# **Advice and Information**

### Helpful Advice

Visits to treatment works and 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 number given below:

Portsmouth Water Ltd PO Box 8 West Street Havant, Hampshire PO9 ILG

Telephone Numbers General Enguiries

Emergency Service Unmeasured Account Enquiries

Measured Account Enquiries

Water Quality Enquiries

Freephone Leakline Free Automated Payments

Facsimile Website E-mail 023 9249 9888 (8.30am to 4.30pm Monday–Friday) 023 9247 7999 (24 hours) 023 9249 9666 (8.30am to 4.30pm Monday–Friday) 023 9244 9090 (8.30am to 4.30pm Monday–Friday) 023 9249 9888 (8.30am to 4.30pm Monday–Friday) 0800 434 6104 (24 hours) 0800 048 0021 (24 hours)

023 9245 3632 www.portsmouthwater.co.uk head.office@portsmouthwater.co.uk







Portsmouth Water Ltd ACTIVITY REPORT 2012/13

**Portsmouth** 

Water



Head Office: PO BOX 8, West Street, Havant, Hampshire, PO9 ILG T: 023 9249 9888 F: 023 9245 3632 E: head.office@portsmouthwater.co.uk

www.portsmouthwater.co.uk

(Incorporating the Conservation, Recreation and Access Report 2012/13)

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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.

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

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

### "The Water Supplier of Customer Choice"

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:

"To supply drinking water of the highest quality providing high levels of customer service and excellent value for money". 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
- Minimising our 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 with other water companies
- 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 assets
- 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 307,000 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.

In 2012/13 we supplied on average 173 million litres of water per day to a population of more than 693,000 people at the lowest cost in England and Wales.

Water is supplied to our customers through a network of over 3,283km of underground water mains and more than 300,000 individual service connections.

#### We have:

- 21 Water Sources
- 19 Water Treatment Works
- 32 Service Reservoirs
- 24 Booster Pumping Stations
- 3,283km of Water Mains
- 230 Employees
- 693,000 Population



# Introduction

Our aim is to supply drinking water of the highest quality providing high levels of service and excellent value for money. This Activity Report sets out how the Company and its employees have delivered this service during 2012/13.



I am pleased to report we have continued to deliver a high level of customer service in terms of water pressure, interruptions of supply, responding to billing queries, dealing with complaints, meter reading and answering the telephone. A significant achievement when the service is delivered at the lowest cost of all companies in England and Wales. During the year we implemented a new billing system without a major disruption to our customers, despite many of our most experienced people working on the new implementation. Despite the challenge of its introduction the Company was ranked 5th out of 21 companies for the whole of 2012/13 in customer surveys conducted on behalf of Ofwat.

Our staff must work safely in delivering this service and their safety is our highest priority, therefore it is

# **In** 2012, 99.96% of our water samples met the designated Water Quality Regulations

particularly pleasing to have been awarded a Gold Medal from RoSPA in recognition of achieving seven Gold Awards and an Industry Sector Award in the last eight years.

Our own customer feedback has highlighted the importance customers place upon safe, high guality drinking water. In 2012, 99.96% of our water samples met the designated Water Quality Regulations reflecting the overall high standards of service we provided.

In early 2012 the Department for Food and Rural Affairs (Defra) declared that a drought was affecting the South East Region following low rainfall for a second consecutive year. In early April seven water companies in the South East announced temporary hosepipe bans on non essential users of water. However our supply situation was sufficient to ensure that we did not have to impose restrictions on customers. Indeed we have not done so since 1976 and as a result of current high groundwater levels unlikely to do so this year. We believe the drought of 2012 highlights the need for storage of surplus winter water from our springs at Havant and Bedhampton in order to facilitate transfers across the South East of England.

In May 2013 we published our Draft Water Resources Management Plan 2014 (Draft WRMP 2014) for consultation. The WRMP examines the factors which will impact upon the demand for water from customers such as population change and climate change and calculates whether the Company will have sufficient water resources over the next 25 years to meet demand.

In the WRMP we are projecting a surplus in the period to 2040. As a result, we do not need to invest in new resources to meet the needs of our customers. However, the Company may be approached by two neighbouring water companies to provide bulk supplies of water to meet the needs of their customers, which have been included as an option in the Plan.

During the year we spent approximately £15.4m (2011/12 £8.0m) on the maintenance of assets to ensure our customers continue to receive a stable level of safe, secure and reliable water supply. This included approximately £5.2m on mains renewals (2011/12 £3.9m). Capital expenditure was higher than previous years as a major scheme at our River Itchen works, to improve treated water quality and improve security was completed during the year. Expenditure on the scheme amounted to  $\pounds$ 4.9m. In undertaking our programme of mains renewals we have listened to

customer feedback and **G** During the year [the Company] worked hard to improve customer communication about our works. We also promoted use of "no dig" techniques to minimise the amount of excavation thereby reducing the disruption to customers and

local road users as well as reducing the installed cost of the mains.

During the year we carried out a full, independent review of leakage and have identified that it is higher than previously thought and that we had in fact missed our leakage target. We immediately put in place a programme to reduce leakage which began in November 2012. The programme is on schedule but we will miss our target for leakage for 2012/13 by approximately 13%. This programme will continue in 2013/14 and further reductions in leakage will be achieved. The higher leakage figure has had no impact on customers bills and the

additional cost of this programme will be met by the shareholders and not by our customers. The initial cost of the programme amounts to £0.9m.

We are currently working on preparing our Business Plan for the next review period (2015-2020). We expect that this will be submitted to Ofwat in December 2013. We are determined to put the views of our customers and stakeholders at the heart of our Plan. As part of this in 2011 we established an independent Customer Challenge Group (CCG) comprising both customers and other stakeholders. The CCG meets on a regular basis and their remit is to review our Plan proposals and promote feedback and challenge from a customer perspective. Details of the group and minutes of meeting can be found on our website at www.portsmouthwater.co.uk.

We are an important part of the community we serve and recognise the important part we play in enhancing the environment and mitigating the adverse impacts of our activities. Throughout this report we have tried to provide an insight into the way we deliver excellent service whilst rising to the

ever increasing challenges of health and safety, climate change, sustainability and the environmental impact of our activities. The high level of performance reported upon demonstrates the dedication and commitment of our

employees and I would like to thank them for their considerable efforts.

I hope that you find this report informative.

ilithe.

Neville Smith Managing Director

spent approximately £15.4m

(2011/12 £8.0m) on the

maintenance of assets

# Highlights and Indicators 2012/13

### Highlights

- · Key aspects of service qualify for the highest possible rating by Ofwat
- Received RoSPA Gold Award for the eighth consecutive year
- Lowest level of written complaints per 10,000 properties of any water company in England and Wales
- Leakage recovery programme on schedule
- 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
- 350,000 litres a day saved by customers as part of the "Saving Water Challenge"
- 6,000 water saving items issued to customers as part of our "Saving Water Challenge"

### Indicators

Ofwat monitors the performance of all water companies and makes comparisons 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
- X deteriorating trend

### CUSTOMER

<ul> <li>Drinking water compliance with prescribed standards</li> </ul>	~	99.96%
Water supply restrictions	~	Nil
Properties at risk of low pressure	~	66
<ul> <li>Properties with unplanned interruptions lasting more than 12 hours</li> </ul>	~	Nil
<ul> <li>Percentage of billing queries answered within 5 days of receipt</li> </ul>	~	99.98%
Number of written complaints per 10,000 connections	~	10.42
<ul> <li>Percentage of written complaints responded to within 10 days</li> </ul>	~	99.7%
Meters read at least once in the year	~	99.96%

ENVIRONMENT		
Compliance with abstraction licences	~	100%
Compliance with discharge licences	~	100%
Pollution incidents	~	Nil

EMPLOYEES		
Employee turnover	~	4.7%
Total accidents	~	7

ASSET CONDITION		
Leakage from supply network	×	34 Ml/d
Bursts per 1000km	~	81
Mains renewed	~	18.4km

SUPPLY		
Annual average treated water distributed	~	173 MI/d
Average daily consumption	~	149 l/h/d

# **Customer Service**

Portsmouth Water is proud to have serviced the local community for over 155 years. We aim to provide water of the highest quality whilst providing a continuous supply at the lowest price in the country.

Our household customers have an average water supply bill of £94, compared to £182 for the industry as a whole.



# **Billing System**

A three year project culminated in a switch to a new billing system in October 2012.

The new system immediately offers benefits to customers, such as an increased number of dates available on which Direct Debits can be taken and more flexible payment arrangements.

We can now record all types of customer contact on the system and see a holistic view covering billing, water quality and any issues with a customer's water supply. This enables our staff to quickly understand a customer's situation and helps to provide the best possible service.

### Key Account Management

This year we have appointed a Commercial Manager to build relationships with our larger business customers and help them to become more water efficient.

The Commercial Manager is supported by the Customer Services Department to ensure billing issues and queries are quickly resolved.

# Complaint Handling

Water companies are required to maintain detailed records of any written complaints they receive. Once a year they have to report the number of complaints, per 10,000 properties, to both Ofwat, the industry's financial regulator and the Consumer Council for Water Pleasingly, we have maintained our record of having the lowest number of written complaints within the industry. In 2012/13 we received 10.42 written complaints per 10,000 properties. Most importantly, we strive to learn from our mistakes and our Managing Director chairs a panel that reviews all written complaints received in order to consider any policy or process changes that are required.

## New Connections

In 2012/13 the Company connected 1,359 new properties for household customers, compared with 1,641 in 2011/12. This was below the ten year average of 1,577 per annum reflecting the slowdown 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 by us free of charge whilst another is to engage a Contractor to repair or replace the entire supply pipe at their cost. The Company has undertaken 407 free repairs or replacements this year. Where the customer arranges for replacement of the supply pipe under their home insurance, we pay towards the insurance excess, making replacement more economical. In 2012/13, 154 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 693,000 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. In 2010 Ofwat set the Company an annual target of achieving water savings, through water efficiency, of 290,000 litres a day. This equated to an overall five year target of 1,450,000 litres a day. Last year we made savings of 360,000 litres.

Pleasingly this year we once again exceeded the target calculating overall savings of 350,000 litres a day. This gives us going forward a surplus of 9,000 litres a day.

This excellent result was achieved by continuing a number of initiatives including:



Saving Water Challenge During the year we continued to promote our "Saving Water Challenge" which encouraged customers to think about their water use in the home and garden. Customers were asked to think about using less water or avoiding non essential use.

Trying to use the shower for less than 4 minutes was one of the many challenges we set our customers as part of the campaign.

Additionally we attended shopping centres and offered a variety of water saving devices including, shower timer, save-a-flush bag, fridge magnets and stickers with saving water messages.

#### Save Water Save Money

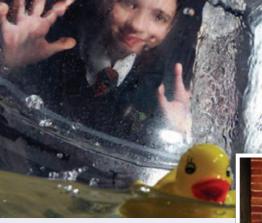
We have a partnership with the website provider "Save Water Save Money'' to promote water efficiency and provided customers with free water efficiency devices such as save-a-flush bags, shower timers, tap inserts and shower restrictors. Nearly 6,000 individual items were sent to customers.

#### Meter Welcome Pack

The meter welcome pack was improved with the inclusion of a shower timer and distributed to 4,857 customers. The pack ensures customers are aware of the advantage of saving water, including the financial benefits.

### Community Talks and Events

Community talks continue to be popular and include advice on water efficiency and the provision of free water saving devices. We have also attended many local summer fetes, science fairs and local universities offering advice information leaflets and water saving devices such as the ever popular shower timer.





Save-a-flush Bags Save-a-flush bags are designed to fit in toilet cisterns, reducing the amount of water used at each flush In 2012/13 we improved the promotion of save-a-flush bags

of water saving

activities. Free

water saving

packs were

also publicised

together with

can be made

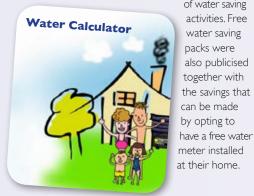
by opting to

the savings that

and distributed approximately 9,000 "save-a-flush bags" to individual customers, councils and schools.

### Interactive Water Calculator

Our water efficiency website was refreshed last year and introduced the new interactive water calculator, a facility to help our customers calculate their water usage which encourages and demonstrates the impact





Working with Staunton Country Park

We continue our education partnership with Staunton Country Park. 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 thereby saving the environment for tomorrow.

The partnership believe it is especially important to highlight to school children the importance water plays in our lives and how we can all play our part in using water wisely. In order to encourage this approach a World of Water exhibition was developed in conjunction with teachers and children from local schools. The exhibit includes an interactive water sphere and puzzle boards that have proven to be a great success in spreading the importance of using water wisely.



### Hampshire Water Festival

Despite a very wet weekend the Hampshire Water Festival, held at Staunton Country Park, saw more than 5,000 visitors. The Company contributed to the overall success of the important community activity in 2012 by assisting with the management, production of publicity material and promotion of the event across the community. 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 eleventh 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. The design of the bottle resulted from a competition held for the children to promote sustainability and saving water. This initiative remains very popular with 30,000 delivered last year, nearly 350,000 water bottles have been provided 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 have a wonderful resource which we are delighted to make available to the Club.

### The Blendworth Centre

The New Blendworth Centre was set up in early 1986 to help people with learning difficulties/ disabilities. Initially with just eight young people the Centre started by looking after private gardens and sold plants they had grown at the Centre and also had some help from local authority subsidy in the form of educational placements.

There have been difficult times over the years when subsidies ceased but by seeking help in the local community the Centre has managed to secure many more gardening contracts plus the Nursery part of the Centre is flourishing, this all contributes greatly to the annual revenue. The Centre now employs I 3 paid staff and has 38 members regularly attending the Centre on either a full or part week basis. Ages range from young to middle aged, all are treated with respect and they know they are an integral part of the day to day running of the Centre.

The maintenance of our grounds at our Head Office, River Itchen and several smaller sites are undertaken by a team from the Centre.

For more information about The New Blendworth Centre please contact the Centre on: 023 9259 7443



# WaterAid



## WaterAid

WaterAid was created by the UK Water Industry in 1981 with the aim of helping some of the poorest communities around the world to improve access to safe water sanitation and hygiene.

Over the last 30 years donations from our customers, together with fundraising efforts of our employees have raised £450,000 for WaterAid.



WaterAid uses practical solutions to provide clean water, safe sanitation and hygiene education to the world's poorest people across 26 countries. Just  $\pounds$ 15 can enable one person to access a lasting supply of safe water, improved hygiene and sanitation. Our customer and employee contributions have helped deliver these improvements to over 16 million people.

# **Employees**

Over the last 20 years 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.

We employ 230 people we strive to recruit and retain the right people and see this as key to the successful performance of our business.

We are firmly committed to the development of our employees, providing opportunities to reach their full potential. As a result a number, during the year, have undertaken Degrees, HNC's, NVQ's along with associated professional qualifications during the year nearly 10% of employees were in some form of further education.

In line with this objective we fully support 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 leading to a NVQ level 2 qualification with many going on to achieve the level 3.

A key part of staff development is our 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. We encourage staff to belong to the Institute of Water and gain the benefit for both their personal and professional development by attending events.

Total absence (days per employee per year) was 5.5. This figure compares with 4.3 for the previous year and is below the national average of 7.1. The increase can be attributed to a number of employees who have been on long term sickness absence.



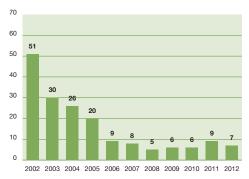
### 13 Activity Report 2012/2013

### Health and Safety

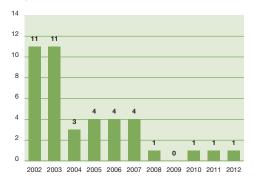
In 2002 and 2003 the Company recorded 51 and 30 accidents respectively with a reportable accident rate of 11 in each year. It was decided that these statistics along with the overall Health and Safety performance were not acceptable. Led by the Board, we embarked on a mission to improve our Health and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

#### **Total Accidents**



#### Reportable Accidents









In 2013 the Company were awarded a Gold Medal in Occupational Health and Safety by RoSPA. The Gold Medal is awarded in recognition of receiving seven Gold Awards and an Industry Sector Award in the last eight 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 the water supply we provide to our customers. We have been 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.

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 we face in the years ahead.





## Finding Sustainable Solutions

In 2012 we completed a major construction project to provide a roof over the raw water Highwood Reservoir, which is located within the Itchen Valley Country Park. Sustainability options considered included providing solar panels and a grass surfaced roof. Both options were ultimately rejected due to engineering difficulties and the findings of a cost benefit analysis of the proposals. However the sustainability review resulted in:

- Land at the nearby Itchen Water Treatment Works as a more appropriate site for the installation of solar panels
- Drainage from the new Highwood Reservoir roof has been sustainably redirected to an existing lagoon at the River Itchen Water Treatment Works to enhance the biodiversity of the wetland habitat for plants, amphibians and other wildlife in preference to directing surplus rainwater to the local sewer
- In addition a management strategy for the woodland around the reservoir has been developed in order to maintain a robust visual screen and enhance the sites biodiversity. The Woodland Management Strategy was approved by Eastleigh Borough Council in 2012 and will be implemented in phases upon completion of the construction project

# Sustainable Water Resources

The EU Water Framework Directive and the Habitats Directive Review of Consents require the Company to conduct environmental studies into the potential impact of our abstractions on ecology.

The rivers included in our 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 2012/13 a specialist consultant supported the Company working closely with the Environment Agency on the project. During the year a small group of staff formed a team to raise awareness of general sustainability issues throughout the business. A number of campaigns have been planned to encourage staff involvement in sustainability at work and home.



### Carbon Management Strategy

We have continued to implement our Carbon Management Strategy. Our net operational emissions have reduced by 900 tonnes of  $tCO_2e$  from 12,532 tonnes in 2011/12 to 11,632 tonnes in 2012/13.

We commissioned six small scale solar projects in 2011. These schemes continue to provide electricity for use at our pumping stations and export surplus energy to the grid.

# **Environment**

Portsmouth Water operates within an environmentally sensitive area, with internationally important inter tidal mudflats and saltmarsh along the coast, and chalk streams which provide a very special wetland habitat and water resource. This provides major challenges to the Company at a time when customer expectations are also rising. The requirements of European legislation provide new challenges, in addition to climate change, extreme weather events, and the day to day operating challenges of supplying water to approximately 693,000 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 upon the environment. All of our abstractions are licensed by the Environment Agency, who take into consideration the potential effects when determining licence conditions.

Last year we agreed a variation to our abstraction licence at Gaters Mill on the River Itchen. This means we have now complied with the Habitats Directive Site Action Plan at that site. The deadline for the Plan is 2015 and we are pleased to have implemented an environmentally beneficial solution earlier than required.

### Post Implementation Monitoring

In the future, abstraction licences will only remain renewable provided the abstractor is able to demonstrate that habitats are not adversely affected.The Post Implementation Monitoring (PIM) investigations covered sites that were originally assessed under the Habitats Directive Review of Consents.These sites were all estuaries and harbours and the key driver was wintering wildfowl and waders.The following areas in our area of supply were investigated:

- Hamble Estuary
- Titchfield Haven
- Hill Head Harbour
- Fareham Creek

The investigations were completed in March 2013 and possible solutions will be considered in the Environment Agency's next round of assessments.

### 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 Water Framework Directive investigations were completed in March 2013, together with some Environment Agency investigations. The following rivers were studied by us:

- River Hamble
- River Wallington
- River Ems
- River Lavant
- Aldingbourne Rife

The following rivers were investigated by the Environment Agency:

- River Meon
- Bosham Stream

Possible solutions to restore sustainable abstraction will need to be considered by the Environment Agency and included in the National Environmental Programme (NEP). These solutions may then be implemented as part of the River Basin Management Plan.



# 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. Following direction from the Secretary of State, we published our Final Water Resources Management Plan in September 2011.

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

We are now preparing the next Water Resources Management Plan (WRMP 2014). A Draft Plan has been published and is currently out for public consultation. Full details may be found on our website at **www.portsmouthwater.co.uk**.

Following consultation a Final Draft WRMP 2014 will be published in November including a formal Statement of Response (SoR). Following further directions from the Government, the Final Plan is likely to be published in the New Year.



### **Conservation & Biodiversity**

We are committed to ensuring compliance with all environmental legislation and obligations, carefully assessing the impact of our activities, especially construction projects on the environment, to ensure that the impact of such schemes is minimised. In 2012/13 we screened 11 new projects in order to identify any potential environmental and ecological impacts, and agreed how any impacts could be minimised and mitigated.

The Company is an active corporate member of the Hampshire and IOW Wildlife Trust. In 2013 the Trust helped us to provide training to 40 members of staff in order to raise awareness about the legislation relating to protected habitats and species. The objective was to make staff more aware of the part they must play to ensure that we comply with environmental legislation.

During the year we hosted a Wildlife Investors event for the Trust at our River Itchen works.Visitors were able to witness the bio diverse wildlife habitats we have improved at this site. As part of our wider commitment to improving environmental quality, we have responsibility to conserve and, where possible, enhance biodiversity on land we own. We own and manage 44 operational sites, including 19 water treatment works. Sites are located in a variety of habitats including chalk downland, river catchments, coastal margins and includes a Site of Special Scientific Interest (SSSI) at the Itchen Water Treatment Works.

The Biodiversity Action Plans produced for each site we own are now currently under review. In 2012 a local botanical specialist was appointed to survey six of the highest priority sites and give advice on habitat management. The surveys produced an impressive list of plants including abundant cowslips, helleborines and four other species of orchids, which is a testament to the good management of our sites. The advice of the consultant is being reviewed and a number of the recommendations have already been implemented.

Significant biodiversity improvements have been completed at the Itchen Water Treatment Works one of our largest sites and includes:

- Staff working parties in summer 2012 to remove Himalayan Balsam
- Removing non-native trees
- Thinning the planted woodland block and coppicing an area of hazel woodland
- Planting native species of trees grown from local seed harvested in Hampshire

For every tree removed to allow solar arrays to be installed at our sites in 2011, volunteers have now planted two trees to replace them. This included creating a new hedgerow at the George Service Reservoir on Portsdown Hill. The tree guards used were recycled from a local nature reserve, adding to the sustainability of the project.



### Recreation and Access

Staunton Country Park: The proposed Havant Thicket Winter Storage Reservoir site is owned by us but managed through an agreement with Hampshire County Council as part of the Staunton Country Park. In 2013 we extended the tenancy to enable the whole of the 167 hectare site to be managed by the Staunton Rangers. The site includes a public bridleway and network of permissive paths through woodland and grassland.

In November 2012 we led a partnership project to provide a new path across our land to link the Forestry Commission woodland at Havant Thicket to Staunton Country Park, opening up 10km of all weather off road tracks for walking, mobility scooters and cycling. The project involved moving a fence to provide more space for the path, trimming vegetation, clearing out an old ditch to improve water drainage, and constructing a 2.5m wide all weather surfaced path. Highwood Reservoir; The raw water storage reservoir site owned by us 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 helped to open up the circular path and improved the habitat for wildlife.

At other company 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

Last year's rainfall was characterised by the exceptional levels of rain in months not normally associated with high levels of rainfall. April, June and July saw rainfall exceed the long term averages for the months by 288%, 383% and 281% respectively. June rainfall of 171mm was the highest level recorded for that month since records began in 1886. For the year, despite commencing in a drought situation, 1,236mm fell in comparison with the long term average of 749mm.

### Havant Rainfall

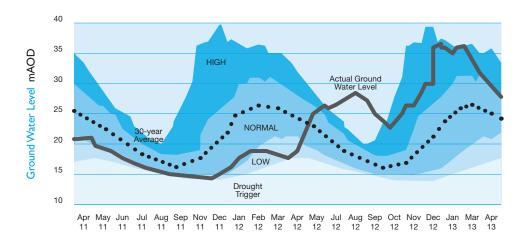


### **Groundwater Levels**

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.

Groundwater in the local aquifer normally fluctuates approximately 9.5m between maximum and minimum annual levels. Due to the low winter rainfall of 2011/12 ground water levels in April 2012 were 6.7m below the long term average, only 1.0m above ground water levels required to trigger the implementation of drought measures. However the heavy unseasonal rain resulted in groundwater levels recovering such that in October when levels are normally at a minimum they were some 5.8m above the long term average. The following five months continued to see well above average rainfall which resulted in exceptionally high ground water peaking at some 12.9m above the long term average. The rate of groundwater recovery experienced in 2012 has only been exceeded once before, in 1963.

### Idsworth Well Level 2011-2013



### Abstraction

Abstraction from the Company's various sources in 2012/13 was as shown in the table below:

Source	Abstraction Type	Licensed Annual Abstraction (Million Litres)	Actual 2011/12 Abstraction (Million Litres)
Northbrook	Boreholes	7,487	8,305
Lower Upham	Borehole	640	0
West Street	Boreholes	3,327	3,228
West Meon	Boreholes	166	21
River Itchen	River	15,916	5,769
Maindell	Wells & Adits	2,491	14
Soberton	Wells & Adits }	3,294	883
Newtown	Borehole }	695	0
Worlds End	Boreholes	8,296	3,625
Lovedean	Boreholes	4,148	0
Havant & Bedhampton	Springs	35,770	16,838
Walderton	Boreholes	9,955	7,755
Woodmancote	Boreholes	1,364	287
Fishbourne	Wells	3,741	1,300
Funtington	Wells & Adits	2,920	1,758
Lavant	Boreholes }	9,950	4,827
Brickkiln	Boreholes }		1,310
Eastergate	Well/Borehole }		2,786
Westergate	Boreholes }		2,093
Slindon	Boreholes }	10,358	674
Aldingbourne	Boreholes }		2,270
TOTALS		120,518	63,743

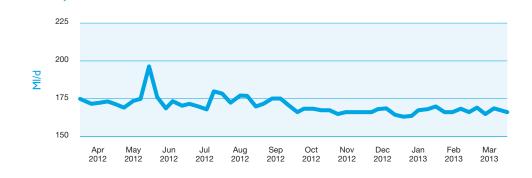
Abstraction is drawn from three groups of sources, the River Itchen Works which treats surface water, boreholes and wells which abstract groundwater from the underground chalk and Farlington Water Treatment Works which treats spring water from Havant and Bedhampton. Our largest source utilises water 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 our requirements.

The nature of the chalk aquifer of the South Downs ensures that at many sites high quality water is abstracted which requires only minimal treatment. Some chalk sources are at risk of cryptosporidium oocysts (which can cause severe stomach upsets) being present in the water which require enhanced treatment by membrane filtration.



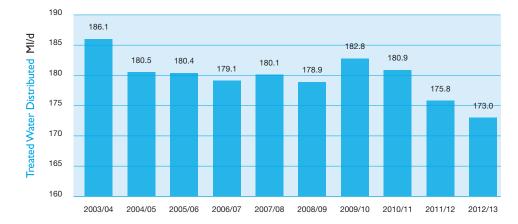
### Treated Water Distributed

Weekly Treated Water Distributed 2012/13



The annual average distribution input fell from 175.8 MI/d in 2011/12 to 173.0 MI/d in 2012/13. The volume of water distributed is influenced by many things, including the weather. The peak week of 196 MI/d occurred in May and was followed by uncharacteristically low demand most likely due to the high rainfall.

#### Annual Average Treated Water Distributed



### Leakage

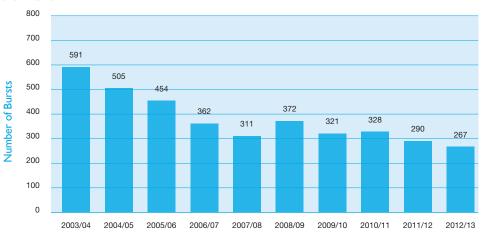
During the year we completed a full, independent review of leakage which identified that it is higher than previously thought and that we had in fact missed our leakage target. We immediately put in place a programme to reduce leakage which began in November 2012. The programme is on schedule but we missed our target for leakage for 2012/13 by approximately 13%. This programme will continue in 2013/14 and further reductions in leakage will be achieved. The higher leakage figure has had no impact on customers bills and the additional cost of this leakage reduction programme will be met by the shareholders and not by our customers.



### **Burst Mains**

The number of burst mains experienced in 2012/13 was 267, compared to 290 that occurred in 2011/12. 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. The number of bursts normally increases during the winter and the lower overall level of bursts this year is most likely to be due to the slower rate of temperature changes during the winter period of 2012/13.

We continue to target mains for renewal 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 often 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's 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.

### Water Quality Standards

In 2012 the Company carried out a total of 39,149 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 Drinking Water Inspectorate (DWI) was 99.96% (99.98 in 2011).

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

	% COMPLIANCE
Process Control	100.00
Disinfection Control	100.00
Distribution Maintenance	100.00
Service Reservoir Integrity	99.94
Domestic Water Systems	99.81
Overall mean zonal compliance	99.96

stages of the process for 2012 are as follows: 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.

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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 and in 2012 100% of the samples taken were compliant.

#### **Disinfectant 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 2012 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 2012 100% compliance was achieved.

#### **Reservoir Integrity**

Reservoir integrity quality compliance is based upon a selection of parameters to reflect the hygienic status

of service reservoirs and includes microbiological analysis. In 2012 99.94% of the samples taken were compliant. There was one failure of the coliform standard at a service reservoir during 2012. All repeat and check samples were found to be clear of any micro-organisms. The investigation into this "failure" found that it was due to human error, the sample had not actually been taken from the reservoir.

### **Domestic Water Systems**

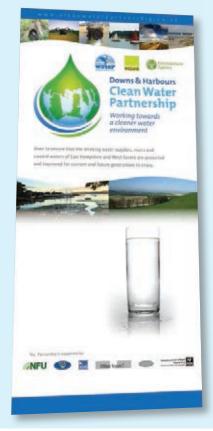
Domestic water quality compliance is based upon a selection of parameters to reflect the design and condition of customers' domestic water systems and includes microbiological analysis. In 2012 99.81% compliance was achieved. The microbiological parameter identified six samples that exceeded the coliform indicator at customers' taps. Because coliforms 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 the cause, as well as the need for any remedial works, to ensure the integrity of the supply. In all of the six microbiological failures, the customer's kitchen tap was identified or suspected of being the source of the contamination. There was also one failure of the Lead standard (25µg/l) in 2012, and this was attributed to the domestic plumbing within the customer's property.

### Other Quality Issues

Membrane plants (sophisticated filtration systems) are operating at 5 of our treatment works and 218 operational and compliance samples were taken during 2012 for cryptosporidium analysis from the final treated water from all these works. Of these samples, five contained low levels of cryptosporidium oocysts. No deficiencies were found at the works and there was no perceived risk to health.

In 2012 we 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 Partnership has been set up to tackle diffuse water pollution issues affecting the quality of ground, surface and coastal waters in our 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 the River Hamble estuary and help improve the near-shore environment
- Reduce pressures on the ecology of local rivers, such as the Hamble, Meon, Wallington, Ems and Lavant

The Partnership offers confidential services and support to farmers and other land owners; these services include nutrient, manure, soil and water management plans as well as workshops, one-toone consultations and farm demonstrations of best farm practices. The past year has seen a greater uptake of these services and the workshops are seeing more participants.

# 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, a member of staff will be sent the same day to take water samples, usually from the kitchen tap. In all cases we 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.

We have continued our five year programme of maintaining critical assets. Capital expenditure in the year to 2012/13 was  $\pounds$ 15.4m and included  $\pounds$ 5.2m on mains renewals. This year also saw major investment of  $\pounds$ 4.9m at the River Itchen WaterTreatment Works and Highwood Reservoir to cover over open tanks at the water treatment works and provide a cover over the raw water reservoir to prevent algal growth.



# Local Mains Renewals

Our underground pipe network is approximately 3,283km 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. During the year we continued to target mains for renewal and replaced 18.4km 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 we have increased the length of mains replaced by "no-dig" technology to over 20% or 9km in the past two years. The process minimises the amount of excavation and 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. In February 2012 we obtained planning permission to enclose elements of one of our largest water treatment works in order to enhance security of this key site and the work was completed this year.





During the past year we continued a programme of maintaining critical assets replacing operational elements of plant in order to maintain service standards to our customers. Interruptions to customers' supplies from plant outages are amongst the lowest in the industry and reflect our ongoing commitment to asset maintenance. During the period 2010–2015 we are spending approximately £10.5m on maintaining water treatment works and pumping stations.

During the year we delivered a number of schemes to upgrade the implementation, control, automation and telemetry facilities at a number of water treatment works. These upgrades allow us to ensure that the treated water entering supply meets the regulations set by the Drinking Water Inspectorate and that the automated processes for water treatment are more





reliable and adequately monitored remotely via Telemetry. During the year we completed work on a scheme at the 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 comprised roofing over the bankside raw water storage reservoir (approximately the size of 3 football pitches) and other elements of the treatment works that prevent sunlight from reaching the water and prevent the growth of algae. The scheme will ensure the water treatment works maintain stable water quality to comply with the latest water quality regulations.



### Havant Thicket Winter Storage Reservoir

The planning application for a new winter storage reservoir at Havant Thicket has been delayed while we review our Water Resources Management strategy, we have been:

- Undertaking a major review of all the key assumptions for our next WRMP due in 2014, including population growth, demand and climate change
- Working with the Water Resources in the South East Group, which includes the Environment Agency, to model regional solutions to address water resource shortfalls in the South East. The options evaluated included the Havant Thicket Winter Storage Reservoir (HTWSR)

A significant amount of work has already been completed in preparation for the HTWSR planning application including; five years of ecological survey work, a water quality assessment, traffic surveys on major roads and a baseline archaeology report. Feedback from an extensive public consultation exercise completed in 2008 was used to inform the "Outline Plan" for the reservoir. A copy of the plan is available on the project website, **www.havantthicketreservoir.co.uk**. In 2012/13 work has focused on securing a route for the proposed pipeline through Bedhampton and Leigh Park. In order to fill the HTWSR with water a pipeline must be constructed from the Havant and Bedhampton Springs to the reservoir site. Securing a viable pipeline route through Bedhampton and Leigh Park is fundamental to the delivery of the reservoir.

We have been working closely with Havant Borough Council to develop a viable pipeline route which minimises both disruption to local residents and environmental impact. During the year councillors were briefed on the proposed route and nine of them took the opportunity to walk the route with us to identify any issues. A letter was sent to all residents and premises along the route and the project website



has been updated to provide information on the route, including a map and answers to frequently asked questions.

To ensure the pipeline route is safeguarded for the future Havant Borough Council intend to include the route in their draft Allocation Plan. Discussion has also taken place with all of the main land owners along the route, including Hampshire County Council and Portsmouth City Council, to ensure any potential issues with the route were identified at an early stage. The Local Plan (Allocations) is currently being prepared by the Council and the public have had the opportunity to provide feedback and comments on the draft plan. Further information on the HBC Allocations Plan can be found at: www/havant.gov.uk/havant-12262.

The HTWSR website has been kept up to date with information on the pipeline route, draft Water Resources Management Plan 2014 and a new link path which opened up 10km of all weather off road cycling and walking through attractive woodland and grassland.









# **Save Water Save Money**

As part of Portsmouth Water's commitment to water and energy efficiency, we are 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 portsmouthwater.co.uk, clicking on the Water Saving Challenge button or phone 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 1 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
- V Put a save-a-flush bag in your toilet cistern (contact us for a free bag) or better still fit a new dual flush toilet
- Fix dripping taps and lag pipes to prevent leaks
- Choose water efficient appliances when replacing old ones





Choose drought tolerant plants which need less watering

In the home

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

Wash your car with

a bucket and sponge



Water plants around the roots and use a mulch to avoid the soil drying out







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