



PORTSMOUTH WATER LIMITED

Outcome Delivery Incentives 2015-2020

July 2018

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Background

The regulatory framework for the last Price Review, PR14, introduced the concept of outcomes, performance commitments and outcome delivery incentives (ODIs). The framework includes rewards for service outperformance and penalties for underperformance. We worked with our customers and stakeholders to develop our outcomes, performance commitments and ODIs for the five year period 2015-2020 (AMP6) and these are set out in our PR14 Final Determination.

Portsmouth Water has committed to delivering outcomes that meet the expectations of our customers. These are supported by 13 associated performance commitments that identify the company's committed level of performance under each outcome. For 9 of these performance commitments the Company is subject to associated financial impacts whereby it will incur a penalty for performance below its commitments, but for some can earn a reward for performance better than its commitments.

We have now completed the first three years of this AMP period. This report will enable stakeholders to assess how we have performed against those measures of success that are regarded by our customers as being the most important factors.

Further we are in a position to quantify the financial impact on customer bills of the related rewards and penalties. These adjustments to apply as of 1 April 2020 and will impact customer bills over the subsequent 5 years period.

The Company recognises the importance of providing information to customers and other stakeholders that is: - customer-led, relevant, clear, useful, complete, accurate and timely. Our ongoing objective is to make information available that is easy to understand and which enables stakeholders to see how we are performing. We believe that this helps to build trust and confidence in the business.

In 2015 Ofwat published "The Company Monitoring Framework" which formalises the process through which they will oversee how stakeholders can have, in particular, confidence in companies' published Performance Measures. We published our Final Assurance Plan for 2017/18 reporting in April 2018, following consultation. This can be found at the following location.

<https://www.portsmouthwater.co.uk/news/publications/company-monitoring-plans/>

Our Data Assurance Summary is published in conjunction with this document. It explains our approach to Data Assurance and provides the Board's position on this issue.

This report is split into six sections:-

- Overview of the year.
- Background, Assurance and Compliance Statement
- Report from the Customer Challenge Group
- Annual Performance and quantification of rewards and penalties on customer bills
- ODIs and KPIs
- Atkins Assurance Report

Overview of the 2017/18

2017/18 is the third year of the current price review period. In many cases our ODI performance remains good, and in many cases industry leading.

The Company published and consulted on its Monitoring Plans for 2017/18 throughout the year. This gave customers, stakeholders and our Customer Challenge Group the opportunity to review and comment on the information we provide externally. We welcome this process and commit to providing our performance to all customers and stakeholders in a clear and transparent manner.

The Company can confirm it failed 3 of its 13 Outcome Delivery Incentive (ODI) targets. There is uncertainty around whether one of these measures, SIM, has been met yet as we need to wait for publication of performance by all companies; our performance has improved slightly on 2016/17, when we were ranked first. Further, the target for household usage, measured by per capita consumption, does not apply until 2019/20.

The three measures failed in the year are discussed in detail in this report, with a very brief discussion in this overview.

Leakage (page 20)

The Company started the year above its leakage target and failed to see a significant improvement over the summer months. There was an increasing trend over the autumn and early part of the winter with a material increase at year end. Despite the significantly greater activity on the issue, the Company did not recover the situation.

The Board take this issue most seriously and have received a monthly report from the management of the Company and approved significant additional funding and resources throughout the year. We very much plan to achieve our five year target for leakage.

Water Quality contacts (page 17)

The water quality contacts target set for the period is extremely challenging, given we did not base our target accurately at PR14. That said, we have continued to reduce the number since 2014 and note that the 2017 performance is better than the leading companies in any of the prior three years.

The Company implemented its “Calm Network” action plan which focuses on the need to ensure the network is operated appropriately when dealing with leakage and bursts in particular and not result in issues for customers. This initiative has been very successful and has driven down contact levels.

Water Quality Standards (Mean Zonal Compliance) (page 15)

The Company failed the water quality compliance measure, Mean Zonal Compliance. Performance has been impacted by two sample failures for lead which, in both cases, arose as a result of lead in the customer side supply pipes. We worked closely with the customers effected and both customers subsequently replaced their lead supply pipe.

A third failure occurred in December 2017 where a customer had glyphosate detected in their water supply. The Company investigated this thoroughly and concluded that there was a back siphonage issue, with a herbicide being used in the garden coming back up the hosepipe to the customer tap. The Company again worked closely with the customer to resolve this issue.

Conclusion

As the Company prepares its plans for its next Business Plan, PR19 covering 2020 – 2025, we believe the performance in 2017/18 ensures we are well placed to continue to deliver high levels of service to customer at an affordable price in the future.

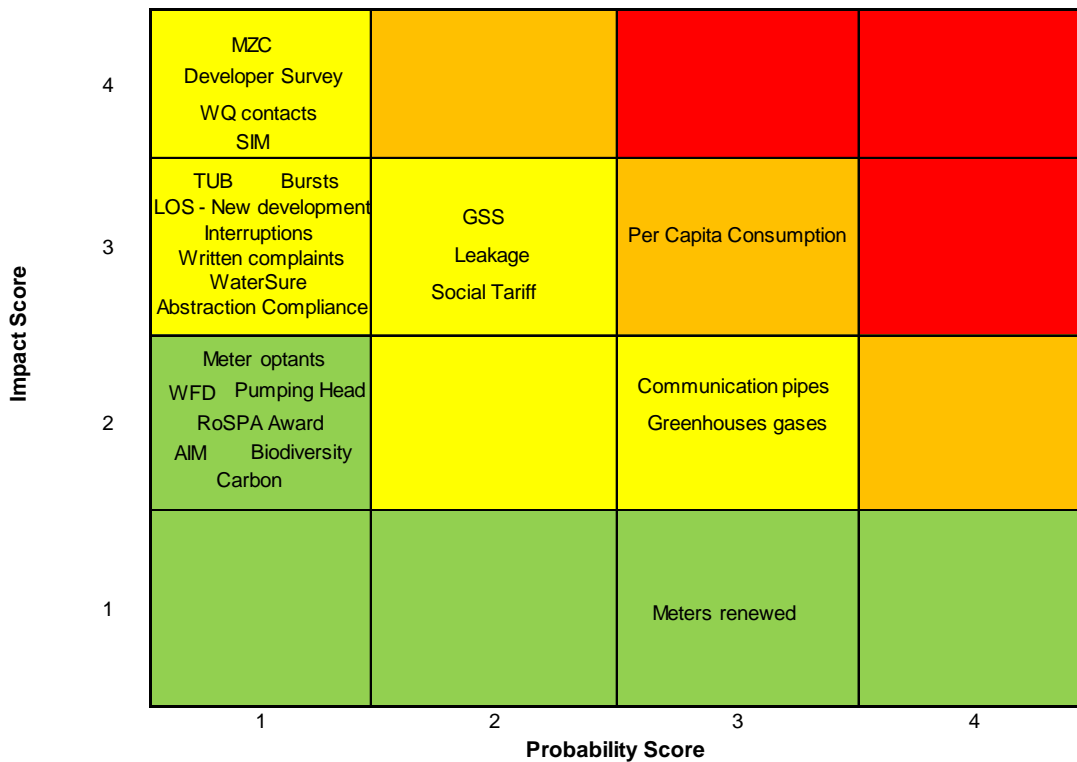
Assurance

Our Reporter from Atkins, has provided third party assurance on our ODIs and other KPIs. The audits are undertaken in accordance with our Final Assurance Plan. The Reporter examines the source of data, checks calculations and assesses the accuracy and compliance to the data requirements of the reported data. The Reporter has produced a report on each audit carried out and his key findings from the audit process are shown on page 43. He attended the Audit Committee in May 2018 to inform the members of the audit findings. Further, on 6 July 2018 he presented his report to our Customer Challenge Group.

As part of the Company Monitoring Framework we undertook an exercise to identify any “risks, strengths and weaknesses” of our data and or processes. The summary results from the risk assessment are shown in the matrix below. All of the data items shown were included in the Reporter’s scope for audit purposes.

The matrix assesses each item of data relative to the reliability, accuracy and complexity of its derivation. Those that score relatively higher on this assessment are ranked in the top right quadrant of the diagram, and warrant greater attention from the Reporter. Definitions of each of these items is given on the next page.

Impact and Probability Risk Matrix



As part of this process we engaged with our Customer Challenge Group (CCG) in particular to determine which data audits our Reporter would conduct. From discussions with the CCG it was agreed that Atkins’ scope would include all ODIs and other KPIs as shown in the table following.

Our ODIs and other KPIs are described as follows.

Outcome Delivery Incentives

Ref	Performance Measure	Board	Management Board	Other review	External review
RA1	Service Incentive Mechanism	Monthly review	Monthly review		Reported to CCWater on quarterly basis. Audited by Atkins at the end of reporting year. Reported in Annual Performance Report (APR) and Statutory Accounts.
RC1	Developer Survey	Yearly review	Yearly review		Reported in APR.
RB1	Per capita consumption	Yearly review	Yearly review		Reported to CCWater. Audited by Atkins at the end of the reporting year. Reported in APR, Statutory Accounts and the Annual Return to the Environment Agency.
WA1	Number of bursts	Monthly review	Monthly review	Reported at weekly Operations meeting	Audited by Atkins at the end of reporting year. Reported in APR and Statutory Accounts.
WA3	Mean Zonal Compliance	Monthly review	Monthly review	Reported at weekly Operations meeting	Reported in Chief Inspectors Annual Report. Reported in APR and Statutory Accounts..
WA4	Number of water quality contacts	Monthly review	Monthly review	Reported at weekly Operations meeting	Reported in Chief Inspectors Annual Report. Reported in APR and Statutory Accounts.
WA5	Temporary usage bans	If required	If required	At weekly operations meeting only if required	Reported in APR, Statutory Accounts and in the Annual Return to the Environment Agency.
WB1	Leakage	Monthly review	Monthly review	Reported at weekly Operations meeting	Reported to CCWater on a 6 monthly basis. Audited by Atkins at the end of the reporting year. Reported in APR, Statutory Accounts and Annual Return to the Environment Agency.
WC1	Interruptions to supply	Monthly review	Monthly review	Reported at weekly Operations meeting	Reported quarterly to CCWater. Audited by Atkins at the end of the reporting year. Reported in APR and Statutory Accounts.
WD1	Biodiversity	Yearly review	Six monthly		Reported in APR. and Statutory Accounts Progress discussed with CCG and Natural England every six months
WD2	Water Framework Directive	Yearly review	Six monthly		Reported in APR and Statutory Accounts. Progress discussed with CCG and Natural England every six months
WD3	Carbon commitment to renewables	Yearly review	Electricity consumption reviewed.		Audited by Atkins at the end of the reporting year. Reported in APR and Statutory Accounts.
WG1	RoSPA	Accidents reported monthly	Accidents reported monthly		Reported to the Health and Safety Executive. Reported in APR and Statutory Accounts.

Other Key Performance Indicators

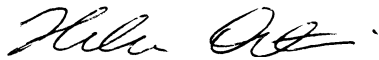
Ref	Performance Measure	Board	Management Board	Other review	External review
O1	Abstraction Incentive Mechanism	Yearly review			Reported in APR.
O2	Optional meters installed	Monthly review	Monthly review	Reported at weekly Operations meeting	Reported annually to the Environment Agency. Audited by Atkins at the end of the reporting year.
O3	Abstraction - compliance with licence conditions	Yearly review		Reported at weekly Operations meeting	Reported annually to the Environment Agency.
O4	Guaranteed Standards of Service	Monthly review	Monthly review	Reported at weekly Operations meeting	Audited by Atkins at the end of the reporting year. Reported in Annual Performance Report and Statutory Accounts.
O5	Watersure	Yearly review	Monthly review	Reported at weekly Operations meeting	Reported quarterly to CCWater. Audited by Atkins at the end of the reporting year.
O6	"Helping Hands" - Social tariff	Yearly review	Monthly review	Reported at weekly Operations meeting	Reported quarterly to CCWater. Audited by Atkins at the end of the reporting year.
O7	New development – levels of service	Yearly review	Monthly review		Reported quarterly to Water UK. Audited by Atkins at the end of the reporting year.
O8	Green House Gas Emissions	Yearly review	Yearly review		Audited by Atkins at the end of the reporting year. Reported in the Statutory Accounts.
O9	Written Complaints by class and cause	Monthly review	Monthly review	Reported at weekly Operations meeting	Reported to CCWater on a quarterly basis. Audited by Atkins at the end of the reporting year. Reported in APR.
O10	Communication pipes	Yearly review	Yearly review		Audited by Atkins at the end of the reporting year.
O11	Meters renewed	Yearly review	Yearly review		Audited by Atkins at the end of the reporting year.
O12	Pumping Head	Yearly review	Yearly review		Audited by Atkins at the end of the reporting year.

Compliance Statement

The Board has reviewed this Outcome Delivery Incentives Report and has approved the following statement:

The Board of Portsmouth Water hereby confirms, in connection with the ODI, that it:

- considers it has a full understanding of, and is meeting, its obligations and has taken steps to understand and meet customer expectations
- has satisfied itself that it has sufficient processes and internal systems of control to fully meet its obligations
- has appropriate systems and processes in place to allow it to identify, manage and review its risks



H Orton
Finance and Regulation Director



H Benjamin
Non-Executive Director
Chair of the Audit Committee

12 July 2018

CCG Report on ODI performance 2017/18

The CCG provides independent challenge and assurance on the quality of the Company's customer engagement and the degree to which customer views shape business planning and activities. It also has a monitoring role to review the performance against the Outcomes (Outcome Delivery Incentives) agreed for the current regulatory period.

ODI Performance 2017/18

The Company met its targets for 8 of the 13 Outcome Delivery Incentive (ODI) measures, detailed later in this report. There is uncertainty around whether 3 of these measures have been met yet, as noted below. However, it is disappointing to note that two of the three failures were for leakage and water quality contacts, which were also not achieved in the prior period.

In the year the Company implemented plans to improve performance in both of these areas. The plans were presented to the CCG in June 2017 and updates were provided to the CCG throughout the year. In particular the CCG has challenged the Company to understand what has caused the increase in leakage and more importantly how it can use new technologies to provide information in a more timely and effective way to counter the increase in leakage.

Leakage

The Company started the year above its leakage target and failed to see a significant improvement over the summer months. There was an increasing trend over the autumn and early part of the winter with a significant increase at year end.

The Company reported performance to the CCG on a monthly basis. Despite the significantly greater activity on the issue, the Company did not recover the situation, and there must be uncertainty if it can achieve its five year target.

Given the profile this issue has with customers, we challenge and encourage the Company to look at how other water companies around the world are using new technology to address this issue. We are pleased that the Company has responded positively to this challenge and look forward to seeing its plans in the near future.

Water Quality contacts

The Company states that, in light of more comprehensive reporting, the target it set for the period is extremely challenging. We note the significant improvement since 2014 and the fact that the 2017 performance is better than the leading companies in any of the prior three years.

The Company has implemented an action plan which focuses on the need to ensure the network is operated appropriately when dealing with leakage and bursts in particular. This is focused on reducing the number of contacts relating to the appearance of the water and has been successful.

Mean Zonal Compliance

The Company failed the water quality compliance measure, Mean Zonal Compliance. The Company state that the overall result was disproportionately impacted by two sample failures for lead which, in both cases, arose as a result of lead in the customer side supply pipes. Both customers subsequently replaced their lead supply pipe.

A third failure occurred in December 2017 where a customer had glyphosate detected in their water supply. The Company investigated this thoroughly and concluded that there was a back siphonage issue, with a herbicide being used in the garden coming back up the hosepipe to the customer tap. The Company again worked closely with the customer to resolve this issue.

Other ODIs

Whilst the Company has improved its overall SIM score this year, it is not able to report against its commitment of being an upper quartile performer, until all companies publish their performance in July 2018.

The absolute number of bursts increased significantly in the year. The Company states this is due to the weather patterns which were described above for leakage. Whilst this is plausible, we encourage the Company to maintain vigilance on this measure of asset health.

Finally we note the increasing trend for per capita usage over recent years. There must be uncertainty if the Company will achieve its 2019/20 ODI for this measure. We have challenged the Company to look at the benefits of wider scale metering and we are pleased that its Draft Water Resources Management Plan has recognised this issue.

Environmental performance

The CCG notes that the Company has also made material progress on its Biodiversity and Carbon programmes in the first three years of this AMP period. It also notes that the water resources schemes set out in the Water Industry National Environment Programme for AMP6 are now complete and signed off by the Environment Agency.

Customer Engagement

During the year the Company undertook many specific activities in preparation for its next Business Plan (PR19) which will cover the 5 year regulatory period from 2020.

The activities included detailed customer engagement on Outcome Deliver Incentives component. Not only did the Company use traditional focus group but established a Customer Advisory Panel, (CAP) which met 4 times in the year to allow greater discussion around specific issues faced by the Company.

The Company has kept the CCG informed on all of its engagement activities and responded positively to any challenges we have made.

Terms of Reference

Following publication of the PR19 Methodology by Ofwat, the Terms of Reference of the CCG were expanded to include participation and review of the PR19 plan, with specific emphasis on customer-impacting areas such as charges, vulnerability and resilience.

Lakh Jemmett
Chair of Customer Challenge Group

Section 1 – Outcome Delivery Incentives (ODIs)

The table below details the ODIs for the Company and performance in 2017/18 against our commitment, or target. Further details on each ODI can be found in the pages below.

ODI Performance 2017/18

ODIs	Unit	Incentive Type	2017/18 Target	2017/18 Actual	2017/18 target met?
Bursts	Nr	Financial	250-435	347	✓
Mean Zonal Compliance *	%	Financial	100.00	99.93	✗
Water quality contacts *	Nr/1000 population	Financial	0.421	0.549	✗
Temporary Usage Bans	Nr	Reputational	0	0	✓
Leakage	MI/d	Financial	29.90	32.93	✗
Interruptions to supply	Minutes per properties served	Financial	6 Mins	4 Mins 17 Secs	✓
Biodiversity Action Plan	%	Financial	60	Progress as planned	✓
Water Framework Directive	Completion date	Financial	No yearly target	Completed March 2018	✓
Carbon	% increase	Reputational	6	Over 95% of electricity used is from renewable sources	✓
RoSPA Accreditation*	Accreditation awarded	Reputational	Awarded	Awarded	✓
Service Incentive Mechanism Quantitative – No. of complaints and unwanted contacts etc. Qualitative – Customer experience survey	Quantitative	Financial	Upper quartile	22.5	✓
	Qualitative			65.4	
	Total Score			87.9	
Reducing per capita consumption	l/h/d	Financial	145.3	147.6	n/a
Survey of developers	%	Reputational	70	91	✓

* Calendar year 2017

The table below details the impact of our ODI performance in the three years up to and including 2017/18 and quantifies the potential rewards and penalties that would apply at the start of the next price review period, 2020.

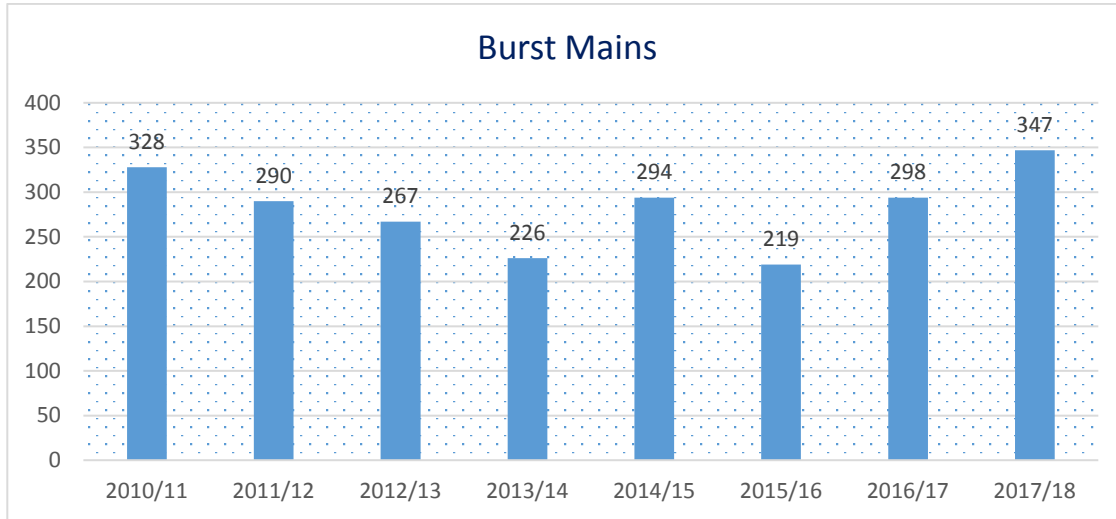
ODIs	Reward / Penalty or Reputation	2015/16	2016/17	2017/18	Reward / penalty (£000s)	Impact on customer bills (£ pa)	Assumption
Bursts	Reward / Penalty	219	298	347	0	0	average of 288 is in dead-band
Mean Zonal Compliance *	Penalty	99.94	99.99	99.93	-640	-0.40	no further performance below 99.95%
Water quality contacts *	Reward / Penalty	0.570	0.665	0.549	-1,903	-1.20	capped at 0.505
Temporary Usage Bans	Reputation	0	0	0	n/a	n/a	No TUB applied
Leakage	Reward / Penalty	28.23	30.38	32.87	0	0	AMP6 average of 29.9 MI/d achieved
Interruptions to supply	Reward / Penalty	3 mins 30 secs	4 Mins 9 Secs	4 Mins 17 Secs	35	+0.02	average of 3 mins 55 secs for AMP6
Biodiversity Action Plan	Penalty	as planned	as planned	as planned	0	0	Signed off by CCG year 5
Water Framework Directive	Reward / Penalty	as planned	as planned	Complete	0	0	Completed by March 2018
Use of renewable energy	Reputation	Over 95%	Over 95%	Over 95%	n/a	n/a	Target achieved in year one
RoSPA Accreditation*	Reputation	Awarded	Awarded	Awarded	n/a	n/a	Target achieved each year
Service Incentive Mechanism	Reward / Penalty	89.5	87.7	87.9	763	+0.50	Top quartile
Reducing per capita consumption	Penalty	143.3	145.1	147.6	0	0	target of 143.9 l/h/d to be achieved in year 5
Survey of developers	Reputation	89	85	91	n/a	n/a	Target achieved each year
Total					-1,745	- £1.08	

Applying the rewards and penalties to the assumed performance results in a reduction in revenue of £1.745m, spread over the five years from 2020. This equates to an £1.08 reduction per customer in 2020.

Wholesale water outcome: Safe secure and reliable drinking water

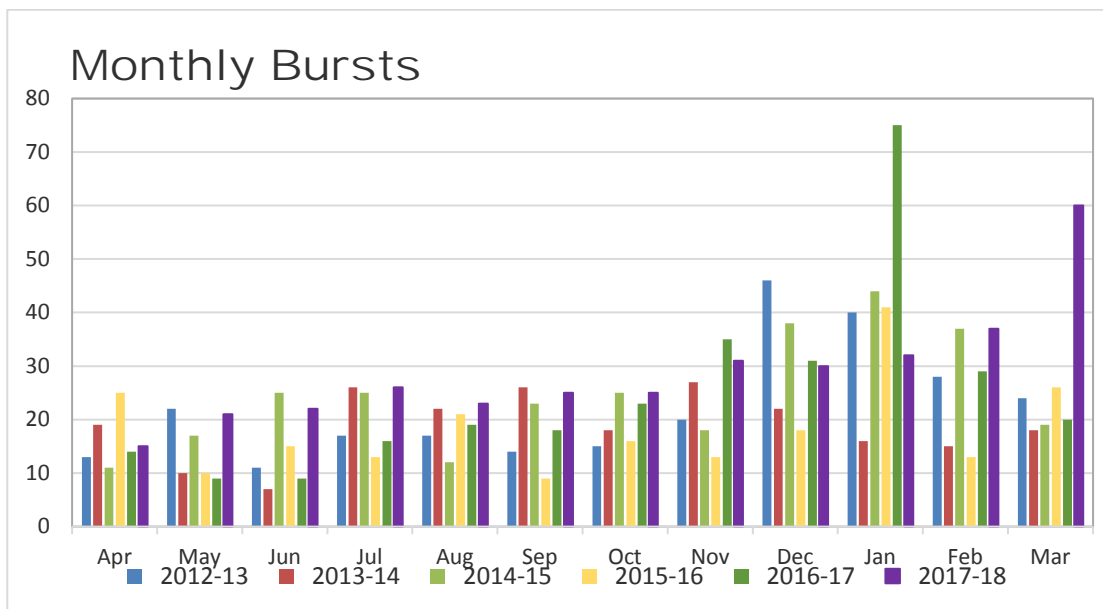
Performance commitment: Bursts

The number of burst mains experienced in 2017/18 was 347, compared to 298 that occurred in 2016/17 and our annual target of 342. It equates to 104 bursts per 1,000km in the reporting year.



Almost 20% of the bursts experienced in the year occurred in March 2018, when the Beast from the East resulted in rapid temperature changes. This measure is very dependent on weather conditions.

The chart below shows the monthly number of bursts over the last six years. High burst rates were seen throughout 2017/18.



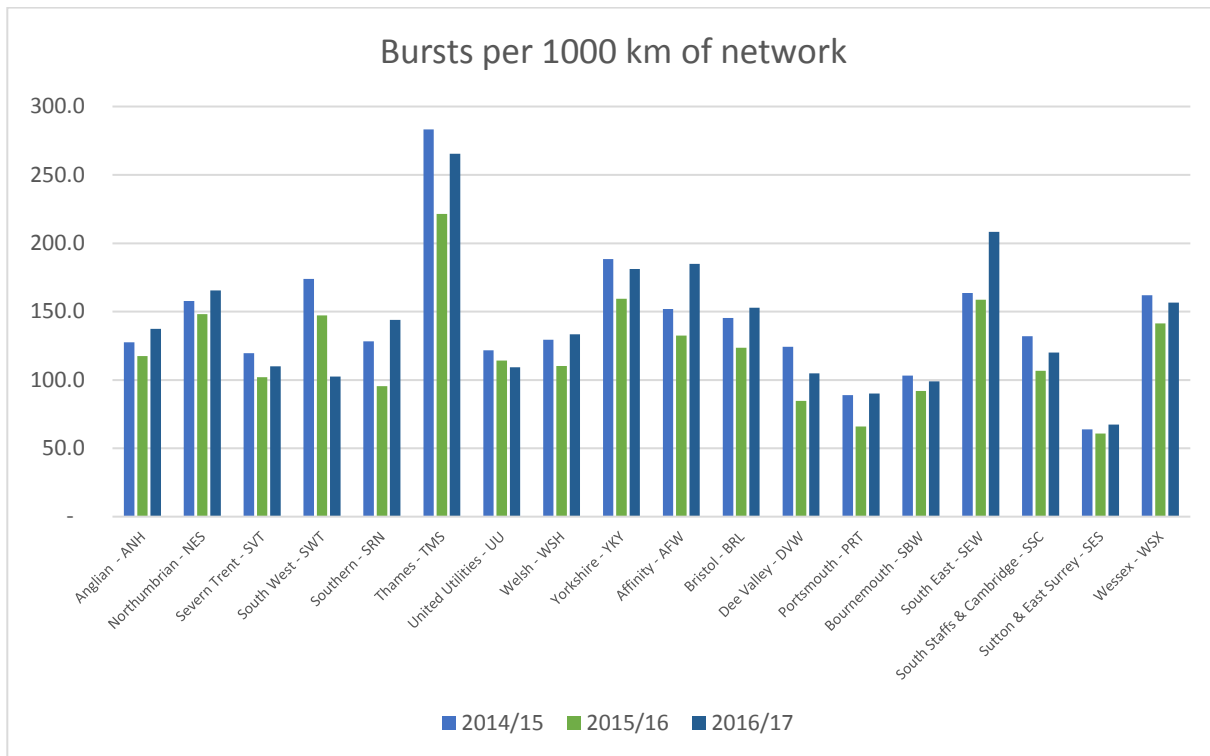
In the year 2017/18 the number of bursts was in line with the performance commitment of 342 and within the tolerance band 250-435. As part of the Ofwat ODI scheme, rewards and penalties apply at the end of the current period and to the average number of bursts over the five year period. Based on the first three years of this AMP period no reward or penalty would apply as the performance falls within the dead-band.

We continue to target mains for renewal based on the impact of bursts on customers.

The industry performance for burst is shown in the graph below. It is for the last three years where data is published up to and including 2016/17.

It shows that relative to other companies our number of bursts per 1,000 km of main is second lowest in the industry and approximately half of the industry average of 130. Our performance rate of 88 for 2016/17 is better than the upper quartile performance.

Industry burst performance, 2014/15 – 2016/17 (number per 1,000km)



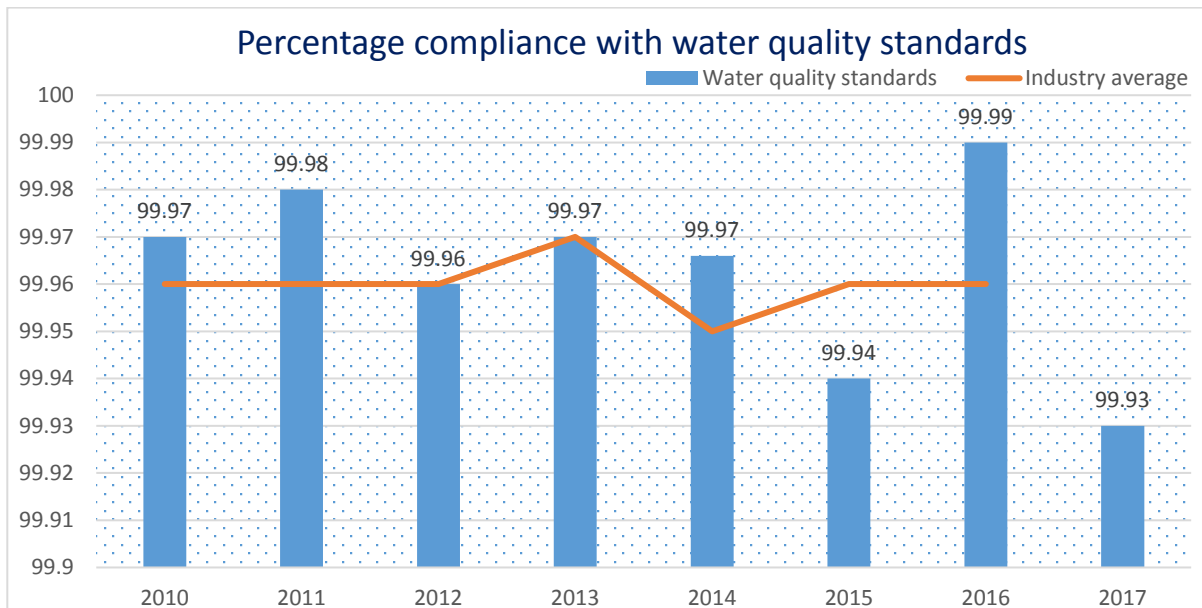
Our performance for 2017/18 equates to 104 bursts per 1,000 km.

Wholesale water outcome: Safe secure and reliable drinking water

Performance commitment: Water quality standards

Our measure of water quality compliance is confirmed at 99.93% for 2017. The mean zonal compliance (MZC), which is the representation of overall drinking water quality in customers' properties, is reported to the Drinking Water Inspectorate (DWI) on an annual (calendar) basis.

The industry average for 2017 will not be published until July 2018.



During 2017 calendar year the company carried out a total over 17,500 determinations in samples taken at customer taps; 3 of these failed to meet the relevant standard and failed the water quality compliance measure, Mean Zonal Compliance.

The overall result was disproportionately impacted by two sample failures for lead which, in both cases, arose as a result of lead in the customer side supply pipes. Both customers subsequently replaced their lead supply pipe.

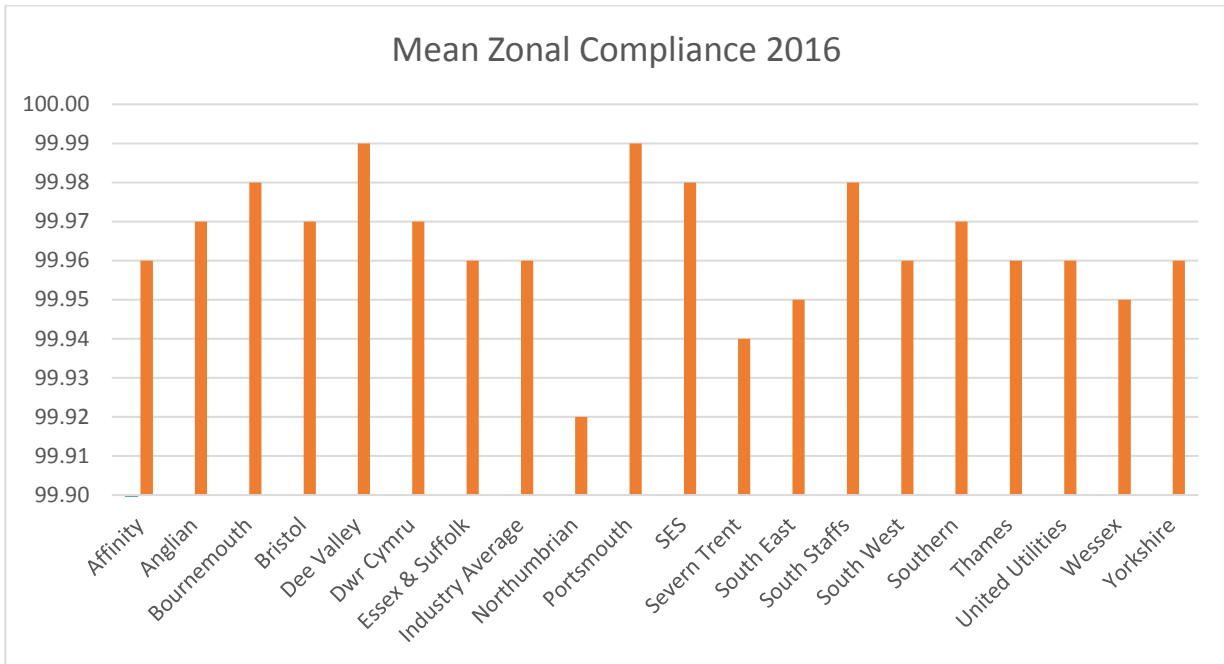
A third failure occurred in December 2017 where a customer had glyphosate detected in its water supply. The Company investigated this thoroughly and concluded that there was a back siphonage issue, with a herbicide used in the garden coming back up the hosepipe to the customer tap. The Company worked closely with the customer to resolve this issue.

We continue to work with an industry group to promote good plumbing workmanship which plumbers can be accredited to giving customers confidence that their work will not impact on water quality.

Penalties apply annually for any year that performance is below 99.95%. The ODI performance for 2017 results in penalty of £320k being applied. Together with the penalty from 2015, customer bills for 2020-25 will reduce by 40 pence at 2020.

The industry performance on this metric is shown in the graph below. It is for the year 2016 as the data is not published for 2017 until July 2018. It shows that our performance for 2017, at 99.93% is lower than the industry average for 2016 of 99.96%.

Industry performance - Mean Zonal Compliance 2016



Wholesale water outcome: Safe secure and reliable drinking water

Performance commitment: Water quality contacts

This measure reflects the number of contacts we receive from customers with dissatisfaction in the taste, odour or colour of their water. This is calculated as the number of contacts per 1,000 population and is reported annually (for the calendar year) to the Drinking Water Inspectorate.

Our target for this period was based on 2013 performance. However, as a result of introducing a new Customer Relationship Management System (CRM) in October 2012, we are now recording, more accurately, resulting in a greater number of contacts.

We therefore set ourselves an extremely challenging level of less than 0.421/1,000 population for 2017. Unfortunately, we reported 389 water quality contacts of this nature which equates to 0.55/1,000 population. Despite this value being above our ODI value it remains significantly below the 2016 industry average of 1.35/1,000 population.

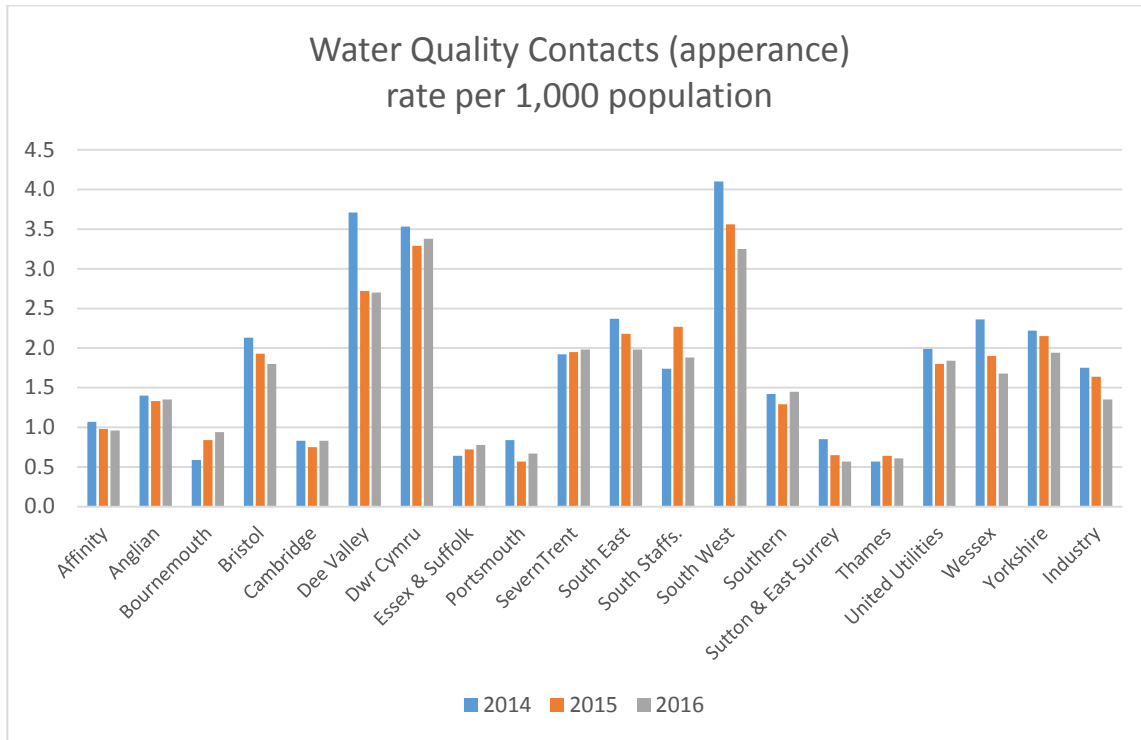
	2013	2014	2015	2016	2017	2017 Target
Appearance	147	308	180	262	152	
Taste & Odour	155	253	194	189	222	
Illness	5	22	24	17	15	
Total	307	583	398	434	389	298
Population (000s)	708	693	698	703	707	707
Rate per 1,000 population	0.43	0.84	0.57	0.67	0.55	0.42
Industry average	1.91	1.75	1.64	1.35		

In the year we continued to implement a number of initiatives to further reduce the level of water quality contacts. These include:

- The Company's website includes information on hardness, taste and odour of the water and cloudy water. The hardness section of the website has been updated recently to try and make it easier for customers to find the hardness value for their area. The data is now presented in a table format indicating whether the water is 'soft', 'moderately hard' 'hard' etc. It is hoped that this will reduce contacts of this nature. Further updates are planned in relation to lead and taste contacts.
- Information videos are now available on the Company's website to try and reduce the number of contacts. This includes a video on 'air in water' and will show how customers can identify air in the water.
- Water quality contact data is shared with the Distribution department to analyse if there is any correlation between distribution activities and water quality contacts. We have undertaken "Calm network training" for inspectors on valve operations on the network. This aims to minimise water surges and their associated problems.
- We are monitoring the air in water contacts and analysing the network to evaluate the possibility of any network modifications that may improve air control. A programme of air valve maintenance is also planned once the plotting of contacts is completed.

As part of the Ofwat ODI scheme, rewards and penalties apply at the end of the current period and to the average contact rate over the five year period. If contacts remained at this level over the remaining three years of the current period until 2020 a financial penalty would be incurred and as a result allowed revenue will be reduced by £1.9million over the next price review period (2020-2025). This will mean a reduction of customer bills of £1.20 at 2020.

The industry performance on water quality contacts is shown in the graph below. It is for the period 2014 to 2016 as the data is not published for 2017 until July 2018. It shows that our performance for 2016 was the third in the industry and that for 2017 we are likely to remain upper quartile.



The Company shared its action plan to reduce the number of Water Quality Contacts with the CCG, who have monitored performance during 2017/18.

Wholesale water outcome: Safe secure and reliable drinking water

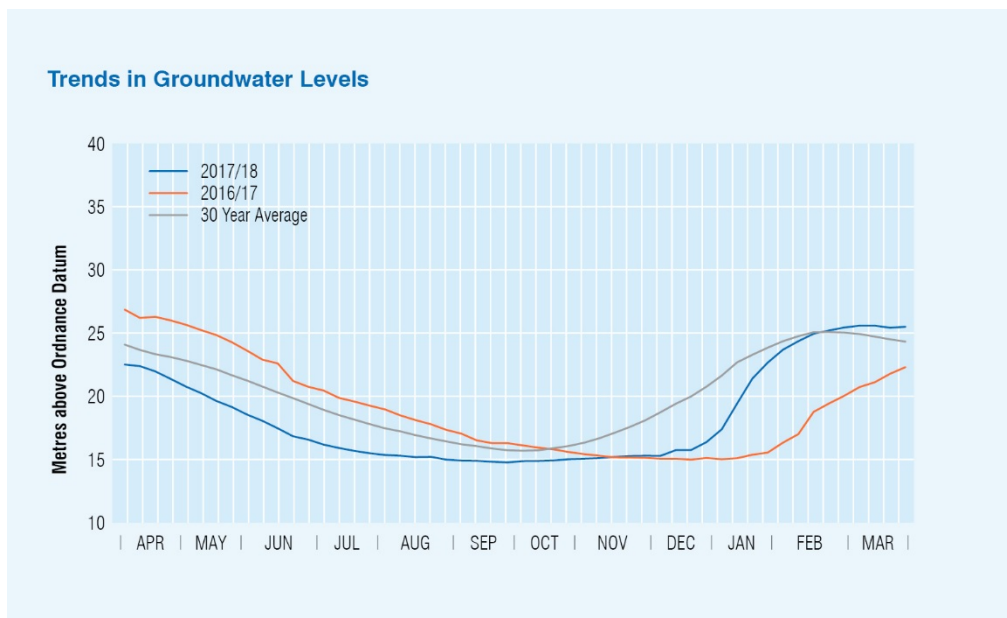
Performance commitment: Temporary usage bans

This is defined as the introduction of water restrictions on customer usage in the period in accordance with the company's approved drought plan. This is a reputational ODI with no financial incentives.

87% of water supplied to customers is from groundwater springs and boreholes which abstract from the underground chalk of the South Downs. Groundwater levels are, therefore, critical to maintaining supplies to customers.

The Company has for many years monitored the groundwater levels at Idsworth Well, Rowlands Castle. The Company has not had to impose restrictions on our customers since 1976.

Whilst ground water levels from October 2016 – October 2017 were consistently below the 30 year average, it was not significant enough to require us to impose restrictions on usage in 2017/18.

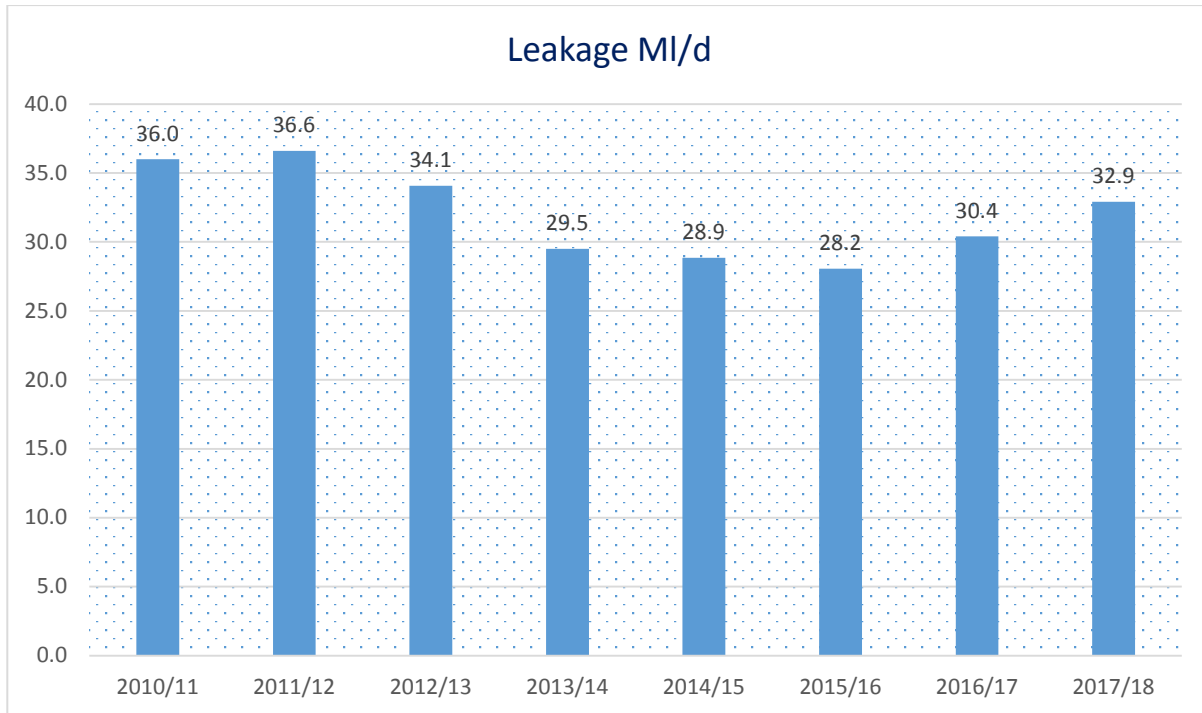


Ground water levels were lower than average at the start of 2017/18 though we have seen rapid re-charge from December 2017 onwards and we are therefore unlikely to need to impose restrictions this summer (summer 2018).

Wholesale water outcome: Less water lost through leakage

Performance commitment: Leakage

For the year 2017/18 average leakage is calculated (post Maximum Likelihood Estimate (MLE)) at 32.9 MI/d. This is a failure against the target of 29.9 MI/d. The graph below shows the long term trend in leakage performance.



The graph below shows the trend in leakage levels during the year (Figure1). Leakage began the year above target at 30.9 MI/d. This was as a result of high winter leakage in 2016/17 that the Company was still recovering from (A). We then experienced an increase in late April and early May to 34.7 MI/d (B) which was due to ground movement associated with a reduction in soil moisture content. There was also an increase in bursts during this time (see page 12). A concerted effort to reduce leakage over this period reduced leakage to 31.1 MI/d by the end of May (C).

We then experienced an extended period of high night usage from June till August (D), when leakage cannot be accurately estimated. Heavy rainfall during the end of August allowed us to better understand night use (E). Leakage rose by 0.9 MI/d to 32.0 MI/d over the summer period.

Despite additional efforts in both leak detection and repair, leakage remained steady during the Autumn (F), only reaching a low of 30.3 MI/d compared to a target of 28.3 MI/d. Whilst we have typically seen leakage reduce during the Autumn, other water companies also saw the same flat trend during 2017/18 as a result of dry ground conditions leading to ground movement and subsequent bursts.

During November we appointed an independent technical expert, Dr Steve Tooms, to review our leakage detection strategy, which was subsequently revised and agreed by the Board and explained to the CCG.

Approximately 98% of water supply connections are continuously monitored by strategic meters (SMAs) and District Meters (DMs) covering 80% of our mains network. Approximately 6 MI/d of leakage existed in Not on District areas (NOD) or 365km of 8"-20" mains.

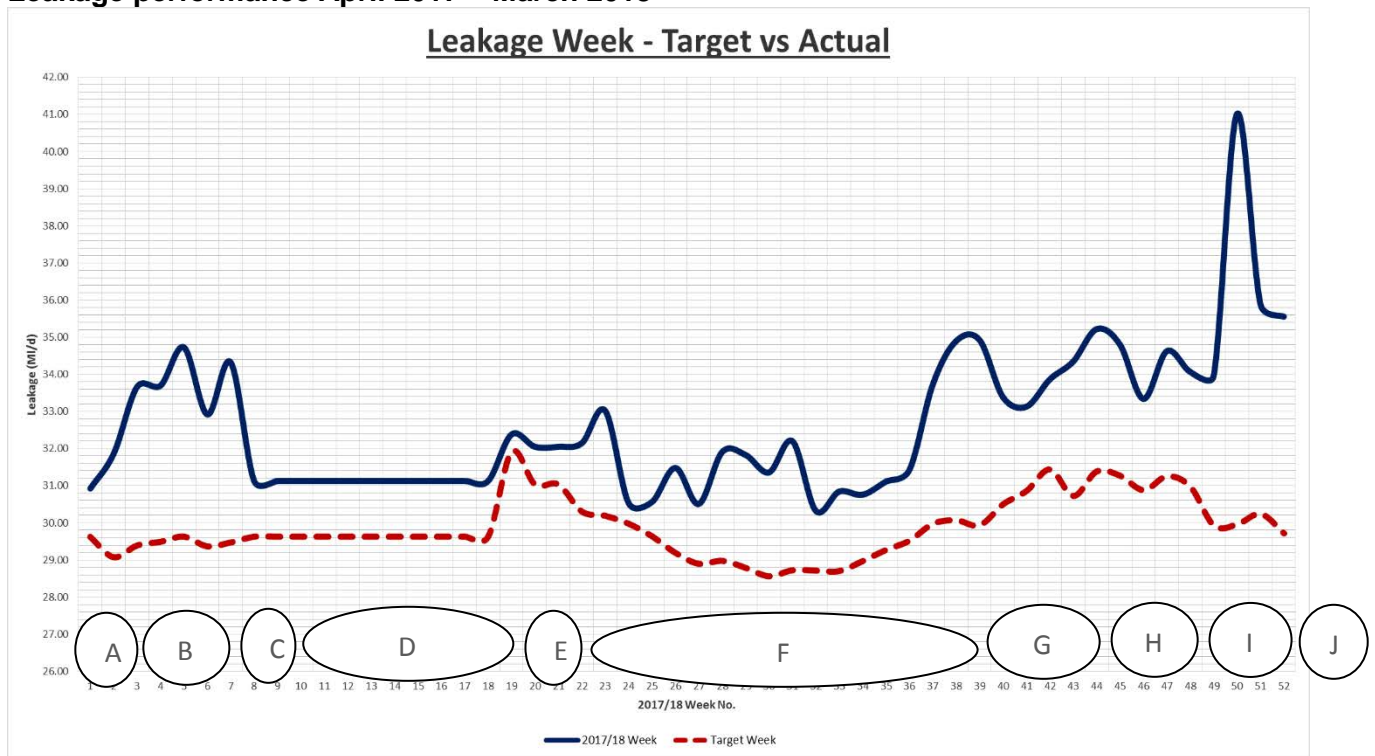
A revised detection strategy was adopted and included:

- Maintaining leakage levels an existing SMA's
- Redirect resources to concentrate on NOD detection and repair
- Creation of additional DMAs and sub division of SMA's
- Purchase of specialist additional equipment to assist in NOD detection and repairs.
- Additional resources and technical support

AMP6 expenditure was increased from an AMP5 level of £2.7m to £5.4m in order to improve performance.

We then experienced four separate Winter Events (G to J), compared to an average of two. A Winter Event is typically caused by an extended period of cold weather and/or a quick thaw. In particular the 'Beast from the East' had a significant impact. Leakage rose by 7.05 MI/d after the thaw, with bursts roughly 3 times higher than the average for March.

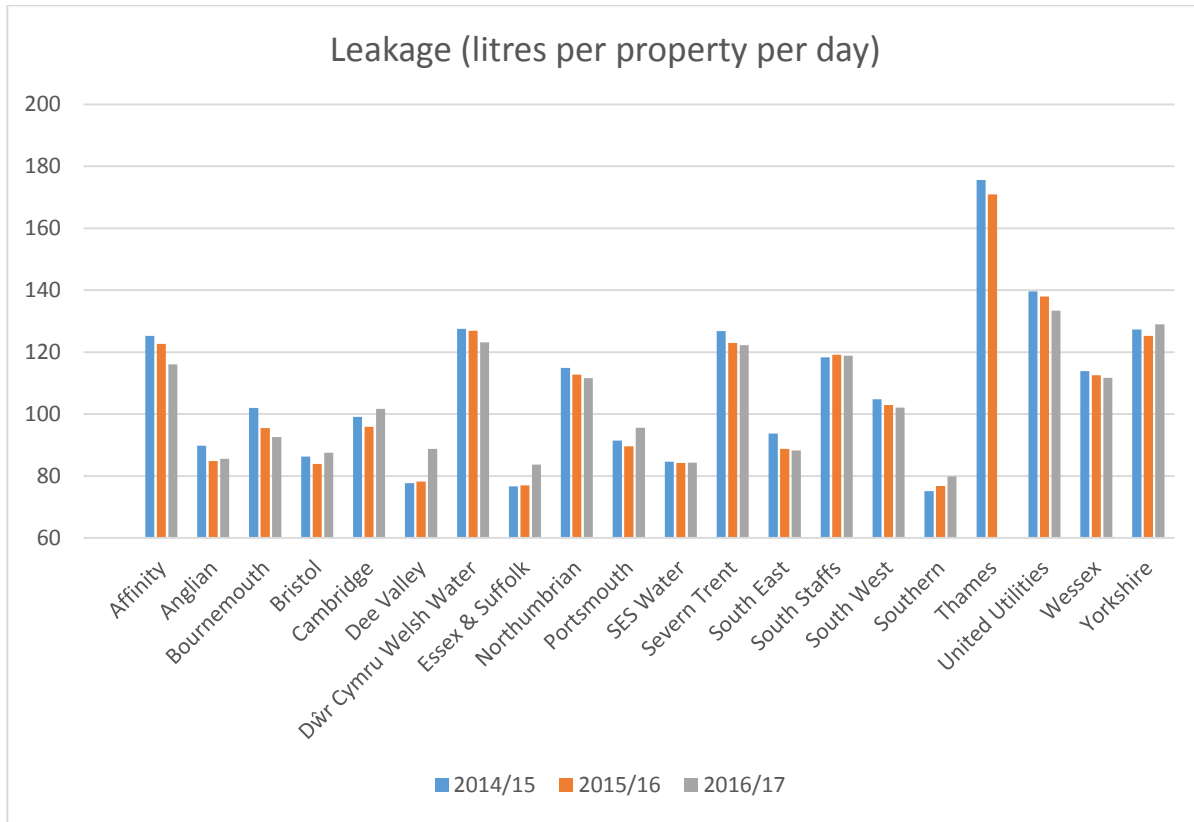
Leakage performance April 2017 – March 2018



The high starting leakage level, combined with the challenging weather and ground conditions meant that we missed our leakage target for 2017/18. The end of year, post-MLE leakage figure was 32.93 MI/d, making the three year average 30.45 MI/d compared to a target of 29.95 MI/d. An enhanced recovery plan has been put into place to significantly reduce leakage during 2018/19 and to ensure the AMP6 ODI target of 29.9 MI/d is achieved.

The industry performance for leakage is shown in the graph below. It is for the three years up to and including 2016/17 as the data is not published for 2017/18. Despite the challenges in this area, our performance remains better than the industry average.

Industry leakage performance, 2014/15 - 2016/17 (litres / property / day)



Wholesale water outcome: High quality service

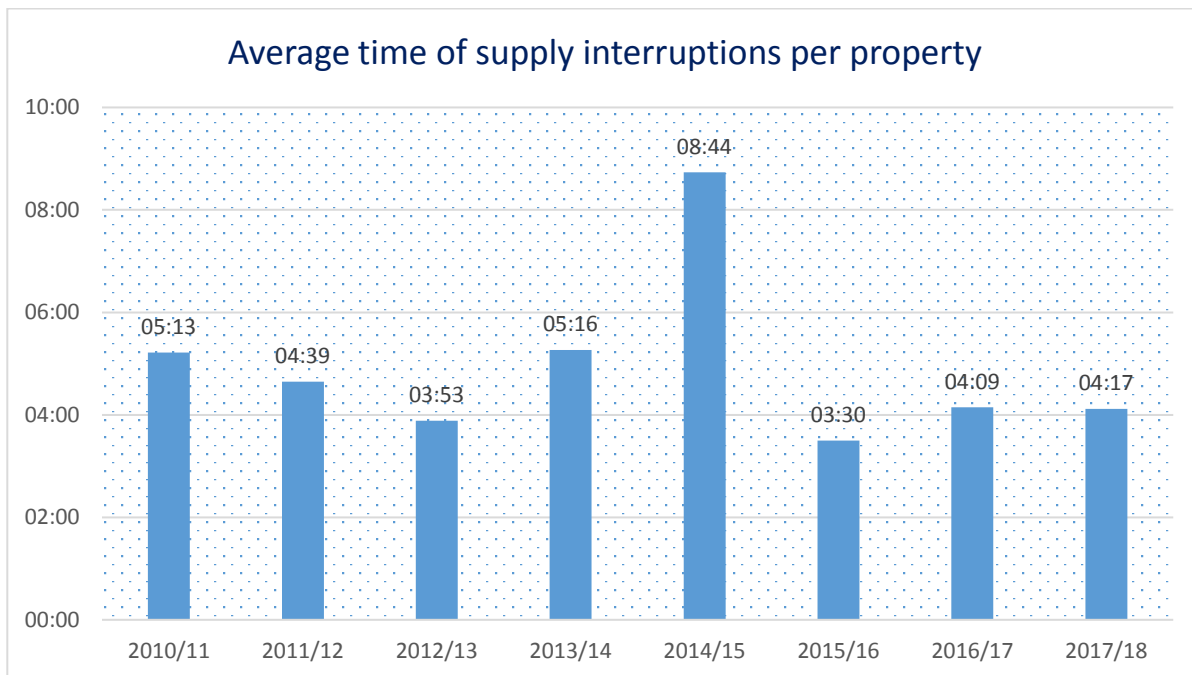
Performance commitment: Interruptions to supply

This is defined as the average time of supply interruption per property within our supply area and includes both planned and unplanned interruptions.

Portsmouth Water's customers experienced an average interruption to their supply of 4 minutes and 17 seconds per total properties served, a slight increase from 4 minutes and 9 seconds in the previous year.

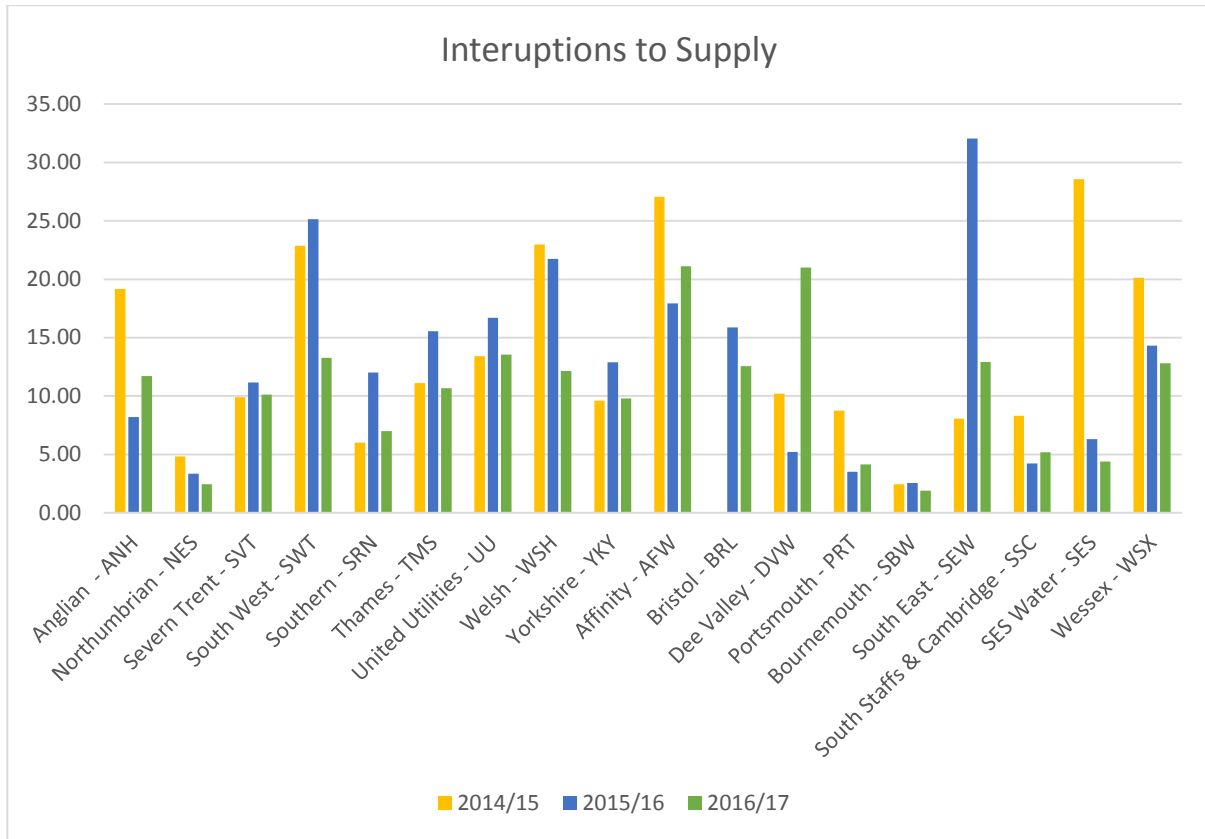
The primary reason for improvement in performance since 2014/15 is due to better management of planned interruptions. The increase relative to 2015/16 reflects an increase in planned interruptions figure from 1 minute 57 seconds to 2 min 30 seconds in 2016/17 and 2 mins 40 in 2017/18 as we increased the length of renewals activity from 11.6km in 2015/16 to 21.5 km in 2016/17 and 21.9 km in 2017/18.

The level of unplanned interruptions was close to the long term average in 2017/18, at 1 min 37 seconds. Despite a similar number of interruptions over 3 hours to previous years, an increase in the number of properties affected per interruption has led to a slight increase compared to the past few years.



In the year the performance commitment of 6 minutes per property has been met. If interruptions remained at the average of the first three years of the period, a financial reward would be gained and as a result allowed revenue will be increased by £35,000 over the next price review period (2020-2025). This will mean an increase in customer bills of 2 pence in 2020.

The industry performance for interruptions is shown in the graph below. It is for the three years up to and including 2016/17 as the data is not published for 2017/18. It shows that our performance for 2017/18 at 4 mins 17 seconds per property would remain upper quartile.



Wholesale water outcome: An improved environment supporting biodiversity**Performance commitment: Biodiversity**

The Company has made a commitment to support conservation and biodiversity. A Biodiversity Action Plan is to be agreed with relevant stakeholders including our CCG. As part of the Ofwat price determination we have increased our budget in this area in order to undertake more conservation and biodiversity projects.

In summer 2015 we appointed a specialist consultant to complete an ecological survey of 52 of our sites. A key objective of the surveys was to identify potential biodiversity enhancement projects. In 2016 the recommendations were collated and prioritised for action into a 4 year programme. The biodiversity action plan programme was then agreed with Natural England and the Customer Challenge Group.

The following prioritised conservation tasks have been completed in 2017/18:-

- Completed National Vegetation Survey & Biodiversity Action Plan priority habitat mapping at 3 high priority sites (Hoe Pumping Station, George SR & Street End SR)
- Completed invertebrate surveys to help inform the biodiversity action plan at 4 high priority sites (Hoe PS, Highdown SR, Nore Hill SR & Shedfield SR)
- Completed a water vole survey at the Itchen WTW lagoons and Great crested newt eDNA survey in a pond at Lavant WTW in advance of planned habitat enhancement works.
- Completed a survey at our Madehurst Reservoir to assess what would need to be done to convert it into an underground bat roost / hibernation site.

The surveys have identified the presence of national and regional Biodiversity Action Plan (BAP) habitats and species and this information is being used to inform the site management going forward.

The following biodiversity enhancement projects have also been completed in the year

- Opened up relic creeks / channels and created some shallow scrapes to allow enhanced tidal flooding and extend the existing saltmarsh plant community on a grazing marsh at Bedhampton.
- Cleared trees and scrub in woodland along a watercourse at Fishbourne WTW to let more light into the channel and onto the banks, to help diversify the vegetation and create improved habitat for water vole.
- Deepened and doubled the size of a pond at Westergate WTW in order that it can hold water for longer through the summer.
- In partnership with Itchen Valley Country Park thinned out approximately 30% of the conifer from the woodland at Highwood Reservoir, letting in more light onto the slopes to help diversify the ground flora, and give more mixed native species the chance to grow. This is part of a project to restore the native ancient woodland which historically would have been present at the site.
- Chalk grassland restoration is ongoing at 3 sites (Farlington, Fort Southwick, Nore Hill) through a programme of scrub clearance and invasive species control, notably cotoneaster, pyracantha, tansy and budleija removal.
- Invasive budleija clearance and removal of non-native conifers at Northbrook WTW.
- Removal of invasive blackthorn and other scrub to restore a wet grassland paddock in woodland north of Hoads Hill.
- Removed invasive willow from the old lagoon at Itchen WTW to diversify and enhance the wetland habitat.

In addition, options appraisal and design work has been taking place in advance of a proposed wetland enhancement projects at three sites. At Fishbourne and the Itchen old lagoon the work will provide additional habitat for water voles. The water vole is the UK's most rapidly declining mammal and has been lost from 94% of places where they were once prevalent. In the last decade there has been a 30% decline in the places where these river mammals once lived across England and Wales. Habitat loss, water pollution and massive building development have led to declines in the voles since the 1960s; exacerbated by predation by North American mink, which originally escaped into the wild from fur farms.

The presence of Dormice has been confirmed in the hedgerow at a small site near West Marden. Dormouse boxes have been placed within the hedge to provide additional harbourage for these European protected species, and the management of the hedgerow adapted to allow hazel trees to flourish and produce the nuts which is the favoured food of this charismatic species.

New hedgerows have been planted at three sites (Fir Down SR, Lavant WTW and Westergate WTW). Only native species have been used in the planting. In addition to hawthorn species such as cherry, crab apple, hazel and spindle have been planted, as these species will provide fruit, berries and nuts in time which will provide food for birds and mammals, along with blossom to support insects, helping to enhance biodiversity at these sites.

All survey and biodiversity projects agreed for the financial year 2017/18 were completed on time, except for two projects (Lavant SR woodland thinning & Soberton WTW pine removal) which were deferred while we investigate a potentially more cost effective way of completing the projects. These were replaced with two other projects completed in February / March 2018;

- Removed trees and scrub to restore grassland habitat designated as a Site of Importance for Nature Conservation at Hoe Pumping Station meadow. A new high priority project identified as being required by the 2017 phase 2 vegetation and invertebrate surveys.
- Removed large conifer trees & coppiced hazel hedge at West Meon WTW.

The commitment is to achieve 90% of the agreed plan by the end of 2020 and this will determine whether a penalty of £44,000 for each 10% of the plan not achieved should apply.

We plan to achieve our commitment on biodiversity and would not expect a penalty to apply.

Wholesale water outcome: An improved environment supporting biodiversity**Performance commitment: Water Framework Directive**

Obligations under the Water Framework Directive are required to be complete by 2021. The Company committed to deliver by 31 March 2018, with a penalty for later delivery and a reward for earlier delivery. The programme was signed off by the EA in winter 2017 in advance of the deadline. This has been achieved and no reward or penalty is now due.

The Company was asked to improve the River Ems for fish and invertebrates. This has been achieved by a combination of river channel improvements and a variation of an existing abstraction licence. The EA have signed off this scheme as completed.

We were also asked to improve the River Hamble for fish and invertebrates. This has been achieved by implementing improvements at two farms which has reduced the level of silt in the water.

At Ford Farm a large arable field drained, via an access track, into the River Hamble. With heavy rainfall sediment from the field washed into the river and created poor water quality. Portsmouth Water, in association with the Rivers Trust, has provided a 'Silt Trap' and modifications to the access track to divert flows at critical times.

At Tangier Farm the existing cattle crossings caused sediment to enter the river and the structures were an impediment to fish migration at times of low water flows. Portsmouth Water and the Rivers Trust replaced three crossings with hard surfaced structures with graded banks and approach ramps.

Having completed these two schemes in 2016/17, Portsmouth Water and the Rivers Trust undertook a third scheme at Park Lodge on the Upper Hamble in 2017/18.

At Park Lodge the Environment Agency had identified an existing weir which was a barrier to fish migration. With the cooperation of the landowner, Portsmouth Water arranged for the weir to be removed and for the river bed to be re-graded. This creates a series of 'Riffles' and 'Pools' which allows fish and eels to move up and down stream.

In addition to the river work the contractor also removed non-native bamboo which has the potential to spread and shade the river. Modifications to the bank profile will encourage more suitable bankside vegetation such as yellow flag iris, reeds, rushes and sedge.

The Rivers Trust is discussing temporary bankside fencing with farmers on the Upper Hamble. This would reduce 'Cattle Poaching' where animals break down the river bank and sediment enters the water. All these measures are designed to make the Upper Hamble more resilient to low water flows, improve water quality and fish migration.

Wholesale water outcome: An improved environment supporting biodiversity**Performance commitment: Renewable Energy**

As part of our business plan we have committed to increasing the amount of electricity that we use from renewable sources by 10% by the end of the current five year period.

The target for the year 2017/18 was a 6% increase in the amount of electricity that it uses from renewable sources. In January 2015 the Company switched electricity supplier. Over 95% of all electricity we use is from renewable sources and thus we consider we have achieved this ODI.

Further we address carbon emissions in a number of different ways;

- Operate solar arrays at 5 of our water treatment works.
- Preparing and submitting our Energy Savings Opportunities Scheme (ESOS)

We will continue to investigate the feasibility of sustainable wind and solar energy projects and other renewable technologies where cost effective.

We continue to work towards further reductions in our power consumption including;

- Enhancing telemetry controls monitoring power consumption
- Targeting investment to optimise pump operation, reduce our base level power requirement and through life monitoring of pump efficiency.
- This is the fourth year we have also participated in National Grid's Demand Side Balancing Reserve (DSBR) where we switch off our pumps during times of peak demand, to assist the Grid in balancing supply and demand in the UK.

This is a reputational ODI with no financial incentives.

Wholesale water outcome: Health and safety culture

Performance commitment: RoSPA accreditation

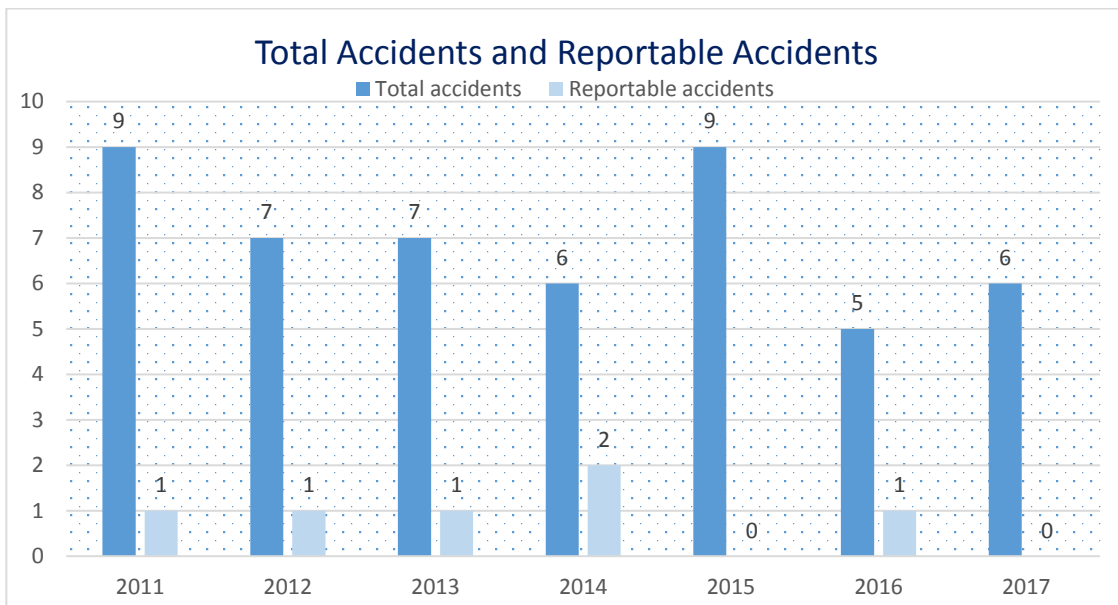
Health and Safety has been a priority within the Company for many years and this focus has driven a very low number of employee accidents with only one serious “reportable” accident in the year. Reportable accidents are those which result in more than 7 days off work.

We continually review our working practices, challenge ourselves and our colleagues to ensure we put safety first. We are proud of our safety record in recent years but we encourage a culture of continuous focus and improvement. Much of our historic approach to H&S had been a top down prescriptive approach. During 2015 we introduced “hearts and minds” with the intention of driving a ‘bottom up’ engagement with H&S, where our operational staff drive both the culture, appropriate H&S activities and changes.

2017 saw us become the holder of the RoSPA President’s Award for Health and Safety for the third successive year. The President’s Award, is part of the RoSPA prestigious awards scheme and is given to organisations that have demonstrated excellence in the area of Health and Safety consistently for 10 years or more.

The President’s Award acknowledges our achievements in the previous 13 years, winning 11 gold level awards and an Industry Sector award.

The performance commitment is to be awarded RoSPA annually, which we have again achieved.



This is a reputational ODI with no financial incentives.

Retail outcome: High quality service**Performance commitment: Service incentive mechanism**

Owat use a methodology for measuring customer service known as the Service Incentive Mechanism (SIM). This seeks to measure the quality of service provided by companies to household customers only. The SIM is divided into two elements:

Quantitative - measured by:

- The number of unwanted telephone contacts
- The total number of written complaints
- The number of escalated written complaints
- The number of CCWater investigations where a complaint was not resolved by a company

Qualitative - measures how satisfied customers are with the quality of service they receive based on a survey of customers who have had direct contact with their water company.

The performance commitment is to achieve a score in the upper quartile within the industry and we will know this following publication of all data, on 15 July 2018.

The table below compares performance for 2017/18 with 2016/17, where the Company was first in the industry.

SIM Scores	Multiplier	2016/17		2017/18	
		Number	Score	Number	Score
Unwanted Phone Contacts	1	11,031	11,031	12,175	12,175
Written Complaints	5	380	1900	296	1,480
Escalated Written Complaints	100	22	2,200	14	1,400
CCWater Investigated	1,000	0	0	0	0
			15,131		15,055
Connected Properties year end			299,251		301,485
Quantitative SIM Score			22.5		22.5
Qualitative Measure		4.48	65.2	4.49	65.4
Total SIM Score			87.7		87.9

The number of unwanted calls increased in the year as a result of two operational events. An unwanted contact is a phone contact received from customers that are 'unwanted' from the customer's point of view. This includes a contact about an event or action that has caused the customer unnecessary aggravation (however mild). It also includes repeat or chase calls by the customer to the company.

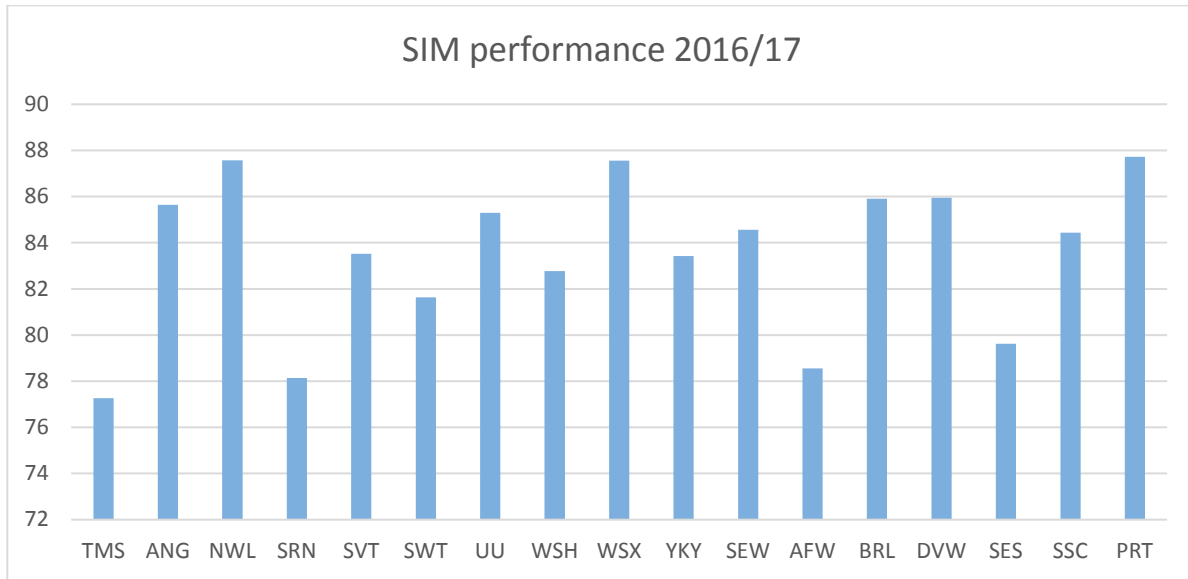
For 2017/18, Portsmouth Water had 10.3 complaints per 10,000 customers. This is a reduction on last year's 12.7 and reflects the increase we saw in 2016/17 as a result of operational issues. The qualitative score remains 22.5 out of 25 for the year.

In the Qualitative assessment for the four quarters in 2017/18 the Company was ranked 4th of the 18 companies with 4.49 points out of 5.00. The Company's Qualitative score was 65.4 out of 75.

This gives Portsmouth Water a total score of 87.9, an increase from 87.7 last year, when we were ranked first in the industry.

Rewards and penalties apply at the end of the current period in 2020. We do not know yet which position we will achieve in the industry performance, however have assumed we will continue to remain upper quartile – resulting in a reward of £800,000 or a 50 pence increase in customer bills at 2020.

The industry performance on SIM is shown in the graph below. It is for the year 2016/17 and where we were ranked first.

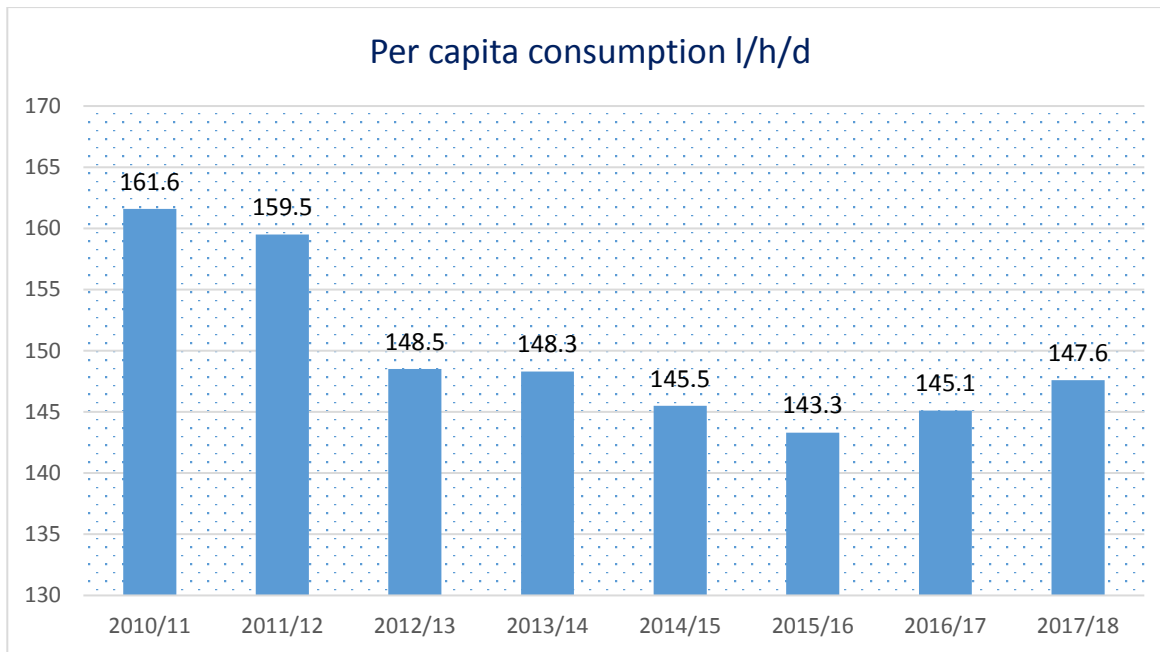


Our performance in 2017/18 is likely to ensure we retain upper quartile status.

Outcome: An improved environment supporting biodiversity

Performance commitment: Reducing per capita consumption

Per capita consumption was 147.6 l/h/d which is an increase from 145.1 l/h/d in the previous year. The graph shows the reported per capita consumption since 2010/12, based on data reported to the Environment Agency in particular.



We continue to monitor household usage of our customers to calculate this measure. There are two groups of household customers, those who are metered and we have an explicit volume of usage and those who are not metered. For this latter group we monitor usage of over 1,000 households with their consent. They provide information on occupancy rate and white goods ownership. From this sample we estimate how much water all of our unmeasured customers use each day.

Household consumption is heavily influenced by the weather. We experience increases in demand during the summer primarily due to external use in the gardens. A 'wet' summer reduces this demand, and we note the summer and autumn of 2017 were relatively dry with a corresponding increase in usage.

In this context, the Water Efficiency programme has distributed over 150,000 free water saving devices to our customers since 2010. The Company continues to promote the benefits of saving water to our customers. We are constantly looking for new ways to encourage water saving. We promote ways to reduce water consumption through our website, free devices, community and school events and this year a team was set up to promote the benefits, financial and environmental, of a customer switching to a water meter.

The ODI target is based on reaching a per capita usage figure of 143.9 l/h/d in 2019/20. No penalty will thus be applied until we know performance in 2019/20.

Retail outcome: Supporting the community**Performance commitment: Survey of developers**

During the year we have again undertaken extensive work with developers working with us in order to understand both their experience and expectations of working with us.

The results have indicated that the level of service we provide is good, our communication and quality of work meets their expectation. This is an important customer segment for the business and wider economy

The commitment is to achieve a 70% satisfaction rate in the survey relating to the service delivered to developers.

In the year we surveyed 11 developers. These are a representative sample of active developers that Portsmouth Water dealt with in 2017/18.

There was a 91% satisfaction rate with 10 out of 11 developers reporting to be 'satisfied' or 'very satisfied' with their overall dealings with Portsmouth Water. This is a small % increase from 2016/17, where 11 out of 13 developers, (85%) were at least satisfied.

This is a reputational ODI with no financial incentives.

Section 2 - Other Metrics

In response to requests from stakeholders we report our performance against various other KPIs. The Reporter also provided assurance on these items; see page 43.

Abstraction Incentive Mechanism (AIM)

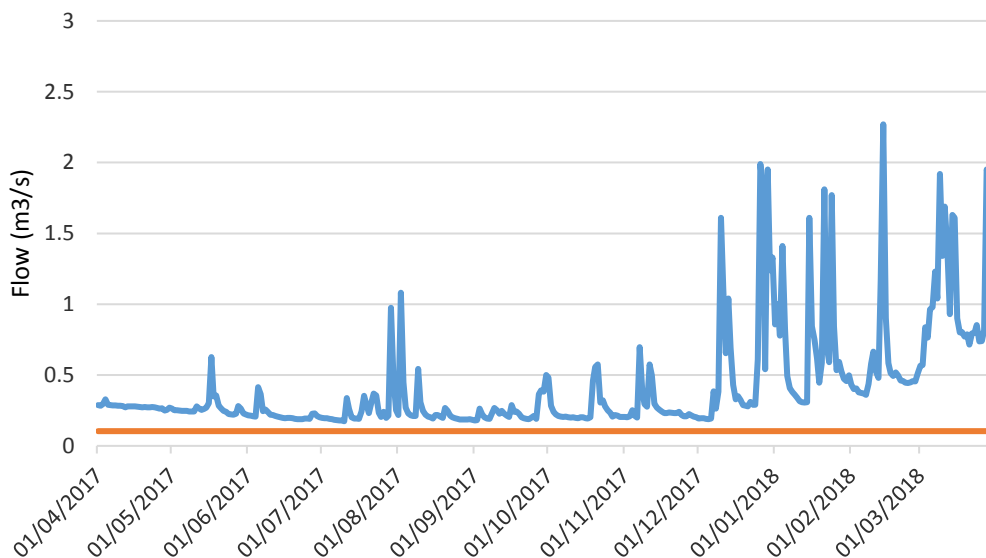
The abstraction incentive mechanism (AIM) has the objective of encouraging water companies to reduce the environmental impact of abstracting water at environmentally sensitive sites during defined periods of low surface water flows. The AIM aims to help to improve the resilience of water supply and ensure that it is provided in a more sustainable way (Guidelines on the abstraction incentive mechanism, Ofwat, 2016).

Northbrook is the only Portsmouth Water site remaining in the Abstraction Incentive Mechanism (AIM) as it is deemed to impact on flows on the River Hamble.

In 2017/18 Portsmouth Water completed an NEP (Natural Environment Program) scheme designed to improve water quality on the River Hamble. It is possible that future enhancement schemes may take still take place for the River Hamble, although this is still subject to review.

The AIM minimum flow target for the River Hamble is 0.104 m3/second and is represented by the orange line in the figure below. This target is based on Q95 flows and recent actual abstraction from the period 2007 to 2014.

During 2017/18 the low flow trigger was not passed in any day, and therefore, annual reporting are all zero.

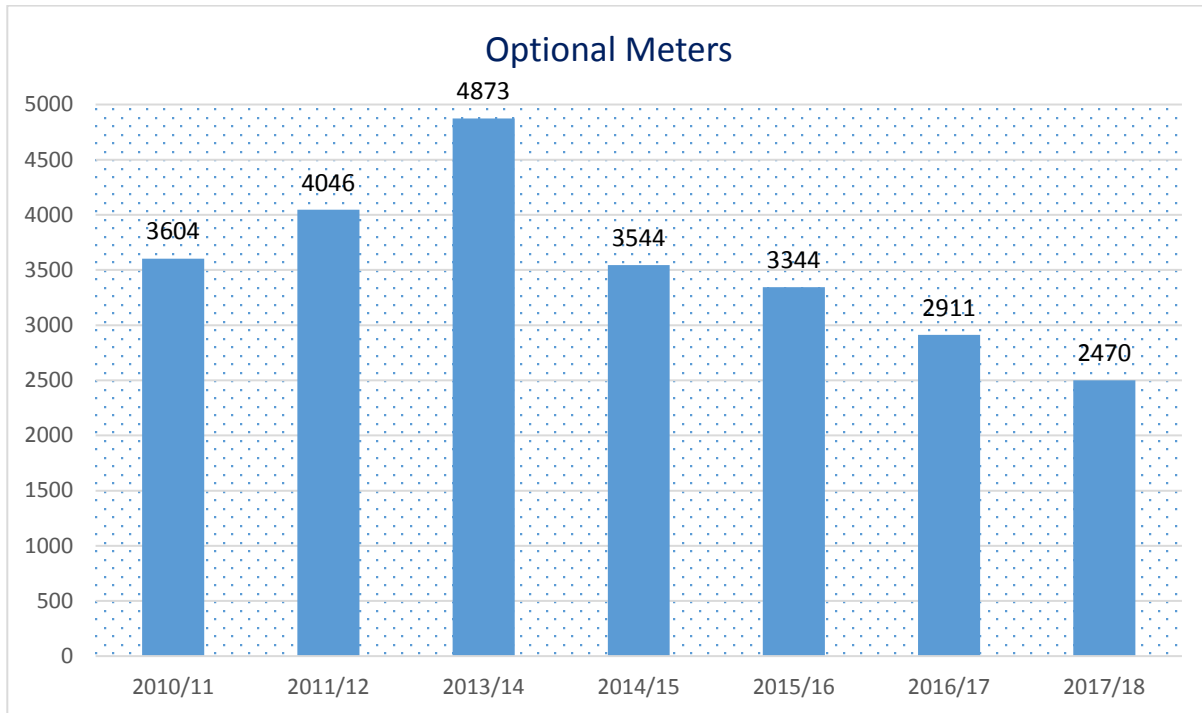


River Hamble AIM 2017/18

Meter Optants

All domestic customers are entitled to be charged in relation to the volume of water used. Thus those who currently pay in relation to the rateable value of their property or a fixed licence fee are normally able to have a meter installed free of charge.

Our Business Plan commitment was to promote metering to customers who would benefit from a financial point of view. The Company proposed to install 5,500 domestic meter options per year, and in 2017/18, and despite a number of initiatives less than 2,500 customers chose to switch to a measured supply as part of the optional metering.



Initiatives in 2017/18 to increase meter penetration, include the following:-

- Promote metering over the phone to those customers that would benefit financially
- Installing loggers on meters for customers before they switch, to identify usage patterns
- Send out leaflets via email to unmeasured customers in specific areas and socio-economic groups promoting metering
- Put metering messages on our contractor vans
- Update the back of Portsmouth Water envelopes to promote metering
- Promote metering at local community events

The average meter penetration rate for 2017/18 was 30.4% of household customers, an increase of 1.5 percentage points from last year.

Compliance with Annual Abstraction Licences

The annual average distribution input increased from 170.1 MI/d in 2016/17 to 174.4 MI/d in 2017/18. The volume of water distributed is influenced by many things, including the weather. We have experienced a very dry period in the autumn in particular, which has resulted in increased demand. The peak week of 210 MI/d occurred in mid-June 2017.

Annual abstraction is drawn from three types of source, 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.

Abstraction from the Company's sources in 2017/18 was as shown in the table below.

Source	Annual Abstraction - MI/Yr			
	Source Licence	Source Actual 2017/18	Group Licence	Group Actual 2016/17
Northbrook	7,487	5,757	7,487	5,757
Lower Upham	640	0		
West Street	3,328	1487		
West Meon	166	15		
River Itchen	15,916	8,455		
Maindell	2,040	56		
Soberton	3,294	1,741	3,294	1,742
Newtown	695	1		
Worlds End	8,296	3,463		
Lovedean	4,148	2,179		
Havant & Bedhampton	35,770	18,588		
Walderton	9,955	7,247	23,740	17,169
Woodmancote	1,103	371		
Fishbourne	3,741	1,919		
Funtington	2,920	1,642		
Lavant	9,950	4,415		
Brickkiln		1,575		
Eastergate	10358*	2,137	10,358	6,813
Westergate		2,072		
Slindon		618		
Aldingbourne		1,986		
Total	116,066	65,724	44,879	31,481

* The Eastergate group (Eastergate, Westergate, Slindon and Aldingbourne) operates within a group licence – with specific constraints on each site.

The Company complied with its annual licence requirements in 2017/18.

Guaranteed Standards of Service

We operate a compensation scheme as part of our Customer Charter. This includes the service standards as set out in law, under the Guaranteed Standards Service (GSS) scheme. If we fail to meet any of the standards outlined in the GSS guidelines, customers are entitled to a compensation payment. The GSS standards cover the following areas;

- Making and keeping of appointments with customers
- Responding to account queries
- Responding to complaints
- Dealing with interruptions to the water supply (planned and unplanned)
- Levels of water pressure

In the year 2017/18 the company made 158 GSS payments which is a reduction from 243 in 2016/17 which itself was heavily influenced by two incidents in June and October 2016 which impacted almost 200 customers significantly in 2016/17.

Detail is shown in the table below:-

	2015/16	2016/17	2017/18
Making and keeping of appointments with customers	27	26	30
Responding to account queries	10	22	11
Responding to complaints	4	3	3
Dealing with interruptions to the water supply (planned and unplanned)	63	191	97
Meters not read	6	1	17
Total	110	243	158

One issue raised in our audit was the appointment management procedures of smaller contractors. We are reviewing our internal policies accordingly.

Social Tariffs and affordability support

In recent years the country has seen increasing levels of household debt. Accordingly the Company pays close attention to how we support customers who may be struggling to pay their water bill. We have a number of options available to support these domestic customers.

We introduced our 'Helping Hand' Social Tariff in July 2016. In 2017/18 this tariff caps customers' bills at our minimum charge, £76.86, for those customers whose household income excluding certain benefits, is less than the Government's low income threshold of £16,105. Working with Southern Water, the wastewater provider, we have over 5,300 customers on this tariff since its launch.

Customers can also apply to be placed on the WaterSure Tariff. This tariff is for metered customers who are in receipt of certain benefits and have a medical condition that requires an individual to use more water or has 3 children under the age of 19 resident in the property. These customers have their measured bills capped at our average bill value. The number of customers has dropped marginally to 210, as customers switch to our Helping Hand social tariff.

Our Arrears Assist Scheme started in May 2014. Through this scheme we encourage customers back into making regular payments by matching the payments we receive £ for £. We have found the Arrears Assist Scheme has been successful in encouraging customers to engage with us about payment of their water accounts. It also enables us to better understand our customers' financial situation and the hardships they are facing. We currently have 183 customers on this scheme. As important is the number of customers who have completed this scheme and now paid off their debts. In the year there were 314 customers who effectively cleared off their debt using this scheme.

We also operate a scheme called Water Direct. Customers who receive certain benefits from the Department of Work and Pensions, and are in arrears on their bills, can request that water bill payments are deducted straight from their benefits. There has been a reduction in the number of customers on this scheme because, in part, when talking to customers we have encouraged them to switch to direct debit.

Finally we have an in-house Customer Support Officer whose role is to engage with hard to reach customers, and the organisations that support them.

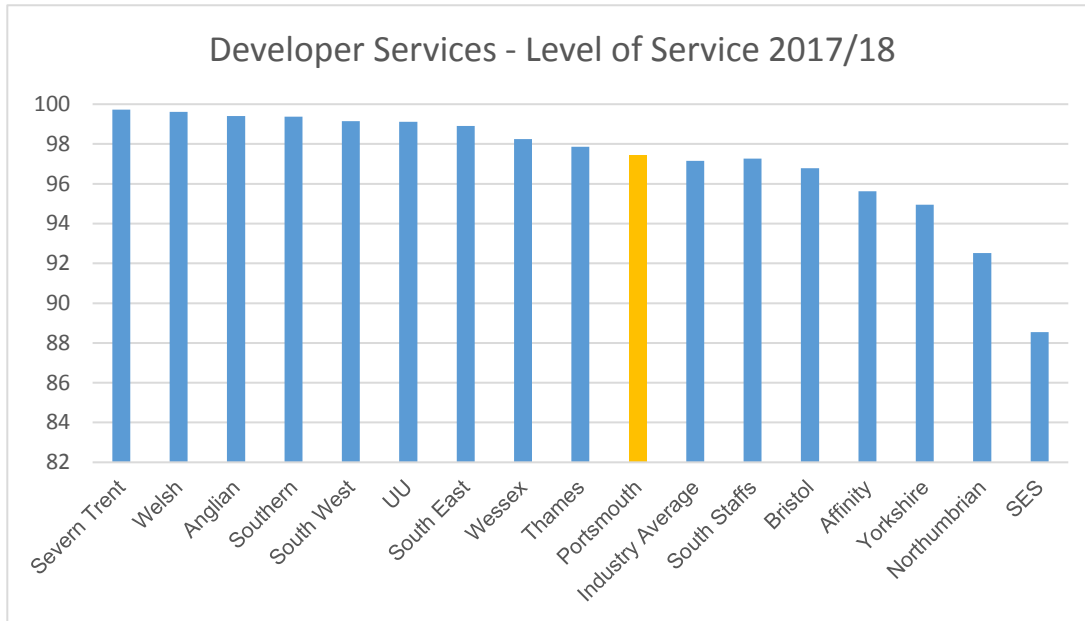
Detail of the number of customers as at 31 March for the last three years is shown in the table below.

	2015/16	2016/17	2017/18
Social Tariff	n/a	2806	5,312
Watersure tariff	255	234	210
Arrears Assist	240	218	183
Water Direct	1277	687	579
Special Assistance	205	225	315

Levels of Service for Developers

During the year 2015/16 the industry published, for the first time, its performance relating to developers. The level of service provided by the Company to this important class of customer is consistently close to 100%.

At 97.43%, our performance is above the industry average for 2017/18 as shown below.



Source: WaterUK

The levels of service being monitored relate to the following:-

- Pre-development enquiries
- Service pipe connections
- Mains design
- Mains diversions and
- Self-lay providers

This KPI should be read in conjunction with our developer survey shown on page 32. We believe the level of service demonstrated in this graph is consistent with the high degree of satisfaction achieved in the survey.

Greenhouse gases

Our Gross Operating Emissions has fallen from 11,079 tCO₂e to 9,718 tCO₂e in the year.

The table below shows how this has been achieved.

Our analysis has been prepared in accordance with the UKWIR methodology and reflects advice from Defra on the appropriate conversion factors for many items to establish the units which relate to carbon dioxide.

The classifications of activity, shown in the table below, are used in the assessment:-

Component	2015/16 tCO ₂ e	2016/17 tCO ₂ e	2017/18 tCO ₂ e
Burning of fossil fuel	444	400	315
Transport for operational staff	412	426	449
Electricity	10,025	9,292	8016
Business travel	47	2	22
Outsourced activities	58	117	167
Transmission and Distribution associated with electricity	828	840	749
Total	11,813	11,079	9,718

Our GHG intensity ratio has reduced from to 178.5 kg CO₂e / MI in 2016/17 to 135.6 kg CO₂e / MI for 2017/18.

The most significant factor leading to the overall decrease is a 1,276 tCO₂e reduction in Scope 2 emissions '*Total grid electricity used by company*'.

The reduction is due to the change in the UK grid Electricity generation mix. The UK has continued to see a reduced dependence on coal and a movement to low carbon generation.

Low carbon generation accounted for a record high of 47.0 percent of supply, up from 42.5 percent in 2016 due to increased generation from wind (due to an increase in capacity and higher wind speeds) and solar (due to an increase in capacity).

Despite a 3% increase in the use of electricity for pumping and treatment in 2017/18, the change in the grid factors resulted in an overall reduction of 1,361 tCO₂e. Had the previous year's grid factors been used the Gross operational emissions figure would have been 11,200 tCO₂e, a 1% increase from the prior year.

Written Complaints

The number of household written complaints has reduced in the year 2017/18.

We no longer report Non-household complaints, as the NHH customer base transferred to Castle Water as at 1 April 2017.

Our written complaints have reduced from 380 in 2016/17 to 296 in 2017/18. We noted last year that the absolute number of written complaints was high, reflecting - in part - operational issues in that year where we switched contractors and the works management system.

Categories of written complaints	2015/16	2016/17	2017/18
Charging and billing	185	210	168
Water service	69	158	123
Metering	3	2	0
Other service issues	3	10	5
Total	260	380	296

The

Company has been consistently classified by CCWater as a best performer for written complaints when scaled by the households we serve, and we would expect this to remain the same for 2017/18.

Water Company		Complaints Per 10,000 Connected Properties								
		2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Water and Sewerage Companies	Anglian	87.3	63.0	67.3	60.8	57.3	44.5	44.5	42.4	31.6
	Dŵr Cymru	83.3	87.6	72.4	30.4	26.0	26.4	21.4	45.8	42.0
	Northumbrian	74.0	53.0	49.2	39.6	38.1	35.1	27.0	29.4	26.4
	Severn Trent	64.4	49.5	57.2	48.8	41.9	43.8	33.8	25.7	30.5
	Southern	128.3	77.8	62.5	64.5	113.3	81.1	70.4	77.1	42.5
	South West	118.1	111.7	77.1	56.8	53.1	55.6	49.7	49.0	34.1
	Thames	68.2	58.3	54.2	60.7	56.5	38.2	35.5	27.1	33.0
	United Utilities	131.8	110.4	117.7	81.5	49.4	40.8	34.2	38.5	30.7
	Wessex	65.5	62.7	37.8	22.5	20.4	17.1	16.2	13.0	15.0
	Yorkshire	26.2	33.4	41.1	36.1	45.0	37.8	30.2	33.5	27.9
Water Only Companies	Affinity	43.6	31.0	20.3	17.1	15.0	17.4	20.1	36.3	28.4
	Bournemouth	29.6	24.1	23.7	23.0	18.5	18.0	16.7	31.7	21.3
	Bristol	70.8	67.8	39.3	23.2	22.3	20.3	18.6	14.1	23.6
	Cambridge	24.3	20.6	31.8	24.5	20.6	12.4	10.3	10.1	34.8
	Dee Valley	33.6	48.0	59.5	50.4	35.8	29.6	20.9	18.1	11.6
	Essex & Suffolk	48.5	45.2	44.6	41.3	34.6	28.7	27.4	31.9	25.7
	Hartlepool	21.5	18.5	26.5	30.1	26.1	18.5	27.1	27.5	32.6
	Portsmouth	6.5	7.0	6.6	8.1	10.4	7.6	10.8	8.7	13.3
	SES Water	19.9	26.0	23.4	19.7	17.8	16.4	15.9	20.2	21.1
	South East	113.5	102.7	93.0	147.1	98.0	69.4	35.5	21.9	14.9
	South Staffs	54.8	55.7	48.4	43.4	28.7	22.9	21.0	14.1	15.7
Industry Average		77.0	63.9	60.8	53.2	49.0	39.8	34.2	33.9	30.0

Communication pipes

The Company has over 300,000 communication pipes connecting its mains to customer supply pipes. We continue to improve our data systems to accurately record this asset, following a data request from Ofwat. The data for this year has improved as we prepare our next Business Plan.

As at the end of March 2018, we have the following communication pipes by material

• Lead	81,727
• Galvanised Iron	18,162
• Other	<u>207,394</u>
Total	307,282

Meters Renewed

The Company renewed 2,291 household meters in the year and 164 non-household meters in the year 2017/18. This is part of an on-going programme reflecting the age of the meter. This data is being provided following a request from Ofwat.

Pumping Head

An important cost to the business is that of electricity. The amount of electricity used is dependent, in part to the height we need to pump our water for our customers. Ofwat have requested we provide this data for different activities, water resources, treatment and distribution.

The data for the year 2017/18 is as follows:-

• Water resources	30.7 m hd
• Treatment	2.2 m hd
• Distribution	<u>36.4 m hd</u>
Total	69.3 m hd

AMP6 Reporter

2017-18 Annual Performance Report
Portsmouth Water

12 July 2018



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Assurance Statement for Portsmouth Water's 2017-18 APR

Atkins is engaged by Portsmouth Water to provide independent assurance on non-financial aspects of the annual reporting activities that Portsmouth carries out. That includes all reporting against Performance Commitments, the Abstraction Incentive Mechanism (AIM) and the Service Incentive mechanism (SIM). For the 2017/18 report year our assurance activities also covered Tables 4D, 4L, 4P and 4Q of the Annual Return, which were formally reported separately as the 'Wholesale Cost Assessment Tables'.

Our scope of audit is specifically designed to provide assurance for the data integrity of the Company reporting against the AR18 Performance Commitments (PCs), plus the reporting of the common metrics for leakage, customer interruptions and unplanned outage events in Table 3S, which need to be prepared in accordance with the water industry consistent reporting guidance referred to in Ofwat Information Notice IN 18/07 (commonly referred to as 'shadow reporting'). Our audit activities are designed to support Portsmouth Water's Assurance Plan, and follow a risk based Audit Plan that was agreed with Portsmouth Water's regulatory team in March 2018. As part of our preparatory work we considered the risks and audit needs required to provide the Audit Committee with an appropriate level of assurance, and satisfied ourselves that the Audit Plan was sufficient to meet this need. Our scope of assurance therefore included the process, systems and figures audits relating to the Annual Performance Report, and specifically the Outcome Delivery Incentive reporting contained within that report.

Our assurance activities are tailored so that, at the end of the process, we are able to confirm whether:

- Portsmouth Water has appropriate systems, procedures and reporting mechanisms in place to control and meet its reporting obligations.
- Portsmouth Water understands the accuracy of the data that it is providing and is able to identify where specific reported data may not be appropriate to regulatory expectations. Many of the items that we audit inherently contain an element of uncertainty, so it is not possible to assure their absolute accuracy. However, Portsmouth Water operates a process of data 'confidence grades' for all of the data used to report against its PCs, and in all cases we provide comment and feedback on the appropriateness of the grades that have been assigned. We also indicate where grades may not be appropriate, or have deteriorated from previous years. Where confidence grades are not used we seek to identify any shortfalls in the reporting processes and highlight any areas of material weakness to Portsmouth Water.
- The key assumptions and processes that are used to report against Portsmouth Water's Performance Commitments are consistent with the way that the target was set for the PR14 Final Determination.
- The methodologies that have been used for reporting of the common metrics in Table 3S are consistent with the technical guidance that has been published by Ofwat, and where there are shortfalls these have been identified appropriately using the Red/Amber/Green (RAG) classifications provided by Ofwat.

Overall, we are able to provide assurance this year against all of the above requirements. The vast majority of reporting processes continue to demonstrate either consistent good practice or incremental improvements from previous years. Where we have previously noted areas of inadequacy in reporting procedures these have now been addressed, and clear written procedures are now in place for all PCs that have been publicly reported on this year. Although we identified some areas of continuous improvement, for the PCs, none of our findings at audit were material and have not required comment by Portsmouth in their Annual Performance Report.

For the common metrics ('shadow' reporting in Table 3S) we confirmed that the methods and RAG classifications used for the reporting of interruptions to supply were appropriate with very few shortfalls against best practice. For the reporting of leakage and per capita consumption we found that Portsmouth are complying with the guidance as far as they are currently able to, and their assessment of the quality of their reporting components is appropriate. However, for both metrics there are components of the reporting that are classified as 'red' or 'amber' against the Ofwat guidance and both reporting systems will require

investment before they can be considered fully compatible with good practice. We also noted that the quality of the non-household billing data that is available to Portsmouth Water from the Market Operator Service Ltd (MOSL) system has affected the quality of reporting for both metrics, but this had a particularly large impact on the uncertainty of leakage reporting. This is not within Portsmouth Water's ability to control, but needs to be noted, particularly if comparisons are being made between the leakage figure that was reported to Water UK for the Open Water website last year, and the 'shadow' leakage figure that is being reported to Ofwat as part of this year's Annual Performance Report. The RAG data classifications for leakage are effectively the same as those that were reported for the shadow data last year. Our review of the methodology used for the reporting of mains bursts, unplanned outage and risk of severe restrictions in a drought confirmed that the process that was used and the RAG classifications that were proposed were appropriate and in accordance with the technical guidance.

For the Wholesale Cost Assessment tables, we confirmed that the reporting guidance had been followed and capital allocations were appropriate. Following our initial review Portsmouth have now been able to improve the methodology used for reporting the age of mains and communications pipe replacements in Table 4P, so there is a stepped change in figures in comparison to the 2016/17 reported figures due to the improved methodology.

We confirm that Portsmouth Water has continued to provide us with full and transparent access to its systems and processes. During the assurance activities, we had free access to the Head of Regulation and his team and the full cooperation of the people responsible for preparing and reporting the 2017-18 APR and Wholesale Cost Assessment submissions and the supporting information.

Douglas Hunt

Associate Director

Reporter providing Technical Assurance Services to Portsmouth Water

Summary Report

1. Introduction and Scope of work

This report provides the findings of Atkins' assurance for the 2017/18 report year. Our scope of audit is specifically designed to provide assurance for the figures that Portsmouth Water will submit to monitor their performance against the PR14 Performance Commitments (PCs) for the report year 2017/18. Our scope also covers the additional performance information that Ofwat have requested through Information Notice IN 18/07 and the associated IN 17/08 Regulatory Accounting Guidelines. Specifically, our remit includes the following additional data:

- Technical performance aspects of the Cost Assessment tables that are used by Ofwat in its comparative assessment and econometric modelling, where our audit activities were limited as follows:
 - For the financial tables we audited the capital expenditure allocations in Tables 4D and 4L. In both cases our audit activities only continued to the point where we were able to reconcile the data against the information that has been previously submitted via the statutory and/or regulatory accounts.
 - For the non-financial tables (4P and 4Q) this only generally required reconciliation of data to other reporting systems. The exceptions to this were:
 - Calculations associated with average pumping head, which were the subject of a separate audit that has already been completed. We reviewed the assigned confidence grades to check they agree with our understanding of the systems involved.
 - The methodology used for classifying mains ages and numbers of communication pipes replaced, which we reviewed specifically as part of our audit activities.
- The requirement that water companies submit additional leakage, interruptions to supply, mains bursts unplanned outage and 'risk of severe restrictions in a drought' figures that follow a specified methodology that is intended to allow comparative assessment across the water industry (commonly referred to as 'shadow' reporting). These are reported in Table 3S of the RAG 4.07 performance reporting spreadsheets.
- Assurance relating to the Compliance Statement, with a focus on Guaranteed Standards Scheme (GSS) and Developer Services.

As part of their overall assurance framework, Portsmouth Water have also asked us to review a number of other matters that relate to the reporting of information to stakeholders. These include:

- Assurance on the operation of the Wholesale Service Desk, which only went live on 1st April 2017. Our objectives were to provide the Company with comfort that its Wholesale Service Desk is: complying with the Operational Code; reporting against the SLAs accurately; and treating all retailers equally (the so-called "level playing field").
- Assurance on the management and administration of the Helping Hands social tariff.
- Water savings activities, including meter installation and other activities, which may be required as evidence to support progress on the per capita consumption PC (PC ref. RB1).
- Reporting of Health and Safety figures to the HSE (this just covers the collation and reporting of data, not the health and safety reporting systems themselves)
- The reporting of inspections carried out under the Water Regulations Advisory Scheme (WRAS)

The scope of our audits covers all reported lines within the elements referred to in our assurance statement, plus the supporting data tables, processes and base data sources that are used to generate those lines of data. We operate a risk based approach to audit so do not examine every source of data, but rather work with Portsmouth Water to identify areas of potential risk, uncertainty and key assumptions that need to be tested in order to provide the assurance that is required.

Many of the items that we audit inherently contain an element of uncertainty, so it is not possible to assure their absolute accuracy. Where the Company has estimated the level of accuracy in its reported data (through confidence grades), we have reviewed this and provided commentary as appropriate. Although uncertainty exists, we note that the purpose of the PC reporting within the Annual Performance Report is to monitor the progress of the Company against the targets that it set itself within its 2014 Business Plan. As a result our assurance includes an evaluation of the consistency of reported figures with the methods, calculations and key assumptions that were used to set the targets for the PR14 Business Plan and associated Final Determination, and, where inconsistencies exist, commentary on their significance.

As with previous years our reporting is carried out on an exception basis, whereby we have concentrated on any issues, concerns or areas of improvement that we identified during the course of our audits. We audit a large number of processes, systems and calculations in order to cover the scope of work described below, and the vast majority of these do not include any areas of exception that we consider are worthy of note within this report. Our scope is confined to the numerical reporting systems used to provide data relating to the areas of scope coverage described above. We are not responsible for assurance relating to financial reporting, or compliance with legal requirements under the Water Industry Act, although we have included a review of the reported Health and Safety figures as they do form part of the PC reporting.

2. General Comments on Governance, Processes and Reporting

All reporting systems that are used for the PCs are now familiar to us, so we are able to comment on both their adequacy and consistency with previous report years, and in particular whether key assumptions and processes are consistent with the way that the PC was set. The vast majority of reporting processes continue to demonstrate consistent good practice, and we note that reporting of SIM customer service data has now improved to the point where all our previous recommendations have been implemented and we consider that the monitoring and allocation of customer contacts is robust.

Although Portsmouth is able to report most data in accordance with reporting requirements, in areas such as bursts, pumping head, and the water balance we have noted that there is a tendency to rely on our assurance services as 'first line' QA for the underlying spreadsheet and systems calculations, with a lack of evidence that spreadsheets and processes have been peer reviewed or checked internally before our external assurance. As the reporting systems across the company are now generally adequate for capturing the required regulatory data for PCs, consideration should now be given to ensuring that internal QA and checks are in place across before we carry out third party audits to ensure compliance with best practice.

As with previous years, the generation of data for the Cost Assessment tables (4D, 4L, 4P and 4Q) was carried out after the PCs and is less well practiced. However, the process of reporting is generally straightforward and linked to the outputs from well-established systems. For the apportionment of capital expenditure, we do have concerns that the process is not working as it should, as a number of the allocations were incorrect and had not been agreed between finance and the capital programme managers prior to our audit. This was addressed during our audit, but, as with the QA comments above, reliance on external assurance to assist with data generation does not represent good practice.

There are still some areas where processes are not fully capturing data, but these are now limited to GSS appointments and ancillary reporting matters such as Developer Services surveys.

Based upon our activities and information collated to date we can also state that we believe that:

- We have been given free access to relevant staff and information on request.
- Except where noted below, the processes, procedures and data complied with the required assurance criteria as set out in our scope of works

3. Findings and Issues Raised During Data Audits

3.1. Performance Commitments

3.1.1. Significant Findings

As with previous years we have classified the 'exceptions' that we have identified into 'red', 'amber' and 'green' categories. In order to satisfy the changes in reporting requirements we have adapted the definition for each category as follows:

- 'Red'. These are material issues that mean that either we cannot provide assurance to that area, or there are issues that present a material reporting risk to the Company, either in terms of inconsistency with the Business Plan PCs, or in terms of the Company's ability to understand whether it has discharged its obligations.
- 'Amber'. These are significant issues that are worthy of comment at the Audit Committee level, and may need to be addressed in order to mitigate the risk to the business in the longer term.
- 'Green' these are relatively minor issues that are designed to provide continuous improvement to the reporting process and are highlighted within the individual audit summaries that we provide for the Company.

We did not encounter any 'red' issues during our audits. Where we have previously audited and commented upon the PCs, we have found these remain generally adequate and have not identified any significant concerns that we consider should be brought to the Board's attention. During our audits of the leakage and water balance we did challenge the consistency of some of the key assumptions, but these were either validated through further testing or were amended prior to submission. We do not therefore have any 'amber' issues to report this year.

In previous years we have noted that the methods used for reporting on leakage are very simplistic, but are well managed and entirely consistent with the way that the PR14 PC was set. Similarly, we have noted that the PCC reporting method relies on some significant, un-evidenced assumptions that are used to modify the raw data that underpins the unmeasured component of the analysis, but this is again consistent with the way the PC was set. However, in both cases the relatively simplistic reporting methods mean that there are relatively large levels of uncertainty about what the 'true' figure has been over the past few years, and this has implications for the 'shadow' reporting methods for leakage and PCC and the associated PC target setting for PR19. Our comments in relation to this are provided in Section 3.3 of this report.

As with previous years we have identified a reasonably large number of 'green' continuous improvement type issues. These are logged in audit feedback reports and monitored through an issues log that is shared with Portsmouth Water.

3.1.2. Key Assurance Statements

Although uncertainties exist within the reported figures, we have reviewed the PCs that currently report a 'no penalty' classification and are confident that the uncertainties that are present are not sufficient to risk a re-classification into a penalty banding. This includes the reported leakage figure, which we consider is highly unlikely to include uncertainties that are large enough to bring it above the performance commitment value for the report year.

There are two PCs that are reported as attracting an Outcome Delivery Incentive (ODI) penalty. The first, customer contacts for water quality, has once again exceeded the penalty deadband by a considerable amount, so there is no risk that the ODI penalty has been mis-calculated or mis-reported. The second, Mean

Zonal Compliance, is based on a very well-established reporting process that is compliant with DWI requirements, and we are confident that the reported figure and hence penalty are appropriate.

3.2. Statutory and Regulatory Obligations

As with previous years, we found that the process of capturing of *most* of the Guaranteed Standards of Service failures and associated payments to customers was well managed and robust, although the management of appointments and associated appointment failures continues to demonstrate the shortfalls that we have identified in previous years. Specifically, we found that appointments made by sub-contractors and made in association with meter installations are not being well managed and there may be GSS failures that are not being recorded or paid.

In terms of meeting standards and reporting to Water UK for Developer Services, we found that the quality of the reporting spreadsheets and associated quality assurance has deteriorated. The Company have undergone a reorganisation of the Developer Services team, with new staff involved this year, and there is a need to document the new reporting process as some long-term employees who had knowledge of this reporting area have left the Company. We have concerns over the QA of the processes and note that the performance that was reported to Water UK may have been worse than the performance that was actually achieved by Portsmouth Water in some areas.

3.3. Reporting of Common Metrics for PR19 'Shadow Reporting'

As noted previously, our audit activities this year covered the reporting of interruptions to supply, leakage and per capita consumption according to the 'shadow reporting' requirements that Ofwat refers to in information letter IN18/07. We reviewed these against the detailed technical methodologies that have been developed by Ofwat and the associated Red/Amber/Green (RAG) classifications that Ofwat require to be submitted to indicate the quality of reporting for the various components that make up the reporting process for each metric.

For the interruptions to supply metric we found that the process is largely compliant with the best practice guidance, as this closely matches the processes that were already being used to report against the AMP6 PCs. We only noted one minor area (the use of pressure loggers to confirm when an incident has resulted in pressures less than 3m) where best practice guidance is not being followed, and confirmed that the RAG classifications that are proposed are appropriate.

For leakage reporting some changes were made to the final reported figure as a result of our audit challenges, and we confirmed that the final agreed figure of 37.96 MI/d (pre-MLE) represents the best estimate that is currently available to Portsmouth Water. We also agreed with the proposed RAG classifications proposed in all categories of Table 3S. In terms of the quality of the reporting systems, we note that there are some 'amber' classifications that have been applied to the reporting components, and two areas where a 'red' classification has been applied. Although the data quality assessment is effectively the same as last year, meaning that the quality of reporting has not deteriorated, these may attract regulatory attention from Ofwat.

The first 'red' classification relates to property counts that are used to calculate night use allowances in the leakage calculation. Currently this is based on an initial GIS assessment of the number of properties, and there are still discrepancies with the Annual Return property data, which could result in an uncertainty of more than 0.2MI/d in the night use allowance and hence the reported leakage figure.

More significantly, for the non-household night use allowance we found that the Market Operator Services Ltd (MOSL) data that Portsmouth Water has to rely on to derive the 'night use' allowance that is made for non-household properties is very uncertain. This has a significant impact on the reported leakage figure, and although this is a cross industry problem, Portsmouth Water have less historic understanding of this allowance because the simplistic systems used to report against the current, PR14 leakage PC do not use best practice methods for night use allowances. Based on a comparison between last years' and this years' non-household MOSL billing figures it appears that last years' night use allowance was under-estimated by around 1.5 to 2MI/d, meaning that the 'shadow' reported leakage figure that was sent to Water UK last year was around 1.5 to 2MI/d too high. This year, following challenge at audit, the Company was able to demonstrate that the MOSL figure is better aligned to the figure used in the water balance, so there is much more confidence in the figures, but billing data are still uncertain and the best practice method that is used

for the calculation of the night use allowance is sensitive to errors in the supporting billing data. The level of uncertainty is still likely to be more than 1M/d, just from this single key assumption.

For PCC reporting, the processes generally align with the Ofwat reporting requirements and the RAG classifications are typical of most companies. The key exception to this is the unmeasured PCC element, where a 'red' classification was agreed at audit. This classification was considered necessary because the existing individual household monitor (IHM) does not appear to be a good representation of the customer base as a whole. Portsmouth Water is looking to address this through the implementation of the Small Area Monitor (SAM) that it has set up in accordance with best practice methods, but this was not available for the report year and we note that the monitor is still not fully validated for regulatory reporting.

As well as attracting potential criticism from Ofwat for the red classification, this unmeasured PCC issue has potential implications for the setting of the Performance Commitments for the PR19 Business Plan. Portsmouth will be expected to use the new methodology for setting the AMP7 targets, but it will not have a consistent set of data that will allow it to analyse trends prior to the 2018/19 base year. That means that it may have to rely on a single yearly value when it is setting the AMP7 targets, or just have to use the Water Resources Management Plan forecasts, which are based on the current method. This means that the PR19 Business Plan baseline will be vulnerable to either a stepped change in PCC due to the implementation of the SAM, or, if it is possible to account for the results of the first year of SAM operation, then the use of a single year could be vulnerable to unknown influences from hot or cold weather in the base year. It is recommended that this is considered when the final PC is being set for PR19, as it will affect Portsmouth's ability to meet its PCC target and hence the rewards or penalties that it incurs in AMP7.

For the reporting of unplanned outages, we reviewed both the process and proposed RAG classifications. We confirmed that both were in accordance with the guidance. Where 'amber' classifications are proposed for certain elements by Portsmouth Water, these tend to result from the fact that the reporting requirements are new, and the issues will need to be tested and addressed in-year prior to the next submission, rather than as a result of poor reporting practice.

Reporting of mains bursts and risk of severe restrictions in a drought was in line with the guidance and we agreed with the RAG classifications that had been applied.

3.4. Reporting of Data for the Wholesale Cost Assessment Tables

To the extent revealed by our audits, we were able to reconcile figures within this tables back to either the systems used to report on Performance Commitments (including the water balance), the Regulatory Accounts, the GIS or energy usage data. We encountered a number of minor issues relating to compliance with the reporting requirements or data uncertainties, but these were either addressed during the audit process or were not significant to the quality of the reported data. There were only two issues that we consider are significant enough to bring to the Audit Committee's attention:

- The shortfalls in the process used for allocating capital expenditure in Tables 4D and 4L, as previously detailed in Section 2 of this report. This does not affect the reported figures, as errors were addressed during our audit.
- Figures for communications pipes and mains ages in Table 4P were reviewed following our audit and an improved methodology applied. This methodology means there is now a stepped change from last year due to the improved method.

3.5. Other Matters

For the other areas of audit that we carried out we were generally satisfied that the reporting processes are appropriate to their use, with minor recommendations for continuous improvement. In relation to the management of Arrears Assist programme we note that the Company currently rely entirely on manual entry spreadsheets, which is not ideal, especially as more customer join the scheme. However, we understand that this is due to be addressed in the current year where the system will move over to one based on RAPID reports.

We are still processing our findings in relation to the Water Regulations Advisory Scheme and the Wholesale Service Desk and will provide relevant assurance in our final June report.

Appendices



Appendix A.

A.1. Meeting Record

Assurance Area	KPI/ODI Reference / Driver / Source	ODI	Atkins Auditor	Audit Date
Serviceability Water Infrastructure	Interruptions to supply (incl. shadow)	Yes	Simon Ingall	02-May-18
	Mains bursts	Yes	Simon Ingall	02-May-18
	Pumping head etc. - Table 12	No	Simon Ingall	02-May-18
Leakage & PCC	Leakage (incl. shadow)	Yes	Doug Hunt	27-Apr-18
	Properties & Population (Table 7)	No	Doug Hunt	01-May-18
	Water Balance & leakage (incl TUBs) (Table 10 etc).	No	Doug Hunt	01-May-18
	PCC estimation (Table 10)	Yes	Doug Hunt	01-May-18
Customer Service	Written complaints	Yes	Ellie Derbyshire	02-May-18
	Escalated written complaints		Ellie Derbyshire	
	CC Water investigated complaints		Ellie Derbyshire	
	Unwanted telephone contacts		Ellie Derbyshire	03-May-18
	Qualitative satisfaction measure - adequacy of sample		Ellie Derbyshire	03-May-18
Developer Services	Questionnaire - Formulation and returns	Yes	Simon Ingall	03-May-18
	Developer services - compliance with Levels of Service	No	Simon Ingall	03-May-18
Environmental performance	Compliance with abstraction licences	No	Simon Ingall	30-Apr-18
	National Environment Programme	Yes	Simon Ingall	30-Apr-18
	Abstraction Incentive Mechanism (AIM)	No	Simon Ingall	30-Apr-18
	Progress with Biodiversity Action Plan	Yes	Simon Ingall	30-Apr-18
	Carbon Accounting including Table 42	Yes	Simon Ingall	30-Apr-18
GSS and Customer Charter	GSS interruptions and low pressure Tables 2 & 6	No	Simon Ingall	x
	GSS Appointments Table 6	No	Ellie Derbyshire	04-May-18
	GSS Payments Table 6	No	Ellie Derbyshire	
Water Savings Activities	Meter Installations and Renewals - Tables 8 & 11	No	Simon Ingall	01-May-18
	Water savings initiatives - Table 1	No	Simon Ingall	01-May-18
Other audits	Health & Safety including Table 41	Yes	Simon Ingall	01-May-18
	Open Water - audit of wholesale desk	No	Ellie Derbyshire	01-May-18
	Water Regulations WRSA performance	No	Simon Ingall	04-May-18
	Water Quality Contacts and GSS	Yes	Ellie Derbyshire	04-May-18
	Social Tariff, Watersure and other programmes of assis	No	Ellie Derbyshire	01-May-18
	Capital Programme including Tables 32, 35, 35a, and 37	No	Doug Hunt	24-May-18
Annual Review	Review report for Audit Committee (phone call)	n/a	Doug Hunt	16-May-18
	Audit Committee	n/a	Doug Hunt	24-May-18

Audit of the capital allocations in Tables 4D and 4L was carried out immediately after the Audit Committee on the 24th May.

Audit of the Unplanned Outage common metric and the Wholesale Cost Assessment tables 4P and 4Q was carried out on the 13th June.

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