkiln	Boreholes }		1,149
Eastergate	Well/Borehole }		2,308
Westergate	Boreholes }		3,069
Slindon	Boreholes }	10,358	617
Aldingbourne	Boreholes }		2,239
<b>TOTALS</b>		<b>119,905</b>	<b>66,434</b>

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

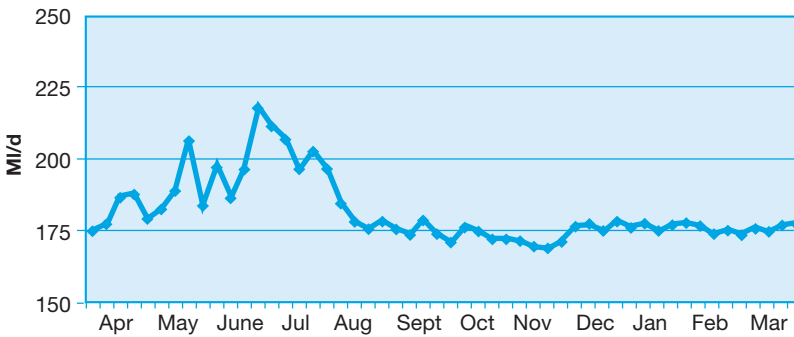
The nature of the chalk aquifer of the South Downs ensures that at many sites high quality water is produced which requires only minimal treatment. Some chalk sources are at risk of cryptosporidium oysts being present in the water which require enhanced treatment by membrane filtration.



## Treated Water Distributed

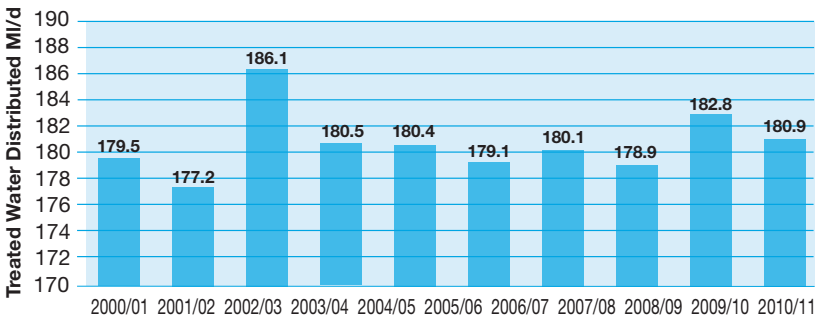
### Weekly Treated Water Distributed

2010 - 2011



The annual average treated water distributed fell slightly from 182.8 MI/d in 2009/10 to 180.9 MI/d in 2010/11. The volume of water distributed is influenced by many things, including the weather: The annual figure of 180.9 MI/d compares closely with the ten year average of 180.5 MI/d.

### Annual Average Treated Water Distributed





## Leakage

Despite overall leakage levels for the year rising marginally from 28.7 MI/d in 2009/10 to 29.6 MI/d in 2010/11 we have again met our leakage target set by the Water Industry Regulator Ofwat.

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 utilising new technologies to improve detection
- The Company's continued drive to replace old corroded water mains and services
- The introduction and enhancement of pressure control to reduce excessive pressures in mains and services



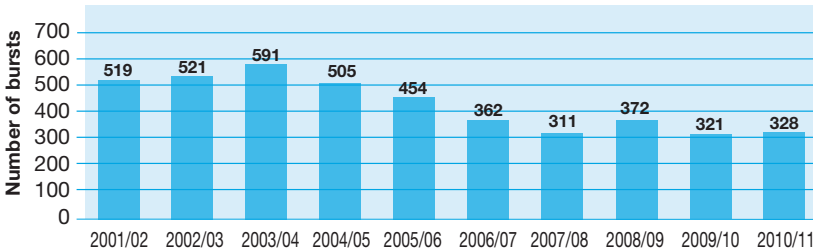
The Company will continue to make reductions in leakage where they are shown to be economic.

## Burst Mains

The number of burst mains experienced in 2010/11 was 328, compared to 321 that occurred in 2009/10. The majority of the bursts occurred on 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 2010 when bursts increased from 20 to 65 per month due to the unusually severe weather experienced in the south of England.

The Company continues to target mains for renewals based on the impact of bursts on customers. The graph below indicates the overall reduction of bursts as a result of the renewals programme. However severe weather demonstrates the importance of maintaining mains renewals at an appropriate rate.

### Burst Mains



# Water Quality

**Water quality regulations are in place to ensure water supplied to customers is safe to drink. There are 58 standards in the regulations covering microbiological, chemical and physical parameters. In order to monitor water quality from source to tap, the Company area of supply is divided into zones serving not more than 100,000 people from single sources. Customers may view water quality results for the zone they live in by visiting the Company's website.**

In addition to publishing the information on the website the results are supplied to the Drinking Water Inspectorate who produces an annual report which contains a commentary on each company. The report may be viewed on the DWI website [www.dwi.defra.gov.uk](http://www.dwi.defra.gov.uk).

## Water Quality Standards

In 2010 the Company carried out a total of 35,379 determinations in samples taken at treatment works service reservoirs and customer taps. Of these the overall mean zonal compliance, which is the representation of overall drinking water quality in customers' properties, as reported to the DWI, was 99.97% (99.98 in 2009).

The water quality regulations monitor 58 standards to ensure water quality meets the standards across all stages of our processes, from source to the customers tap. The results grouped by the DWI to reflect the stages of the process for 2010 are as follows:

	% Compliance
Process Control	100.00
Disinfection Control	100.00
Distribution Maintenance	99.74
Service Reservoir Integrity	100.00
Domestic Water Systems	99.92
<b>Overall mean zonal compliance</b>	<b>99.97</b>





The specific compliance groups are explained in more detail below to provide an understanding of water quality monitoring from source to tap:

### **Process Control**

Process control quality compliance is based upon a selection of parameters which are in general terms, controlled by the processes in place at water treatment works. The focus is on chemical parameters. In 2010 100% of the samples taken were compliant.

### **Disinfection Control**

Disinfection control quality compliance is based upon a selection of parameters which demonstrate the effectiveness of disinfection and pathogen removal. Microbiological standards are of particular importance and based upon the presence of coliforms a highly ubiquitous group of bacteria which are not normally pathogenic and which make excellent indicator organisms. In 2010 100%, of the samples taken were compliant.

### **Distribution Maintenance**

Distribution maintenance quality compliance is based upon a selection of parameters to reflect the age, condition and maintenance standards of water mains. In 2010 99.74% compliance was achieved. There was just a single compliance failure which was traced to a customer's deteriorating domestic water pipe.

### **Reservoir Integrity**

Reservoir integrity quality compliance is based upon a selection of parameters to reflect the hygienic status of service reservoir and includes microbiological analysis. In 2010 100% of the samples taken were compliant.

### **Domestic Water**

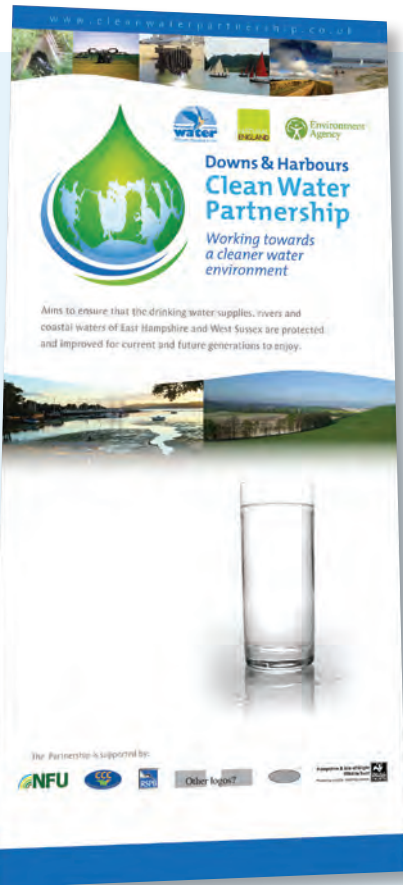
Domestic water quality compliance is based upon a selection of parameters to reflect the design and condition of customers' domestic water systems and includes microbiological analysis. In 2010 99.92% compliance was achieved. The microbiological parameter identified 6 samples with exceedence of the coliform indicator at customers' taps. Because coliform occurs 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.

In all of the six failures, the customer's kitchen tap was identified or suspected of being the source of the contamination.

## Other Quality Issues

Membrane plants (for the removal of oocysts) are operating at 5 of our treatment works and during 2010, operational and compliance samples were taken for cryptosporidium analysis from the final treated water from all our works and none contained any cryptosporidial oocysts.

in 2010/11 the Company continued operating a Water Safety Plan covering all identifiable risks from source to tap known as the Drinking Water Safety Plan. The Plan has been audited by the Drinking Water Inspectorate.



2009 saw the launch of the Downs and Harbours Clean Water Partnership, a forward thinking initiative formed by Portsmouth Water, Natural England and the Environment Agency. The unique Partnership has been set up to tackle diffuse water pollution issues affecting the quality of ground, surface and coastal waters within the Portsmouth Water supply area.

The Clean Water Partnership's focus is on reducing inputs of nutrients, particularly nitrates, to the water environment. The project is working to:

- Protect and improve the water quality of groundwater sources used for public water supply
- Reduce algal growth in Portsmouth, Chichester, Langstone Harbours and River Hamble
- Reduce pressures on the ecology of local rivers such as the Hamble, Meon, Wallington, Ems and Lavant

To help achieve its goal in 2010/11 the Partnership offered confidential services and support to farmers and landowners. These services included management plans for nutrients, manure and soil as well as workshops, one-to-one consultations and farm demonstrations of best management practices.



## Enquiries

Enquiries 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.

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

# Infrastructure

**The Company owns and operates a range of assets in order to abstract, treat and distribute water to its customers. The standard of water treatment has increased over the years requiring more sophisticated technology and plant to meet these increasing standards. The relatively long life of our assets requires a well planned and managed programme of maintenance to sustain stable levels of service to our customers.**

The Company has embarked upon a five year programme of maintaining critical assets. Capital expenditure in the year to 2011 was £9.6m and included £5.0m on mains renewals. Feedback on our customers' priorities from local research included the need to provide safe and secure

supplies with effective leakage control. In the last five years we worked to achieve these aims. In the past year we have with the help of our staff improved the condition of many assets securing safe supplies whilst minimising the impact on the environment.

## Local Mains Renewal

Our underground pipe network is around 3,270km long, and during the past ten years we have worked hard to reduce the impact of bursts upon our customers by targeting mains for renewal. Despite the extremely cold winter of 2010/11 the level of bursts has been relatively low demonstrating the effectiveness of a long term mains renewal strategy.

During the year the Company continued to target mains for renewals and replaced 17.9km of mains and associated service pipes. The long term benefit of mains renewals is sometimes

less obvious to our customers who on occasions suffer the short term

inconvenience of our construction activities. In response to this the Company increased the length of mains replaced by "no-dig" technology in 2010/11 to approximately 4km. The process minimises the amount of excavation and thereby disruption to customers and road users.



## Security Improvements

Resilience of critical utility assets to acts of terrorism has been recognised by the Government Department for Environment Food and Rural Affairs (DEFRA) who issued advice notes to the water industry providing guidance upon securing assets that could affect service to customers. During the year the Company completed schemes maintaining security of reservoirs and water abstraction sites.

## Flood Resilience

Major flooding events in the summer of 2007, in Gloucester, Yorkshire and other parts of the UK resulted in Sir Michael Pitt under Government direction undertaking a major investigation into the resilience of the Country's infrastructure to flooding. The recommendation to the water industry has formed the basis of our assessment of the resilience of the Company's infrastructure to floods. Feedback from our customers supports the need to maintain constant supplies. During the year we have embarked upon a scheme to improve flooding resilience at four water treatment works and the work is now nearing completion.



## Water Treatment Works and Pumping Station Maintenance

During the past year the Company continued a programme of maintaining critical assets replacing operational elements of plant in order to maintain stable service to our customers. Interruptions to customers' supplies from plant outages are one of the lowest in the industry and reflects our ongoing commitment to asset maintenance. Over the next five years we will be spending approximately £10.5m on maintaining water treatment works and pumping stations.

During the year we commenced work on a scheme at our River Itchen Water Treatment Works to control the growth of algae in raw water abstracted from the river and stored prior to treatment and subsequent delivery to our customers. The scheme consists of covering the bankside raw water storage reservoir and elements of the treatment works with a roof preventing sunlight from reaching the water and thereby preventing the growth of algae. The scheme will ensure the water treatment works maintains stable water quality complying with the water quality regulations.



## Havant Thicket Winter Storage Reservoir

The planning application for a new winter storage reservoir at Havant Thicket has been delayed by revisions to the Company Water Resources Management Plan (WRMP). The latest update to our Draft Plan was published on 16 March 2011 and suggests that development of the reservoir is now not likely to commence until 2025 with completion expected by 2035. The Company remains confident that the provision of a reservoir at Havant Thicket provides a robust, sustainable and cost effective part of the solution to meeting the increasing demands on our water supply in the long term.

A significant amount of work has already been completed in preparation for the planning application:

- An extensive public consultation process was completed in 2008 and used to inform the Outline Plan for the reservoir: A copy of the plan is available on the project website along with a report on the consultation.
- The Environmental Impact Assessment scoping was completed and published on the website. Meetings have taken place with the Local

Planning Authorities and the Environment Agency to agree what information will be required to support the planning application.

- Five years of ecological survey work has been completed on site and work is ongoing to finalise the survey reports. A comprehensive vegetation survey has also been undertaken.
- Traffic surveys were completed on all major routes around the site in 2009, including queue length surveys for the peak evening period at the roundabouts in Rowlands Castle and Horndean, east of the A3(M).
- The baseline archaeology report is at an advanced stage.
- Water sampling from local streams has been ongoing for two years and water quality modelling has commenced. The reservoir will store excess winter water from the natural springs at Havant and Bedhampton which currently flow out into the sea. This freshwater is naturally filtered by the chalk and is of very good quality. Initial indications from the modelling are that the reservoir will actually help to improve the quality of the water in the Riders Lane and Hermitage Streams.





Further work to model the potential impact of traffic flows cannot be completed until the timescales for completion of the reservoir are more certain. This also applies to most of the remaining Environmental Impact Assessment work. Given the current uncertainty on timescales it would not be sensible to progress the impact assessment work. As a result the objective in 2010/11 has been to draw the existing preparatory work to a sensible holding position and not commence any new work for the time being.

The Company is committed to a major review of the key assumptions for our next Draft WRMP due in 2014. It is possible that climate change, the

need for licence reductions at the River Itchen and the impact of the Water Framework Directive may well have an influence upon that Plan and possibly the timing of the need for the reservoir but this is unlikely to be confirmed until 2015.

The Havant Thicket Winter Storage Reservoir Stakeholder Group members were updated on the situation. In March 2011 a newsletter update was sent out to more than 400 people who had previously expressed an interest in the reservoir project. The newsletter is available on the newly revamped project website which can be found at: [www.havantthicketreservoir.co.uk](http://www.havantthicketreservoir.co.uk)



# Save Water Save Money

As part of Portsmouth Water's **Commitment to water and energy Efficiency, Portsmouth Water is working in partnership with SAVE WATER SAVE MONEY to offer our customers a range of FREE Water saving devices.**

Customers may save money and save the environment by logging onto [www.portsmouthwater-savewatersavemoney.co.uk](http://www.portsmouthwater-savewatersavemoney.co.uk) and clicking on the link, or phone our Customer Services on the number below.

For more information please call **023 9249 9666**



Here's a few water saving tips:

## In the home

- ✓ Turn off the tap when brushing your teeth
- ✓ Wash vegetables and salads in a bowl rather than under a running tap
- ✓ Only run washing machines or dishwashers with full loads
- ✓ Take a short shower rather than a bath
- ✓ Put a Save-a-Flush bag in your toilet cistern (contact us for a free bag) or better still fit in a new dual flush toilet
- ✓ Fix dripping taps and lag pipes to prevent leaks



## In the garden

- ✓ Choose drought tolerant plants which need less watering
- ✓ Use a water butt to store rainwater for the garden
- ✓ If you use a hosepipe, fit a trigger gun to control the flow
- ✓ In hot weather, water before 8.00am or after 8.00pm, to reduce evaporation losses
- ✓ Don't water established trees, shrubs and lawns – they don't need it
- ✓ Water plants around the roots and use a mulch to avoid the soil drying out
- ✓ Wash your car with a bucket and sponge





# Advice and Information

**Helpful Advice** Visits to treatment works, talks 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.	
General Enquiries	<b>023 9249 9888</b> (8.30am to 4.30pm Monday – Friday)
Emergency Service	<b>023 9247 7999</b> (24 hours)
Unmeasured Account Enquiries	<b>023 9249 9666</b> (8.30am to 4.30pm Monday – Friday)
Measured Account Enquiries	<b>023 9244 9090</b> (8.30am to 4.30pm Monday – Friday)
Water Quality Enquiries	<b>023 9244 9083</b> (8.30am to 4.30pm Monday – Friday)
Freephone Leakline	<b>0800 434 6104</b> (24 hours)
<b>Facsimile</b>	<b>023 9245 3632</b>
<b>Website</b>	<b><a href="http://www.portsmouthwater.co.uk">www.portsmouthwater.co.uk</a></b>
<b>E-mail</b>	<b><a href="mailto:head.office@portsmouthwater.co.uk">head.office@portsmouthwater.co.uk</a></b>



**Head Office:** PO BOX 8, West Street, Havant, Hampshire, PO9 1LG  
**T:** 023 9249 9888 **F:** 023 9245 3632 **E:** [customers@portsmouthwater.co.uk](mailto:customers@portsmouthwater.co.uk)

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