

**Portsmouth Water Limited**  
**Outcome Delivery Incentives**  
**Performance Report**  
2019/20



**Delivering excellence**  
for our customers, our people,  
the environment and the  
communities that we serve

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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 financial payments or rewards for service outperformance and financial payments or 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 committed to delivering outcomes that met 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 was subject to associated financial impacts whereby it could incur a penalty for performance below its commitments, but for some could earn a reward for performance better than its commitments. These financial incentives manifest as adjustments to customers bills through the next AMP period (2020-25).

We have now completed the fifth and final year 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.

Additionally, we are in a position to quantify the financial impact on customer bills of the related rewards and penalties. These adjustments apply as of 1 April 2020 and impact customer bills over the subsequent 5 year period from 2020 – 2025.

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. In line with this framework we published our Final Assurance Plan for 2019/20 reporting in April 2020, following consultation. This can be found at the following location:

[www.portsmouthwater.co.uk/news/publications/company-monitoring-plans/](http://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 performance 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
- Jacobs external Assurance Report

# Overview of the 2019/20



2019/20 is the fifth and final year of the AMP6 price review period. Our ODI performance remains good, and in many cases industry leading.

The Company consulted on and published its Monitoring Plans for 2019/20 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 reporting our performance to all customers and stakeholders in a clear and transparent manner.

The Company can confirm it delivered 11 of its 13 Outcome Delivery Incentive (ODI) targets. For two of these ODIs we have delivered exceptional performance which we are very proud of. These are Leakage and Interruptions to Supply. We discuss these in detail later in this report, with a very brief discussion in this overview. The three ODIs where we fell below our aspiration were Mean Zonal Compliance, Water Quality Contacts and Per Capita Consumption. These are discussed below;

## Water Quality Standards (Mean Zonal Compliance)

The Company failed the water quality compliance measure, Mean Zonal Compliance in 2019. Performance was primarily impacted by two sample failures early in the year, relating to nickel and lead. The first failure was the result of a new tap at the customer property. The second was the result of lead in the customer side supply pipes. We worked closely with the customers to ensure their supply subsequently met the quality

standards. Other failures did occur in the year and these are documented later in this report.

## Water Quality Contacts

In recognition of the importance customers placed on this measure, we set ourselves a very challenging Water Quality Contacts target set for the period. Whilst we have reduced the number of contacts since 2014 - and specifically in 2019 we have beaten the target we set for the year - the ODI is assessed over the 5 year period. Unfortunately, we have not achieved the level of reduction we aspired to across the full period. Despite this, we are proud that in 2018 our performance was industry leading and we expect this to remain the case in 2019.

The success in the latter part of this AMP period was due to the delivery of our "Calm Network" action plan. This plan focused on the need to ensure we operate the network in a manner that does not 'shock' the system, particularly when dealing with leakage and bursts. Shocks in the system can result in issues for customers such as colouration or cloudiness. This initiative has been very successful and has driven down contact levels significantly.

## Per Capita Consumption

Per capita consumption is the volume of water used by household customers, measured on a daily basis relative to the number of people in a household.

This measure is not wholly under our control, as the volume of water customers use is heavily influenced by the weather, social trends and personal circumstance. Our challenge is to ensure all customers understand the value of water and also act to ensure it is not wasted. In recent years we have seen an increase in per capita consumption and we have missed our 2019/20 goals significantly.

This measure remains an important consideration for us into AMP7 and we have an enhanced engagement and metering programme proposed for the next five year period.

## Leakage

In response to failing our leakage target in 2017/18, we have invested significantly in both leak detection and repair activities.

As a result, we have reduced leakage to a level of 23.6Ml/d in 2019/20 - a reduction of 4Ml/d from 2018/19 and an outperformance of our regulatory target for 2019/20 by over 6 Ml/d.

We have installed new technology in our network of over 3,550km mains to help us identify and locate leaks quicker. This, together with help from our customers, has resulted in us now having an industry leading level of leakage at just under 75 litres / property / day. In 2017/18 this value was 100 litres / property / day.

We are very aware that leakage is a significant issue to many customers and stakeholders. We are well placed to continue this improvement in the next five year period, where we need to reduce leakage by a further 20%.

## Interruptions to Supply

We are very proud to have one of the lowest levels of interruptions to supply for customers in the industry. At an average of 3 mins 22 per property, this is our best performance in the last five years and is one of the best performances in the industry.

Because we have designed our network with a high level of integration, in the event of a burst pipe, water can be quickly rerouted using different pipes to ensure it still reaches our customers. This allows us to keep the impact to customers of any burst in our pipes to a minimum.

When it is necessary to interrupt the supply of water to a customer for essential maintenance work, we consider the need of the customer at the heart of our planning. In many cases we have provided temporary supplies to customers to enable a sufficient supply to continue whilst we undertake the work. We continue to explore the use of new technology to make repairs on our network, so that customers are not impacted by any failure.

## Conclusion

As we execute our plans for the five year period starting in April 2020, we believe our performance in 2019/20 demonstrates we are well placed to continue to deliver high levels of service to our customers at an affordable price in the future.

The detail of our performance against each ODI is given in the rest of this report, as well as some other performance data requested by stakeholders.

# Assurance



In September 2019 we appointed a new Reporter, Jacobs, replacing Atkins. The Reporter 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 her key findings from the audit process are shown on page 43. She attended the Audit Committee in May 2020 to inform the members of the audit findings.

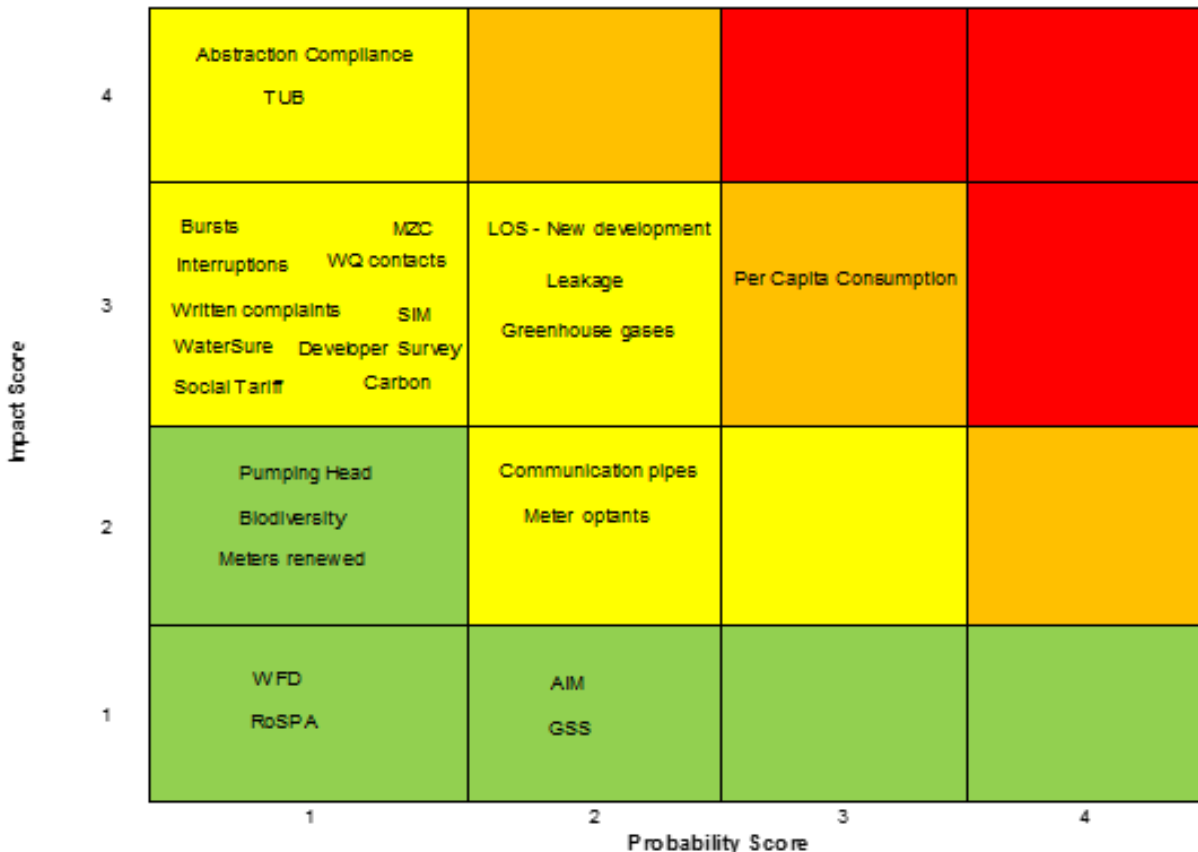
As part of the Company Monitoring Framework we undertook an exercise to identify any “risks, strengths and weaknesses” of our data and our processes. The summary results from the risk assessment are shown in the matrix below. All of the data items shown were included in the Reporter’s scope for audit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

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 Jacobs scope would include all ODIs and other KPIs as shown in the table below.

Our Reporter has also reviewed performance against our new, PR19, ODIs. In total we have 26 ODIs for the AMP7 period. These are not discussed as part of this report.

**PR14 - Impact and Probability Risk Matrix**



<b>PR14 Performance Measures</b>					
<b>Ref</b>	<b>Performance Measure</b>	<b>Board</b>	<b>Executive Team</b>	<b>Other review</b>	<b>External review</b>
<b>RA1</b>	Service Incentive Mechanism	Monthly Review	Monthly Review	Reported at weekly Operations meeting	Reported to CCW on quarterly basis. Audited by Jacobs at the end of reporting year. Reported in Annual Performance Report (APR).
<b>RC1</b>	Developer Survey	Annual Review	Annual Review		Reported in Annual Performance Report.
<b>RB1</b>	Per capita consumption	Annual Review	Annual Review		Reported to CCW. Audited by Jacobs at the end of the reporting year. Reported in Annual Performance Report and in the Annual Return to the Environment Agency.
<b>WA1</b>	Number of bursts	Monthly Review	Monthly Review	Reported at weekly Operations meeting	Audited by Jacobs at the end of reporting year. Reported in Annual Performance Report.
<b>WA3</b>	Mean Zonal Compliance	Monthly Review	Monthly Review	Reported at weekly Operations meeting	Reported in Chief Inspectors Annual Report. Reported in Annual Performance Report.
<b>WA4</b>	Number of water quality contacts	Monthly Review	Monthly Review	Reported at weekly Operations meeting	Audited by Jacobs at calendar year end. Reported in Chief Inspectors Annual Report. Reported in Annual Performance Report.
<b>WA5</b>	Temporary usage bans	Monthly Review	Monthly Review		Reported in Annual Performance Report and in the Annual Return to the Environment Agency.
<b>WB1</b>	Leakage	Monthly Review	Monthly Review	Reported at weekly Operations meeting	Reported to CCW on a 6 monthly basis. Audited by Jacobs at the end of the reporting year. Reported in Annual Performance Report and Annual Return to the Environment Agency.
<b>WC1</b>	Interruptions to supply	Monthly Review	Monthly Review	Reported at weekly Operations meeting	Reported quarterly to CCW. Audited by Jacobs at the end of the reporting year. Reported in Annual Performance Report.
<b>WD1</b>	Biodiversity	Annual Review	Six Monthly		Audited by Jacobs. Reported in Annual Performance Report. Progress discussed with CCG and Natural England every six months
<b>WD2</b>	Water Framework Directive	Annual Review	Six Monthly		Reported in Annual Performance Report. Progress discussed with CCG and Natural England every six months
<b>WD3</b>	Carbon commitment to renewables	Annual Review	Electricity consumption reviewed.		Audited by Jacobs at the end of the reporting year. Reported in Annual Performance Report.
<b>WG1</b>	RoSPA	Accidents reported monthly	Accidents reported monthly		Audited by Jacobs. Reported to the Health and Safety Executive. Reported in Annual Performance Report.

<b>Other Performance Measures</b>					
<b>Ref</b>	<b>Performance Measure</b>	<b>Board</b>	<b>Executive Team</b>	<b>Other review</b>	<b>External review</b>
<b>O1</b>	Abstraction Incentive Mechanism	Annual Review	Monthly Review		Reported in Annual Performance Report.
<b>O2</b>	Optional meters installed	Monthly Review	Monthly Review	Reported at weekly Operations meeting	Reported annually to the Environment Agency. Audited by Jacobs at the end of the reporting year.
<b>O3</b>	Abstraction - compliance with licence conditions	Annual Review	Monthly Review	Reported at weekly Operations meeting	Audited by Jacobs Reported annually to the Environment Agency.
<b>O4</b>	Guaranteed Standards of Service	Monthly Review	Monthly Review	Reported at weekly Operations meeting	Audited by Jacobs at the end of the reporting year.
<b>O5</b>	WaterSure	Annual Review	Monthly Review	Reported at weekly Operations meeting	Reported quarterly to CCW. Audited by Jacobs at the end of the reporting year.
<b>O6</b>	Social tariff	Annual Review	Monthly Review	Reported at weekly Operations meeting	Reported quarterly to CCW. Audited by Jacobs at the end of the reporting year.
<b>O7</b>	New development – levels of service	Annual Review	Monthly Review		Reported quarterly to Water UK. Audited by Jacobs at the end of the reporting year.
<b>O8</b>	Green House Gas Emissions	Annual Review	Annual Review		Audited by Jacobs at the end of the reporting year.
<b>O9</b>	Written Complaints by class and cause	Monthly Review	Monthly Review	Reported at weekly Operations meeting	Reported to CCW on a quarterly basis. Audited by Jacobs at the end of the reporting year.
<b>O10</b>	Communication pipes	Annual Review	Annual Review		Audited by Jacobs at the end of the reporting year.
<b>O11</b>	Meters renewed	Annual Review	Annual Review		Audited by Jacobs at the end of the reporting year.
<b>O12</b>	Pumping Head	Annual Review	Annual Review		Audited by Jacobs 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

13 July 2020



**M Coffin**  
Non-Executive Director  
Chair of the Audit Committee



# Customer Challenge Group Report on ODI Performance 2019/20



The Customer Challenge Group (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.

The CCG met formally 6 times in the year 2019/20, as part of the regulatory price review process and to review ODI performance. I thank the members for their ongoing commitment to this group. I would also like to formally thank David Howarth (Environment Agency) and Douglas Kite (Natural England) for their contribution to the group and welcome Jon Sellars and Aldous Rees as their replacements. I would also like to thank Douglas Hunt (Atkins) for providing technical support to the CCG and welcome Alex Martin (Jacobs) to this role.

## ODI Performance 2019/20

The Company reports that it has met 11 of the 13 Outcome Delivery Incentive (ODI) measures, detailed later in this report. Whilst it is disappointing to note any failure, the Company has discussed performance of all of its ODIs throughout the year, and we consider that we have a good understanding for the reasons and mitigations the Company has put in place to improve. The 2 ODIs it has missed are Per Capita Consumption and Mean Zonal Compliance, which are discussed next.

- **Per capita consumption**

As in recent years we note the increasing trend for per capita usage. We have

consistently challenged the Company to look at the benefits of wider scale metering and we are pleased that in the PR19 Final Determination and the approved Water Resources Management Plan metering and water efficiency play an important role.

The targets set in these plans for the next five years in particular are ambitious and the Company must develop an innovative engagement programme with its customers if it is to succeed, particularly in a region where metering is not compulsory. We will continue to challenge the company to find innovative ways to manage consumption and leakage.

- **Mean Zonal Compliance**

In recent years the Company has twice failed the water quality compliance measure, Mean Zonal Compliance. It is disappointing that it has failed this measure again in 2019. The Company state that the overall result were disproportionately impacted by one nickel failure as a result of a new kitchen tap being sampled and a lead failure as a result of lead in the customer side supply pipes. The Company have provided information on each of the failures and the actions and remedies as a result.

The Company states that it supports the development of the new measure of water quality compliance, the Compliance Risk Index, as the impact of the failures experienced will in 2019 will more accurately reflect the quality of the water delivered to customers.

We are very pleased to note the significant improvements in a number of the ODIs in 2019/20, specifically, leakage, interruptions, water quality contacts and bursts. These are commented on in detail below.

- **Leakage**

In 2017/18 the Company failed its leakage target significantly. Given the profile this issue has with customers, we challenged and encourage the Company to look at how other water companies around the world are using new technology to address this issue.

The CCG are pleased that the Company has responded positively to this challenge and are able to report a significant reduction in leakage year on year, exceeding the annual target set by Ofwat at PR14 for both 2018/19 and 2019/20. There has been a marked step change in the Company's understanding of this issue.

The Company are well placed with leakage as it enters into the new five year review period.

- **Interruptions to Supply**

In 2019/20 the Company has continued its strong performance for this ODI. There are times when customers' supplies need to be interrupted to allow essential repairs and maintenance to the network. In managing this activity, the Company has focused on minimising the impact on customers.

The Company are consistently one of the best performers in the industry on this ODI and well placed to achieve the targets set for the next five years.

- **Water Quality contacts**

The Company states that, in light of more comprehensive reporting, the target it set for the period was extremely challenging. We note the significant improvement since 2014 and the fact that the 2019 performance has outperformed the target. Further we note that performance in recent years is the best in the industry.

The Company has implemented a number of engineering actions which aims to ensure the network is operated appropriately when completing repair work associated with leakage or bursts. This means that customers are not impacted when the main is recommissioned with issues associated with the appearance of the water supplied. This focus has resulted in a reduction of the number of contacts relating to the appearance of the water in

the year, and underpins the improvement in the year.

The Company are well placed on water quality contacts as it enters into the new five year review period.

• **Bursts**

In recent years the Company had stated that it has seen a high number of bursts, predominantly because of the effect of ground conditions on its pipe-network. It is therefore pleasing to note that the number of bursts in 2019/20 has reduced significantly, reflecting the relatively mild winter.

The basis of this ODI has been revised for the next review period. The Company are well placed to achieve the new ODI, called mains repairs.

We provide brief comment on the remaining ODIs for this 5 year review period.

• **Service Incentive Mechanism**

Ofwat did not require companies to monitor its SIM performance for 2019/20. It will be replaced by a new measure called C-Mex for the period 2020-25. However it was pleasing to note that as part of the Final Determination the Company's SIM performance in the period 2015/16 – 2018/19 was recognised as the best in the industry.

• **Environmental performance**

The CCG notes that the Company has also made material progress on its Biodiversity and Carbon programmes in this review period. In particular we are pleased to report that we consider that the Company has delivered against its Biodiversity Commitment at PR14.

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.

Finally we note also that no restrictions on customer use has been required in the five year period.

• **Health & Safety**

We are pleased to note that the Company has again delivered good Health & Safety performance in 2019/20 and has been recognised by RoSPA by awarding the Order of Distinction, for 15 years high level Health & Safety performance.

• **Developer survey**

The Company continues to receive good feedback in its annual survey with developers. This will be more important in the next five year period as Ofwat will monitor all companies using a new measure called D-Mex.

**Customer Engagement and Business Planning**

During the year the Company undertook a number of specific activities customer engagement to support its Business Plan (PR19) which will cover the 5 year regulatory period from 2020.

The CCG was actively involved in reviewing proposals for customer engagement activity to support the development of the ODIs, monitoring the customer engagement activity and reviewing the analysis to ensure that customer feedback was reflected in the ODIs in the PR19 business plan.

The plan was submitted to Ofwat in September 2018 with a revised plan being submitted in April 2019, following Ofwat's Initial Assessment of Plans in January 2019.

Ofwat published its Draft Determination in July 2019 and Final Determination in December 2019.

At all times the Company kept the CCG informed and involved in the process.

**Havant Thicket**

The Company has made significant progress on the development of Havant Thicket over the last year. The CCG is very pleased that the Company is developing the first reservoir in the South East of England since the mid-1980s.

The scheme will not only enable Portsmouth Water to provide more water to Southern Water to reduce its abstraction from sensitive chalk rivers in Hampshire, it will also give local Portsmouth Water residents access to new green infrastructure for recreation and education.

The Company has an excellent opportunity to engage with local customers and residents bringing wider benefits to the region both in its construction period and when in operation in the late 2020s.

**Terms of Reference**

Following publication of the PR19 Methodology by Ofwat in December 2017, 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.

These will be reviewed again by the CCG as we enter this new 5 year review period.



**Lakh Jemmett**  
Chair of Customer Challenge Group  
20 May 2020

## SECTION 1

# Outcome Delivery Incentives (ODIs)

The table below details the ODI performance in 2019/20 against our commitment, or target. Further details on each ODI can be found later in this report.

ODI Performance 2019/20					
ODIs	Unit	Incentive Type	2019/20 Target	2019/20 Actual	2019/20 target met?
<b>Bursts</b>	Nr	Financial	342	255	✓
<b>Mean Zonal Compliance *</b>	%	Financial	100.00	99.93	✗
<b>Water quality contacts *</b>	Nr/1000 population	Financial	0.412	0.395	✓
<b>Temporary Usage Bans</b>	Nr	Reputational	0	0	✓
<b>Leakage</b>	MI/d	Financial	29.80	23.58	✓
<b>Interruptions to supply</b>	Minutes per properties served	Financial	6 Mins	3 Mins 22 Secs	✓
<b>Biodiversity Action Plan</b>	%	Financial	> 90%	98%	✓
<b>Water Framework Directive</b>	Completion date	Financial	No yearly target	Completed March 2018	✓
<b>Carbon</b>	% increase	Reputational	10	Over 99% of electricity used is from renewable sources	✓
<b>RoSPA Accreditation*</b>	Accreditation awarded	Reputational	Awarded	Awarded	✓
<b>“Proxy” Service Incentive Mechanism</b>	Quantitative Qualitative Total Score	Financial	Upper quartile	20.7 64.3 85.0	✓
<b>Per Capita Consumption</b>	l/h/d	Financial	143.9	153.6	✗
<b>Survey of developers</b>	%	Reputational	70	93	✓

\* Calendar year 2019

The table below details the impact of our ODI performance in the five year in AMP6 and quantifies the outperformance (rewards) and underperformance (penalties) that will apply at the start of the next price review period, 2020.

<b>Impact of our ODI performance in the five year in AMP6</b>							
<b>ODIs</b>	<b>Reward / Penalty or Reputation</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>	<b>2019/20</b>	<b>Reward / penalty (£000s)</b>
<b>Bursts</b>	Reward / Penalty	219	298	347	347	255	0
<b>Mean Zonal Compliance *</b>	Penalty	99.94	99.99	99.93	99.96	99.93	-957
<b>Water quality contacts *</b>	Reward / Penalty	0.570	0.665	0.549	0.437	0.395	-1,903
<b>Temporary Usage Bans</b>	Reputation	0	0	0	0	0	n/a
<b>Leakage</b>	Reward / Penalty	28.23	30.38	32.87	28.12	23.56	76
<b>Interruptions to supply</b>	Reward / Penalty	3 mins 30 secs	4 mins 9 secs	4 mins 17 secs	3 mins 54 secs	3 mins 22 secs	73
<b>Biodiversity Action Plan</b>	Penalty	As planned	As planned	As planned	As planned	98%	0
<b>Water Framework Directive</b>	Reward / Penalty	As planned	As planned	Complete	Completed	Completed	0
<b>Use of renewable energy</b>	Reputation	Over 95%	Over 95%	Over 95%	Over 95%	Over 95%	n/a
<b>RoSPA Accreditation*</b>	Reputation	Awarded	Awarded	Awarded	Awarded	Awarded	n/a
<b>Service Incentive Mechanism</b>	Reward / Penalty	89.5	87.7	87.9	89.1	85.0	1,255
<b>Reducing per capita consumption</b>	Penalty	143.3	145.1	147.6	152.4	153.6	-333
<b>Survey of developers</b>	Reputation	89	85	91	95	93	n/a
<b>Total</b>							-1,790

\* Calendar years

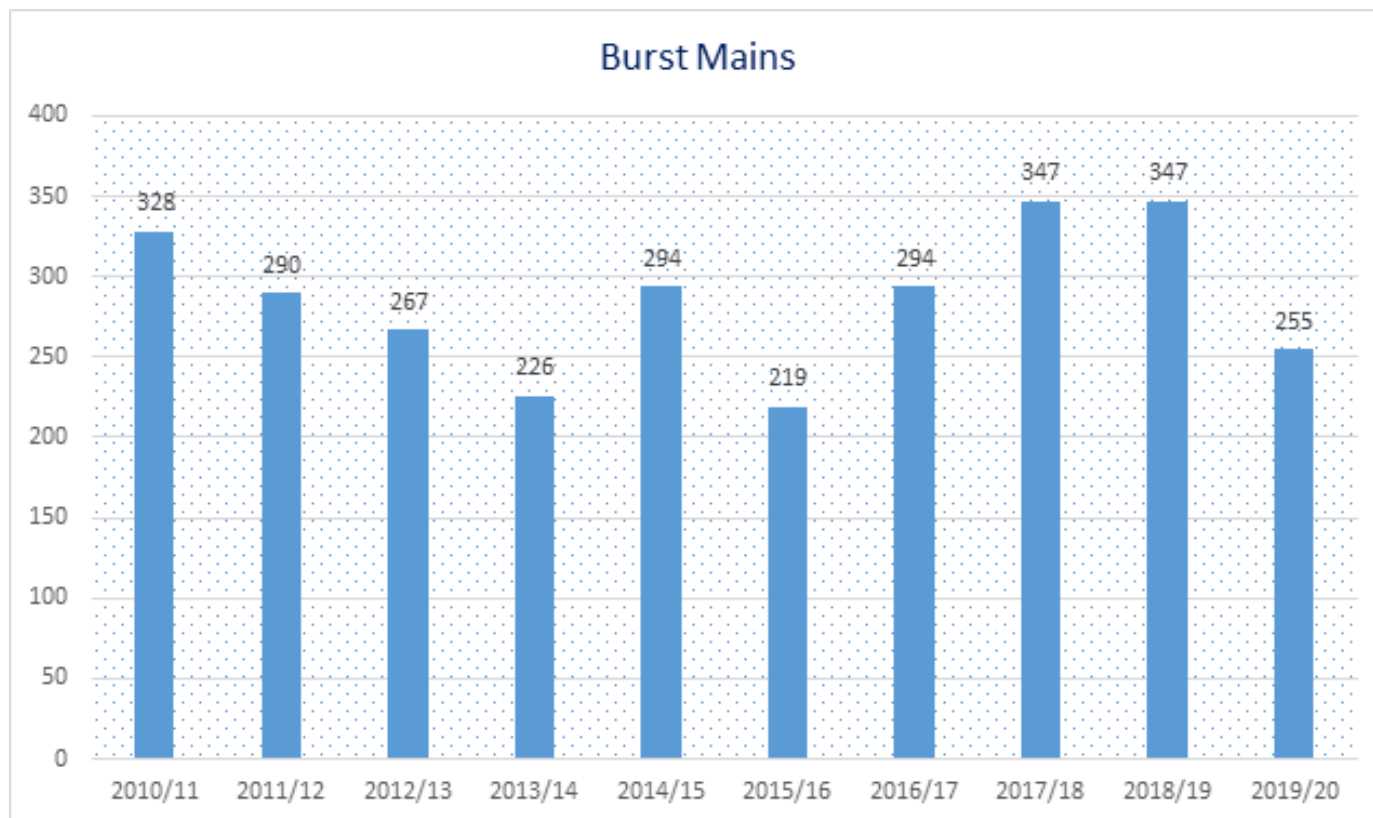
Applying the aggregate underperformance payment (or penalty) of £1.790m over AMP7 results in an annual bill reduction of £1.20 per customer per annum in the period 2020-25.

WHOLESALE

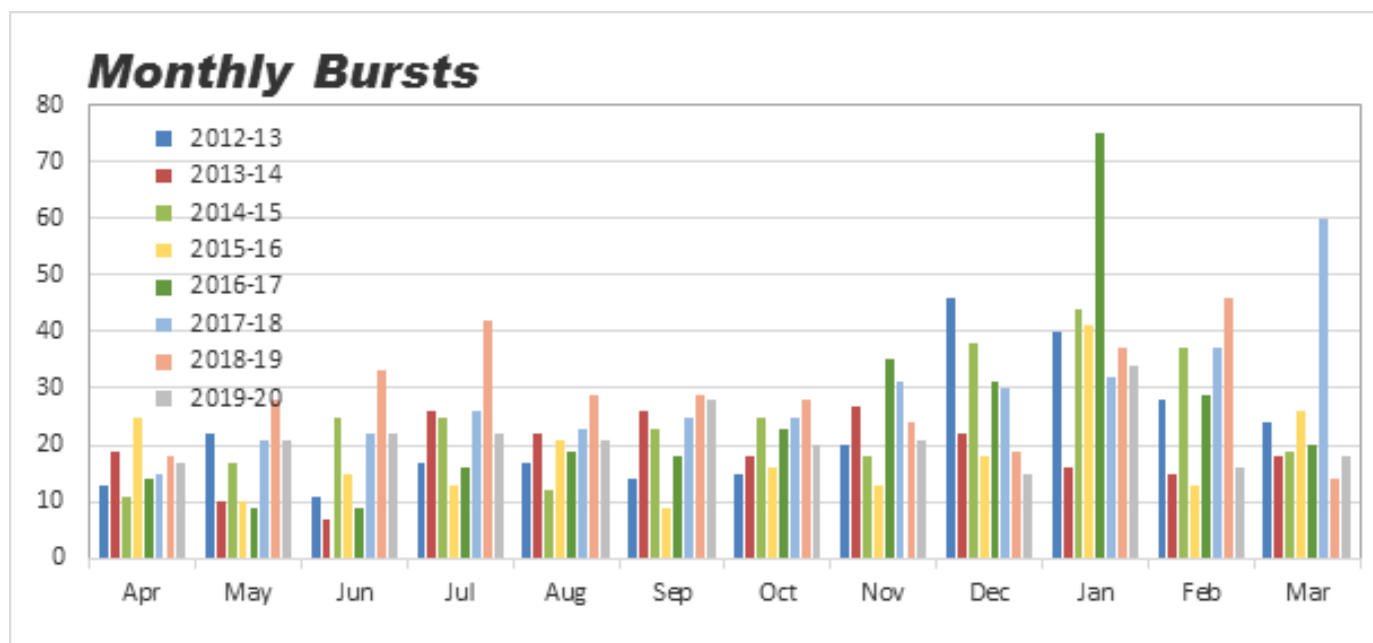
# Safe, secure and reliable drinking water

## Bursts

The number of burst mains experienced in 2019/20 was 255, reducing from 347 in the last two years and compared to our annual target of 342. It equates to 76 bursts per 1,000km in the reporting year.



The chart below shows the monthly number of bursts over the last eight years. Burst rates were steady throughout 2019/20, with no particular increase in the winter period, reflecting the benign nature of the winter. This is very different to the two prior years which saw significant increases in the winter driven by low temperatures.



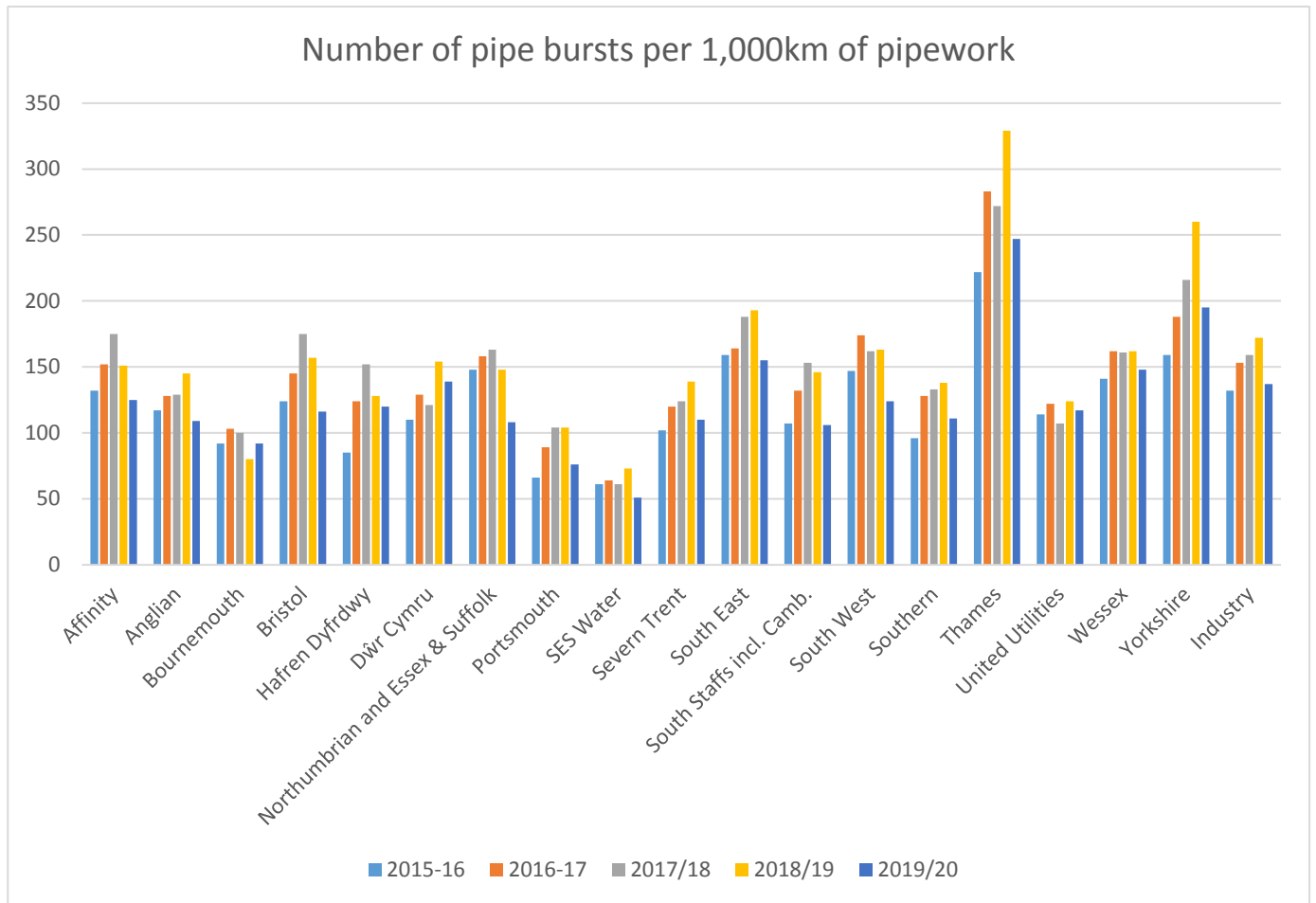
In the year 2019/20 the number of bursts was significantly below the ODI performance commitment of 342 and well within the tolerance band 250-435.

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. The average of the five years is 293 and therefore no reward or penalty applies as the performance falls within the dead-band.

The industry performance for bursts is shown in the graph below. This is for the last five years, up to and including 2019/20.

It shows that relative to other companies our number of bursts per 1,000km is the second lowest in the industry and approximately 55% of the industry average.

**Industry burst performance, 2015/16 – 2019/20 (number per 1,000km)**



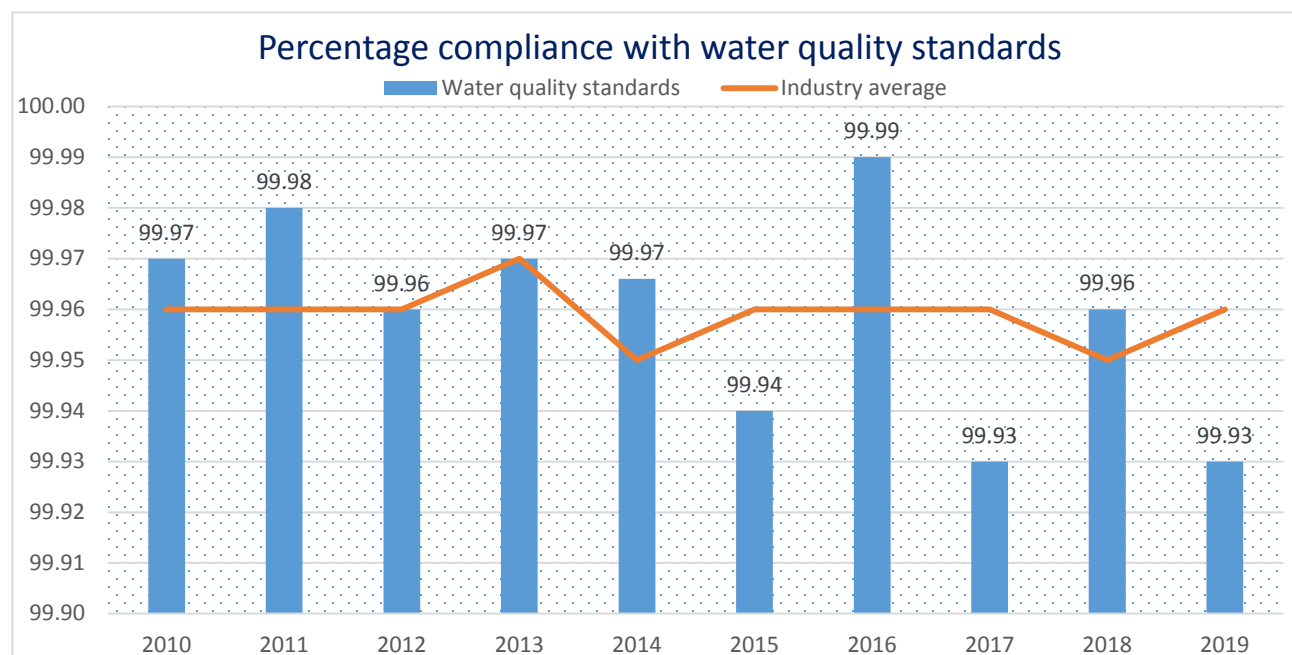
## WHOLESALE

## Safe, secure and reliable drinking water

### Water quality standards

The measure of water quality compliance is confirmed at 99.93% for calendar year 2019 against a target of 100.0%. 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 graph below shows the our performance against the industry average since 2010.



During 2019 calendar year we carried out a total over 17,500 determinations in samples taken at customer taps, with 12 failures impacting our Mean Zonal Compliance performance. These are listed below and include the actions taken by us to understand and resolve the issue.

2019	Location	Type of failure	Company Actions
25 Jan	Bognor	Nickel	Empty property – new tap
9 April	Portsmouth North	Lead	Lead replaced PW side and results then met the regulations
15 May	Portsmouth South	Odour	Presence of flexi hoses which could contribute to potential odour – advice given
15 May	Portsmouth South	Taste	Presence of flexi hoses which could contribute to potential taste – advice given
29 May	Chichester	Taste	Most likely cause of the taste detection was related to the internal plumbing – advice given
31 May	Havant	Odour	Root cause of the odour detection was attributable to the black poly supply pipe
31 May	Havant	Taste	Root cause of the taste detection was attributable to the black poly supply pipe
10 June	Bognor	Coliform	Most likely cause of the Coliform failure was an aerator fitting on the kitchen tap – advice given
20 June	Fareham	Hydrogen ion (pH)	Tap was plumbed in incorrectly by plumber, customer happy that we found an issue
4 Oct	Chichester	Coliform	Coliform failure was as a result of poor tap hygiene – advice given
9 Dec	Havant	Coliform	Failure was as a result of the poor state of the tap and poor tap hygiene. Customer was replacing tap
18 Dec	Bognor	Taste	Old water softener, customer was given advice to replace and fit a non-return valve

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.

Financial penalties apply annually for any year that performance is below 99.95%. The ODI performance for 2019 results in an underperformance payment being required, equating to £319,000. This will reduce customer bills in the period 2020-25.

**WHOLESALE**

## Safe, secure and reliable drinking water

### 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. It 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, 2015-20, was based on 2013 performance. However, as a result of introducing a new Customer Relationship Management System (CRM) in October 2012, we saw an increase in the number of contacts. We are now recording, more accurately, resulting in a greater number of contacts.

We therefore set ourselves an extremely challenging level of less than 0.413/1,000 population for 2019 which we have achieved, despite the target setting issue. Our performance last year, 2018 was industry leading, and we expect our performance in 2019 to remain best in the industry.

	2013	2014	2015	2016	2017	2018	2019	2019 Target
<b>Appearance</b>	147	308	180	262	152	114	119	
<b>Taste &amp; Odour</b>	155	253	194	189	222	180	148	
<b>Illness</b>	5	22	24	17	15	18	15	
<b>Total</b>	<b>307</b>	<b>583</b>	<b>398</b>	<b>434</b>	<b>389</b>	<b>312</b>	<b>282</b>	
<b>Population (000s)</b>	708	693	698	703	707	711	714	
<b>Rate per 1,000 population</b>	0.43	0.84	0.57	0.67	0.55	0.44	0.395	0.413
<b>Industry average</b>	1.91	1.75	1.64	1.35	1.31	1.31		

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

- Our 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.
- Information videos are now available on our 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.

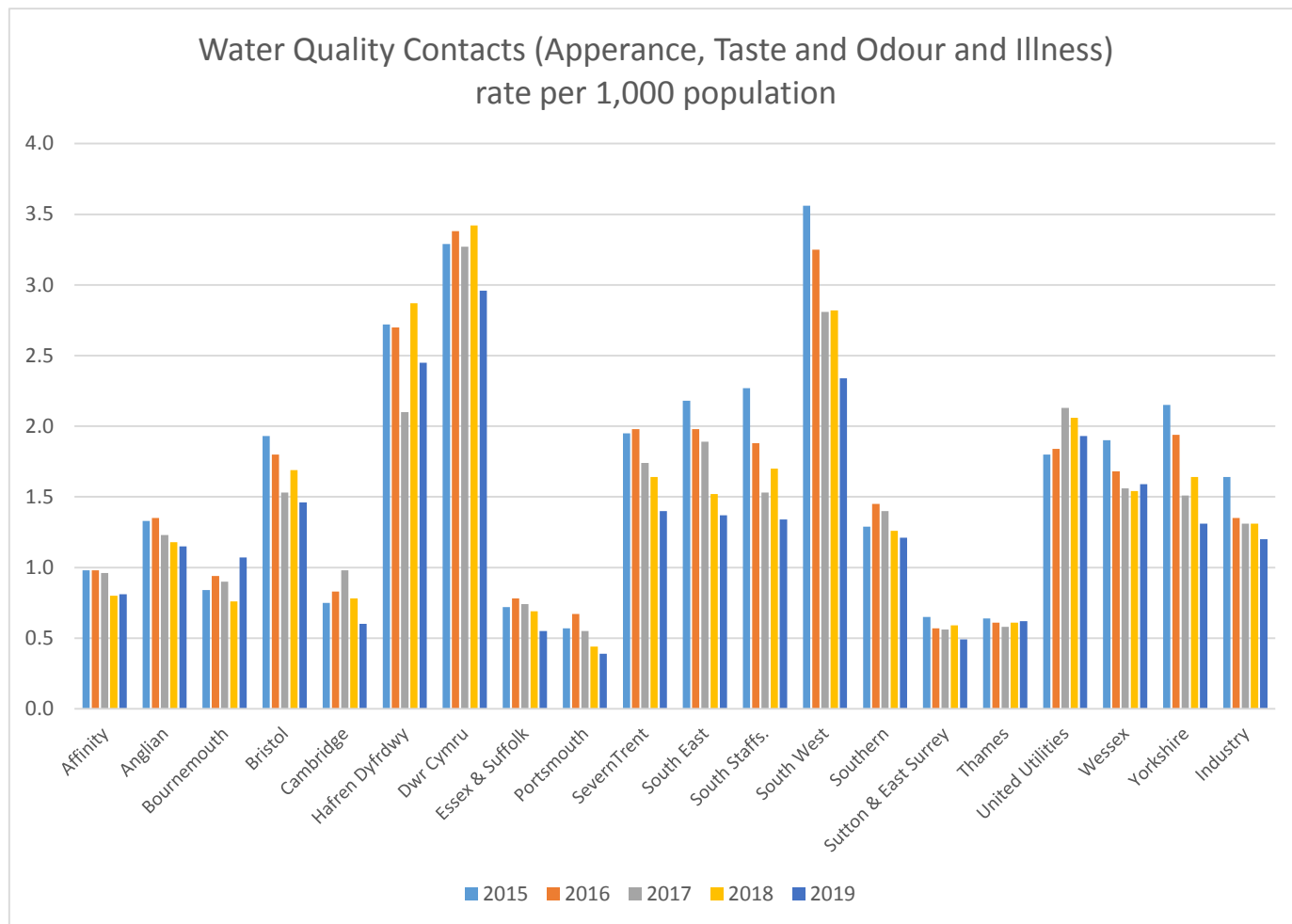
We shared our action plan to reduce the number of Water Quality Contacts with the CCG, who have monitored performance during this AMP period.

As part of the Ofwat ODI scheme, rewards and penalties apply at the end of the current period to the average contact rate over the five year period. Unfortunately we have failed this ODI resulting in a financial penalty of £1,903,000 which will reduce customer bills over the period 2020-25.



The industry performance for water quality contacts bursts is shown in the graph below. This is for the last five years, up to and including 2019.

It shows that relative to other companies our number of contacts per 1000 population served is the best in the industry and one third of the industry average.



**WHOLESALE**

# Safe, secure and reliable drinking water

## Temporary usage bans

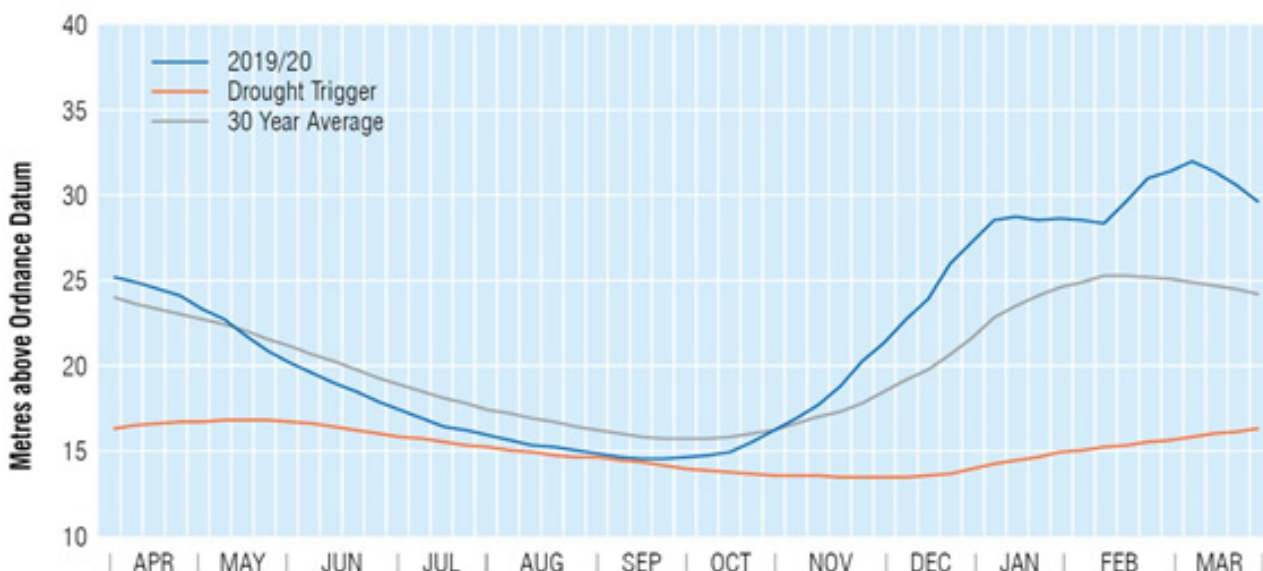
This is defined as the introduction of water restrictions on customer usage in the period in accordance with our approved drought plan. This is a reputational ODI with no financial incentives. We did not introduce any restrictions in 2019/20.

84% 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.

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

Whilst ground water levels from May 2019 – November 2019 were consistently below the 30 year average, it was not significant enough to require us to initiate our communication programme with customers about using water wisely or impose restrictions on usage in 2019/20.

### Trends in Groundwater Levels



Ground water levels were significantly higher at the start of 2020 which means that it is unlikely that we need to impose restrictions this summer (summer 2020) despite the long hot dry April and May months.

**WHOLESALE**

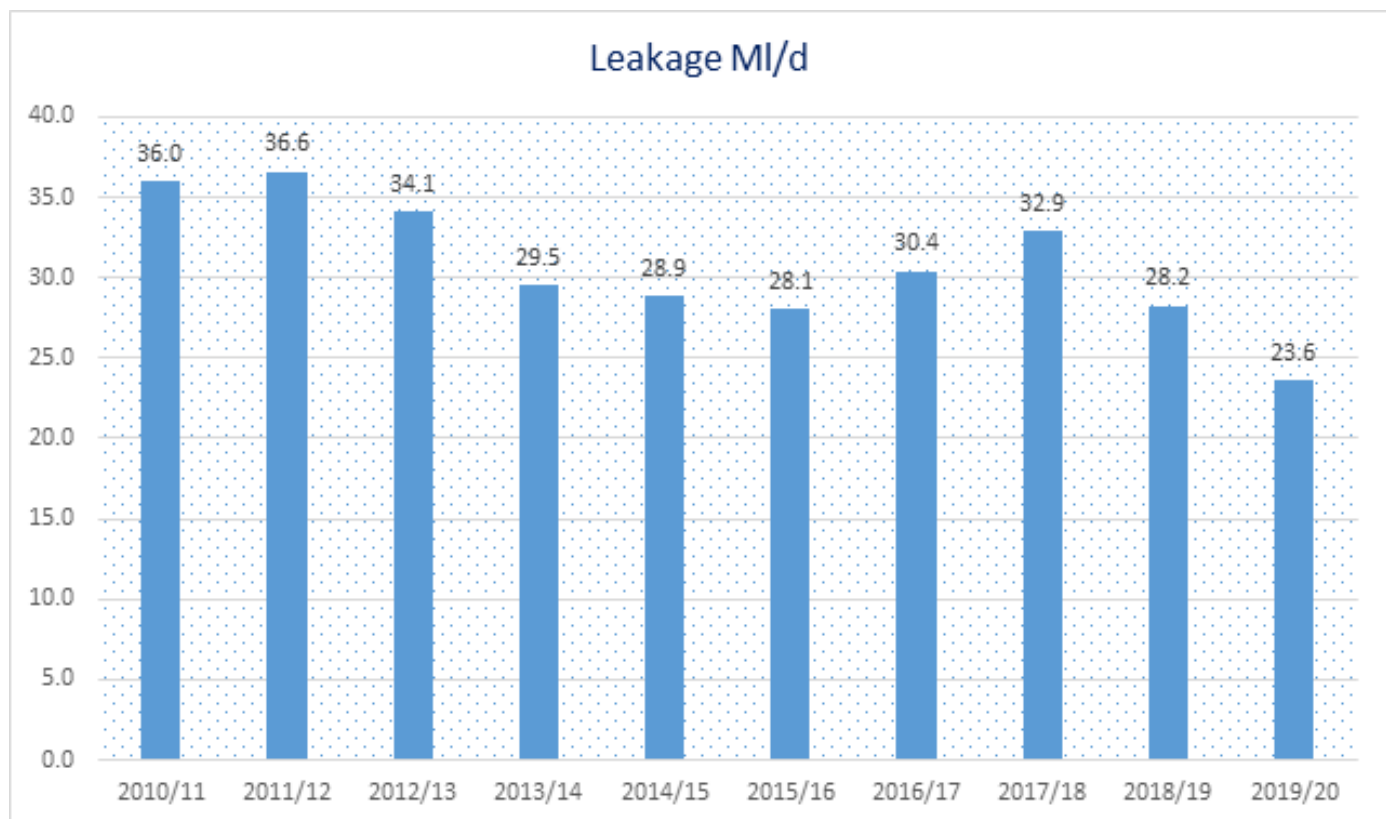
# Less water lost through leakage

## Leakage

For the year 2019/20 average leakage is calculated (post Maximum Likelihood Estimate (MLE)) at 23.58 MI/d. This is against the annual target of 29.80 MI/d.

The graph below shows the long term trend in leakage performance and the significant improvement in both 2018/19 and 2019/20.

We have outperformed its 5-year AMP6 ODI of 29.9 MI/d.



### Leakage Expenditure to Maintain Low Leakage Level

We started 2019/20 in a strong position as a result of a 7 MI/d leakage reduction over 2018/19. We spent £3.7m on leakage activity in 2019/20, compared to £3.9m in 2018/19.

- £0.3m was spent on additional fixed noise correlators and other leakage detection equipment to further improve leakage detection efficiency. We have continued to work in partnership with manufacturers to develop the new equipment and now has fixed noise correlators listening for leaks in real-time on 30% of its network.
- £0.1m was spent on flow and pressure logging and software to improve network understanding. This included continuing to work collaboratively with a local business to further develop IoT pressure sensors. Initially developed in partnership with us in 2018/19, IoT loggers are now being used to detect leaks on plastic pipes.
- £1.2m was spent on internal and external specialist leakage detection technician resources. A total of 22 technicians were deployed during 2019/20 to locate leaks to maintain low leakage levels.
- £0.5m was spent on leakage management, analysis and consultancy. This included customer side leakage and plumbing loss studies to provide more accurate assessments of unidentified water loss and work with specialist consultants to develop more efficient leakage detection strategy.
- £1.6m was spent on leak repairs. 3,869 leaks were fixed during 2019/20, showing that the improvements in leakage repair processes has successfully allowed the repair team to keep up with the higher number of leaks detected without additional resource.

**Leakage Detection Figures**

In total, 3871 leaks were detected during 2019/20, compared to 4025 in 2018/19. Whilst a lower number, this represents an increase in leaks per tech compared to 2018/19. The number of leakage techs in 2019/20 was 22, compared to 26 in 2018/19.

Further efficiency savings are expected in 2020/21 as a result of a new leakage detection strategy and new equipment purchased during 2019/20.

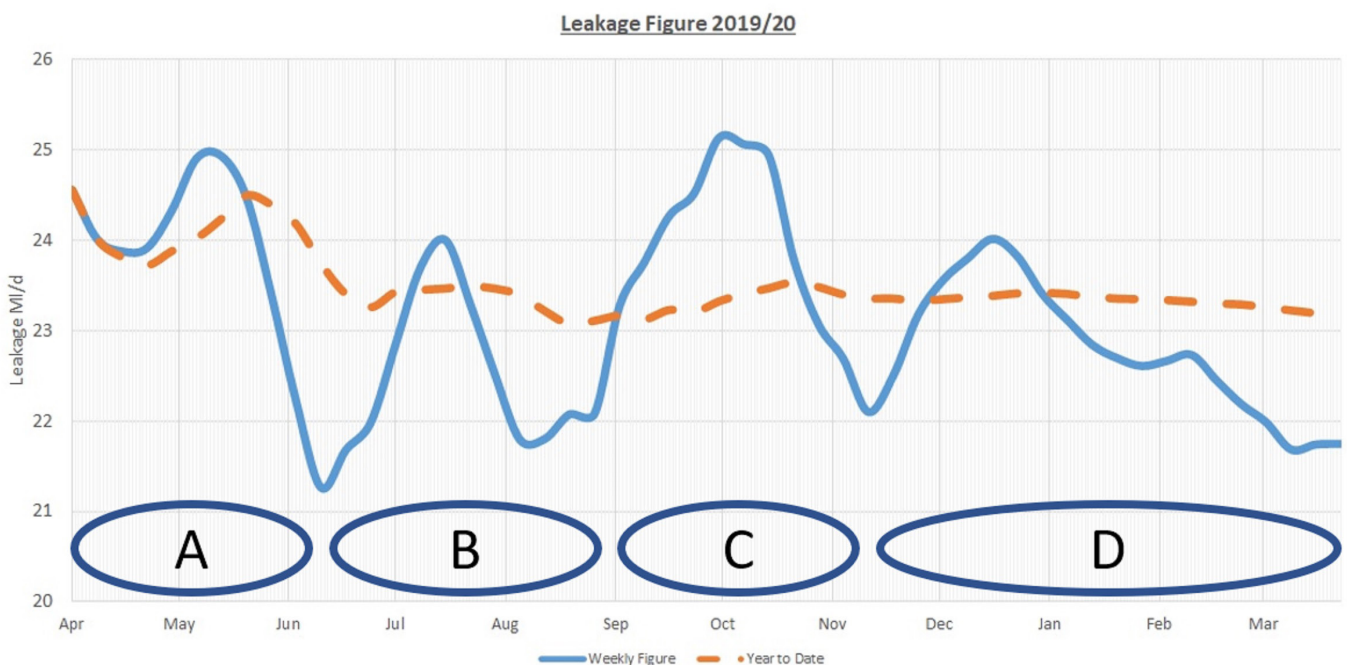
**Total Leaks Detected – Comparison 2018/19 to 2019/20**

	2018/19	2019/20	Leaks per Tech 18/19	Leaks per Tech 19/20
<b>Mains/Ferrules</b>	557	496	21	23
<b>Service pipes/ Customer Side</b>	1,294	1,135	50	52
<b>Mains Fittings</b>	148	94	6	4
<b>Stopcocks</b>	2,026	2,146	78	98
<b>Total</b>	<b>4,025</b>	<b>3,871</b>	<b>155</b>	<b>176</b>

**The Leakage Story for 2019/20**

Three different weather conditions led to rises in leakage through 2019/20 (Figure 1). In each instance, a leakage rise was followed by a quick recovery due to the resources available to find the new leaks. The result of this continued high effort can be seen by the continued high leaks detected through the year.

**Weekly and Year to Date Leakage Graph**

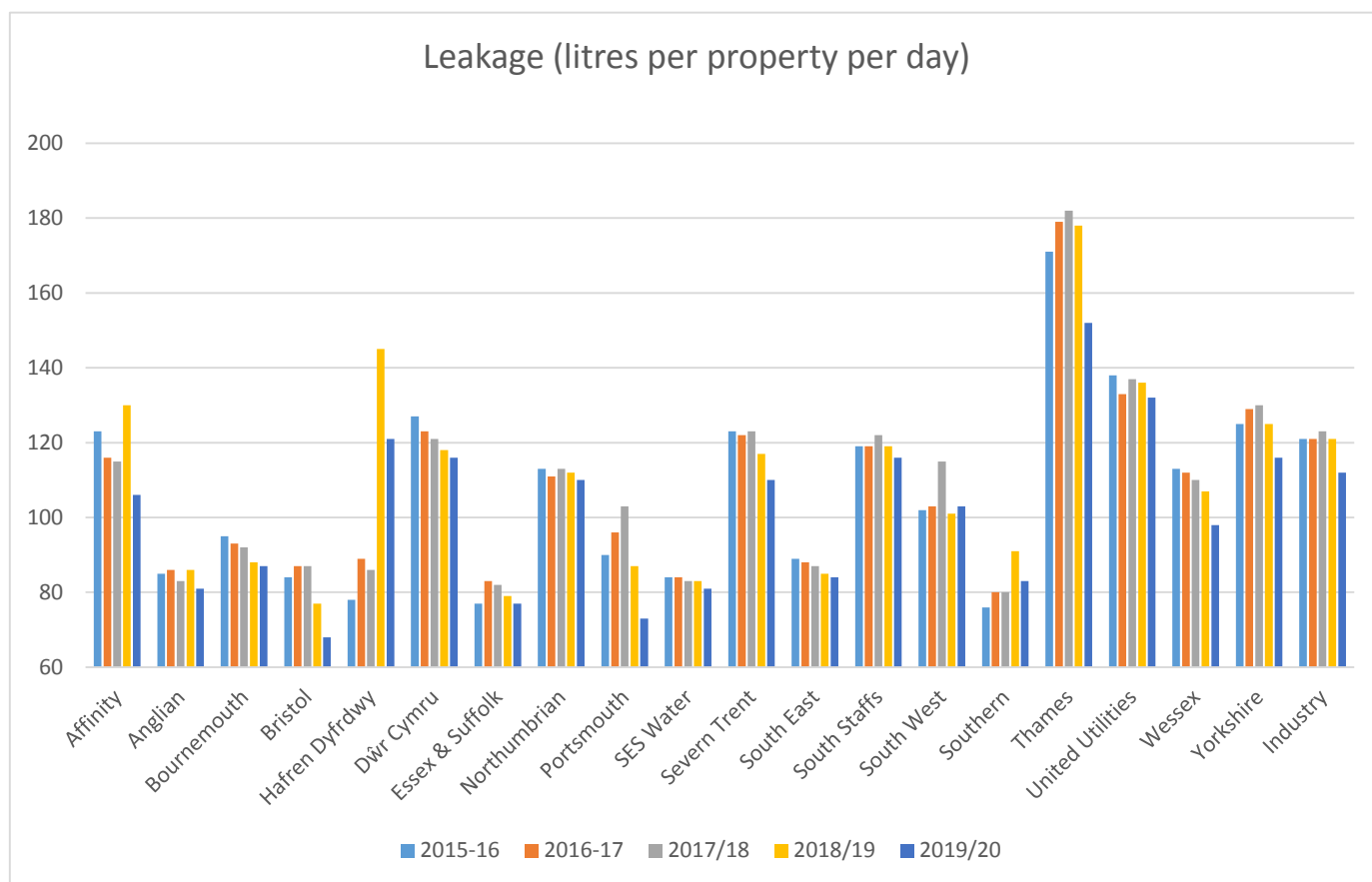


- A. Gradual leakage reduction from 25 MI/d to 21 MI/d through period of benign weather and consistent leakage detection and repair.
- B. Rise in leakage as hot weather resulted in pressure fluctuations on network, causing leak breakout. Followed by recovery as weather cools down and network returns to calmer state.
- C. Rise in leakage as increase in ground soil moisture levels leads to ground movement, causing leak breakout. Followed by recovery as ground movement reduces.
- D. Rise in leakage as temperature drop resulted in traditional winter leak breakout. The benign winter of 2019/20 means that this leak breakout was lower than average. Followed by recovery as temperature warms.

The industry performance for leakage is shown in the graph below. This is for the last five years, up to and including 2019/20.

It shows that relative to other companies our leakage rate per property served is the second lowest in the industry and approximately 65% of the industry average.

**Industry leakage performance, 2015/16 - 2019/20 (litres / property / day)**



As part of the Ofwat ODI scheme, rewards and penalties apply at the end of the current period relative to the average leakage rate over the five year period. At the end of year 4 we were exactly on target for the period. As a result of the significant improvement in 2019/20 we outperformed our five year target and are entitled to an outperformance payment of £76,000.

**WHOLESALE**

# High quality service

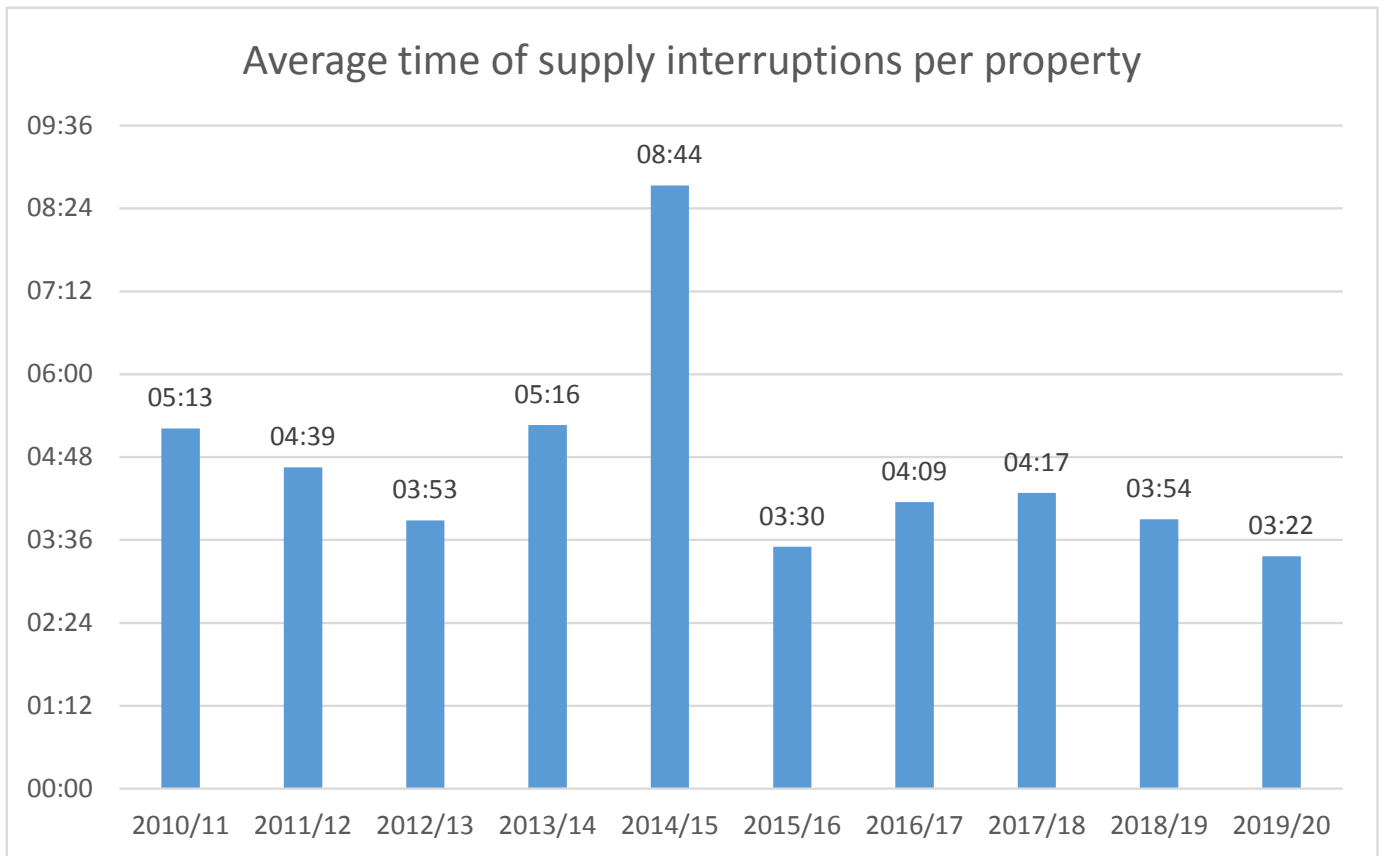
## Interruptions to supply

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 3 minutes 22 seconds per total properties served, a reduction from 3 minutes and 54 seconds in the previous year. This is our best performance in the last 10 years.

The primary reason for improvement in performance since 2014/15 is due to better management of planned interruptions. At 1 min 12 secs, this activity now only equates to 1/3 of the total as we undertake planned repair and maintenance of the network. This has been achieved whilst changing our renewals technique from 23% no dig technology in AMP5 to 78% no dig in AMP6, a method which requires customers supplies being turned off for the period the main is installed. This success has only been possible because of the highly collaborative and successful infrastructure contract where we work closely with our delivery partner Cappagh to minimise disruption to customers supplies.

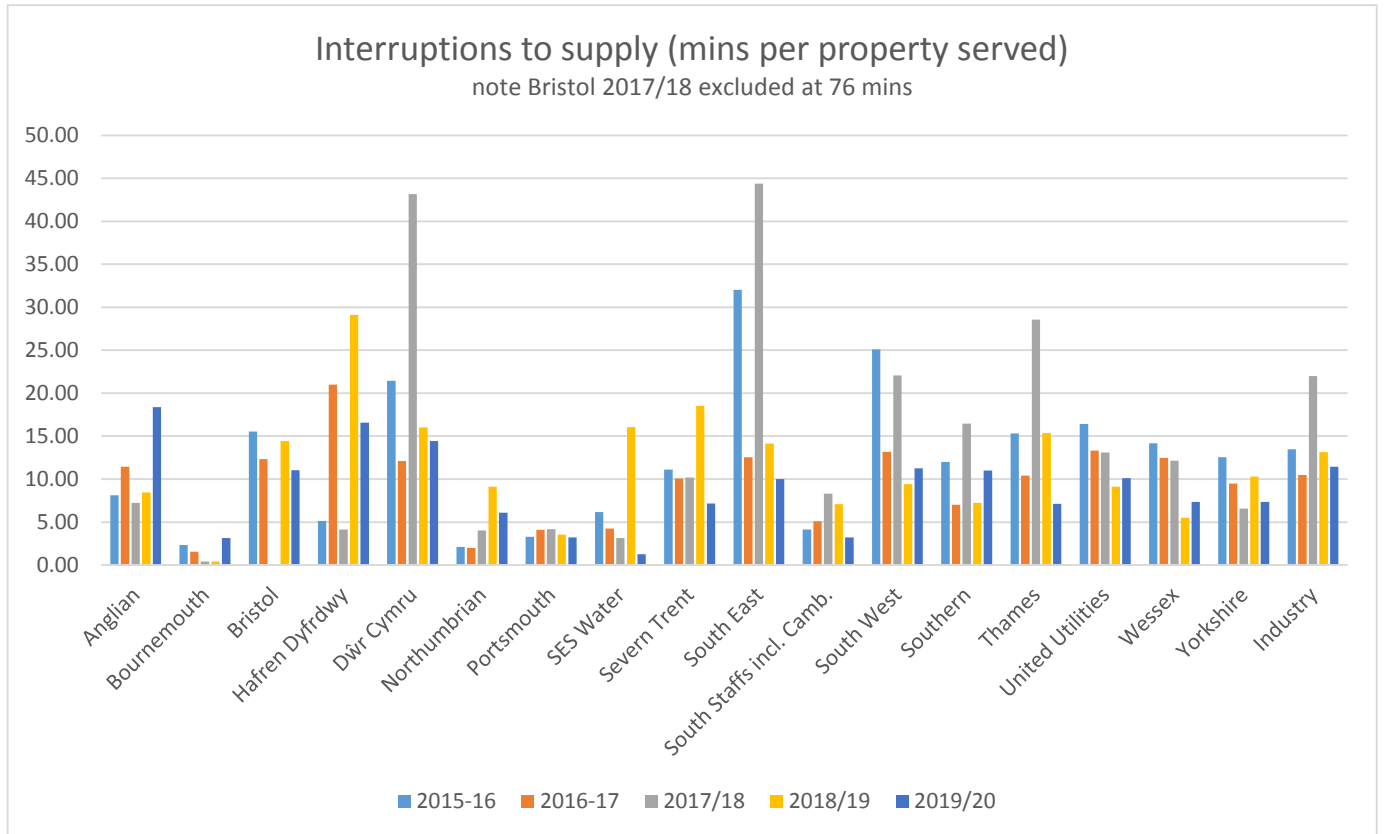
The level of unplanned interruptions was slightly above our long term average in 2019/20, at 2 min 12 seconds. Despite a similar number of interruptions over 3 hours to previous years, an increase in the number of properties affected per interruption has led to a slight increase compared to the past few years.



In the year the performance commitment of 6 minutes per property has been met. A financial outperformance payment has been earned equating to £73,000 to be recovered from customer over the next price review period (2020-2025).

The industry performance for interruptions to supply is shown in the graph below. This is for the last five years, up to and including 2019/20.

It shows that relative to other companies our interruptions per property served is the third lowest in the industry and approximately 30% of the industry average.



**WHOLESALE**

# An improved environment supporting biodiversity

## Biodiversity

At PR14 we made a commitment to support conservation and biodiversity. A Biodiversity Action Plan was agreed with relevant stakeholders including our CCG. 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 key conservation activities have been completed in 2019/20;

- Employed an experienced botanist to carry out a detailed vegetation survey and map priority habitats at 2 sites with monitoring on a further 10 sites
- Employed specialist consultants to complete invertebrate surveys at 6 high conservation value sites. Firdown Reservoir site was particularly important and has many notable species using it. This site will be monitored and management arrangements changed if needed
- Gaps in the hedgerow were planted at Soberton Meadows, Clanfield Reservoir and Walderton WTW using native species. These projects have increased the connectivity of the habitats on site for the benefit of wildlife
- A new scrape was dug at Soberton Meadows to increase the marsh habitat on the site. A willow tree line was also laid and scrub reduced. This will help increase the available habitat on site and hopefully increase the variety of flora using the site which will be monitored each year
- Non-native trees were removed from Soberton WTW and replaced with native species such as Hazel, Hawthorn, Maple and Oak. This should increase the biodiversity across the site and add to the age diversity of the trees
- Abandoned service reservoirs at Madehurst and Slindon were converted into bat hibernacula. This involved giving the bats access to the underground space by adding louvre grills to upstands and adding features to the inside space to create suitable bat habitats

In addition the following projects were also completed in 2019/20;

- Volunteer staff working parties undertook conservation work at Havant Thicket alongside numerous conservation workdays by other organisations, volunteer groups and local schools on the site
- Continued scrub clearance at Highwood Reservoir to keep the banks open for the benefit of wildflowers and reptiles
- Woodland thinning, coppicing and scrub management was carried out at Whiteways Lodge, Lovedean WTW, Lovedean Reservoir, Hoads Hill Reservoir, Northbrook WTW, Fort Southwick Reservoir and the Head Offices at Havant. This will allow remaining trees to have the space to mature, and increase the biodiversity at the sites
- The site at Nore Hill, Slindon is proving popular with Barn Owls and they were monitored by the local ringing group as part of the National Trust Slindon Estate

All survey and biodiversity projects agreed for the financial year 2019/20 were completed on time.

The PR14 commitment is to achieve 90% of the agreed plan by the end of 2020 and this would determine whether a penalty of £44,000 for each 10% of the plan not achieved should apply.

We presented our assessment of performance to its CCG in May 2020. The CCG confirmed and agreed that we had achieved 98% of its programme. Specifically it stated that:-

*"The Company started this 5 year period with some knowledge of the habitat on its 60 sites. It ends the 5 year period with a very good understanding on over 50 of those sites. The Company has undertaken 160 projects over the period, and not only had the team remained within budget but it had planned and delivered the projects very well.*

*Whilst most of the Company sites are small they do provide good areas of grassland, woodland and meadows. The Company need to continue the fantastic foundation built by Tracey Viney to ensure that it continues to improve biodiversity."*

We have therefore met our PR14 Commitment.



## WHOLESALE

# An improved environment supporting biodiversity Water Framework Directive

Obligations under the Water Framework Directive are required to be complete by 2021. We committed to deliver the Water Resources programme 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.

Details of what we have delivered, as part of the NEP, is given in previous reports.



## WHOLESALE

# An improved environment supporting biodiversity Renewable Energy

As part of our PR14 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 2019/20 was a 10% increase in the amount of electricity we use from renewable sources.

In January 2015 we switched electricity supplier. Over 99% 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**

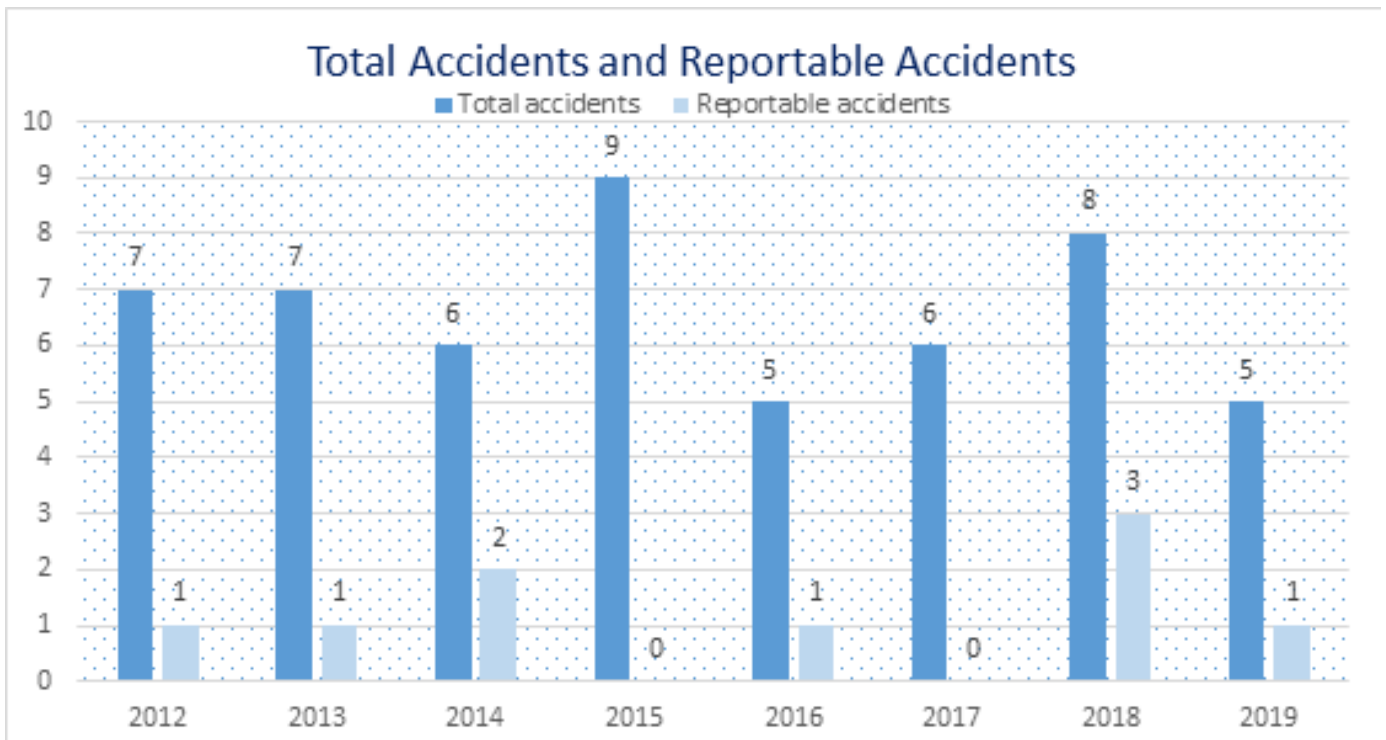
**Health and safety culture**  
**RoSPA accreditation**

Health and Safety has been a priority within the company for many years and in recent years this focus has driven a very low number of employee accidents. However in 2018 we saw an increase in both total and reportable accidents. Reportable accidents are those which result in more than 7 days off work. We are pleased to report that the number of accidents has reduced in 2019.

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. In 2019/20 we refreshed our programme, highlighting the word complacency.

In 2019 we were awarded the RoSPA Order of Distinction for Occupational Health & Safety. This 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 15 years or more.

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



This is a reputational ODI with no financial incentives.



**RETAIL**

## High quality service

# Service Incentive Mechanism

At PR14 Ofwat used a methodology for measuring customer service known as the Service Incentive Mechanism (SIM). In the PR19 Final Determination published by Ofwat, we received the highest SIM reward in the industry for our performance in the four years up to and including 2018/19.

For the period 2020-25 this measure has been replaced by a new measure called C-Mex. 2019/20 is a trial year for C-Mex.

However, Ofwat have asked companies to report a SIM value for 2019/20, based on the C-Mex survey results and revisions to the quantitative components.

SIM seeks to measure the quality of service provided by companies to household customers only and is measured by two elements:

**Quantitative** - measured by:

- 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

The number of unwanted telephone contacts is not required for this proxy SIM.

**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 table below compares performance for 2019/20 with 2018/19.

SIM Scores		2018/19	2018/19	2019/20	2019/20
Quantitative Measure	Multiplier	Number	Score	Number	Score
<b>Unwanted Phone Contacts</b>	1	12,988	12,988	n/a	n/a
Written Complaints	5	294	1,470	309	1,545
Escalated Written Complaints	100	18	1,800	24	2,400
CCWater Investigated	1,000	0	0	0	0
			<b>16,258</b>		<b>3,945</b>
Connected Properties (year end)			303,208		305,957
<b>Quantitative SIM Score</b>			<b>22.3</b>		<b>20.7</b>
<b>Qualitative Measure</b>		<b>4.56</b>	<b>66.8</b>	<b>4.43</b>	<b>64.3</b>
<b>Total SIM Score</b>			<b>89.1</b>		<b>85.0</b>

The exclusion in unwanted calls from this new proxy SIM resulted in a change in the weightings of the Quantitative SIM score, and thus the two scores are not directly comparable. The importance is our relative position in the industry, which we will not know until July 2020.

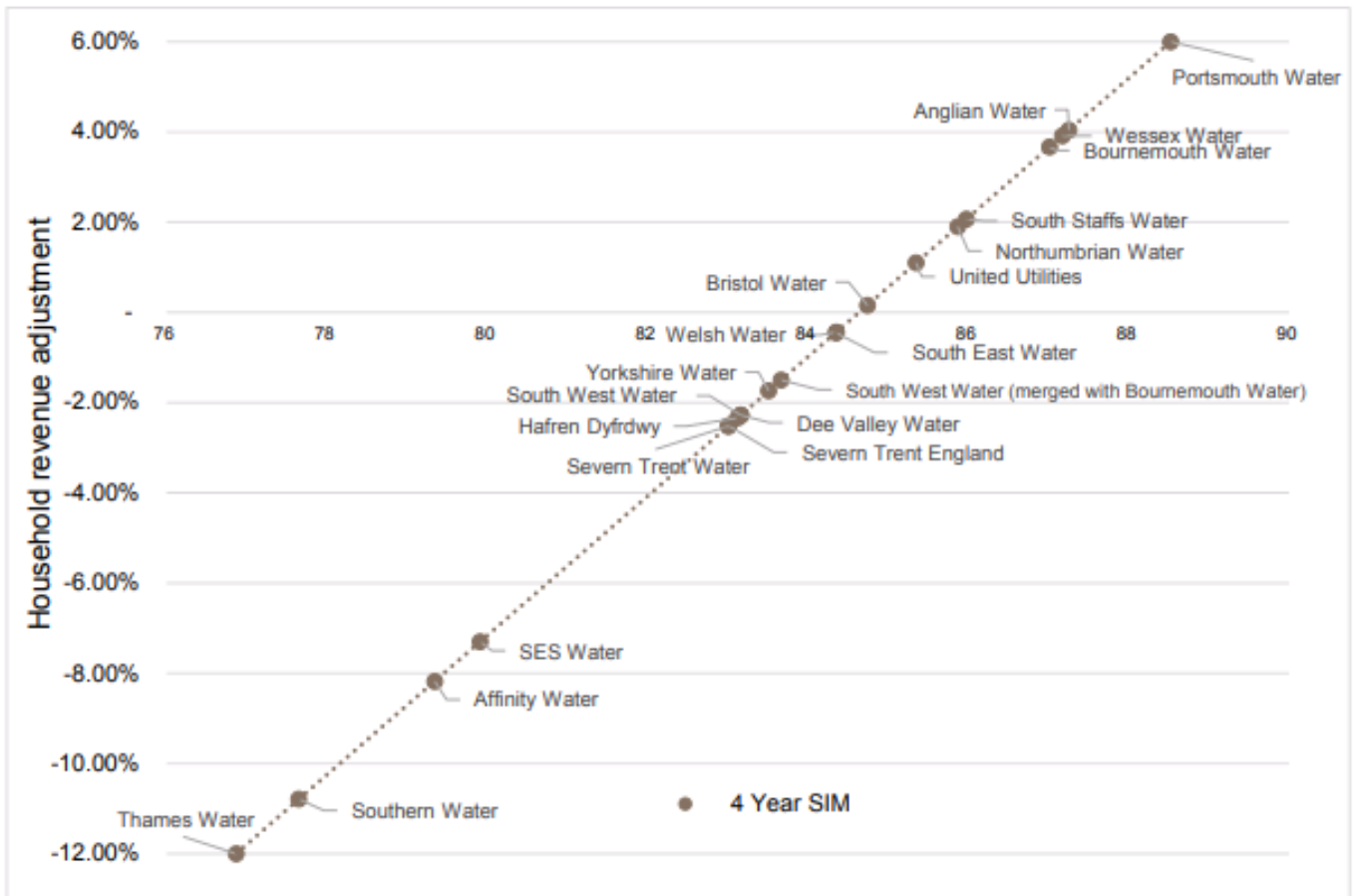
For 2018/19, Portsmouth Water had 10.3 complaints per 10,000 customers and were ranked second best in the industry. For 2019/20 this will increase slightly to 10.8 complaints per 10,000 customers and we therefore expect to remain upper quartile as a result.

In the Qualitative assessment for the C-Mex survey we were ranked 2nd of the 18. This implies that we were also ranked 2nd for the SIM survey.

Portsmouth Water has scored 85.0 on this proxy SIM measure for 2019/20.

The industry performance on SIM in AMP6 is shown in the graph below which is an extract from Ofwat's report. We were ranked first in the industry, resulting in a reward of £1.255m (in 2012/13 prices) which will be recovered from customers in AMP7 through a bill increase.

**Figure 3.1: Four year average SIM scores and % retail revenue adjustments**



Reference:- Ofwat PR19 Final Determination, Accounting for Past Delivery – Technical Appendix page 22 (December 2019).

Our performance in 2019/20 is likely to ensure we retain upper quartile status.

**RETAIL**

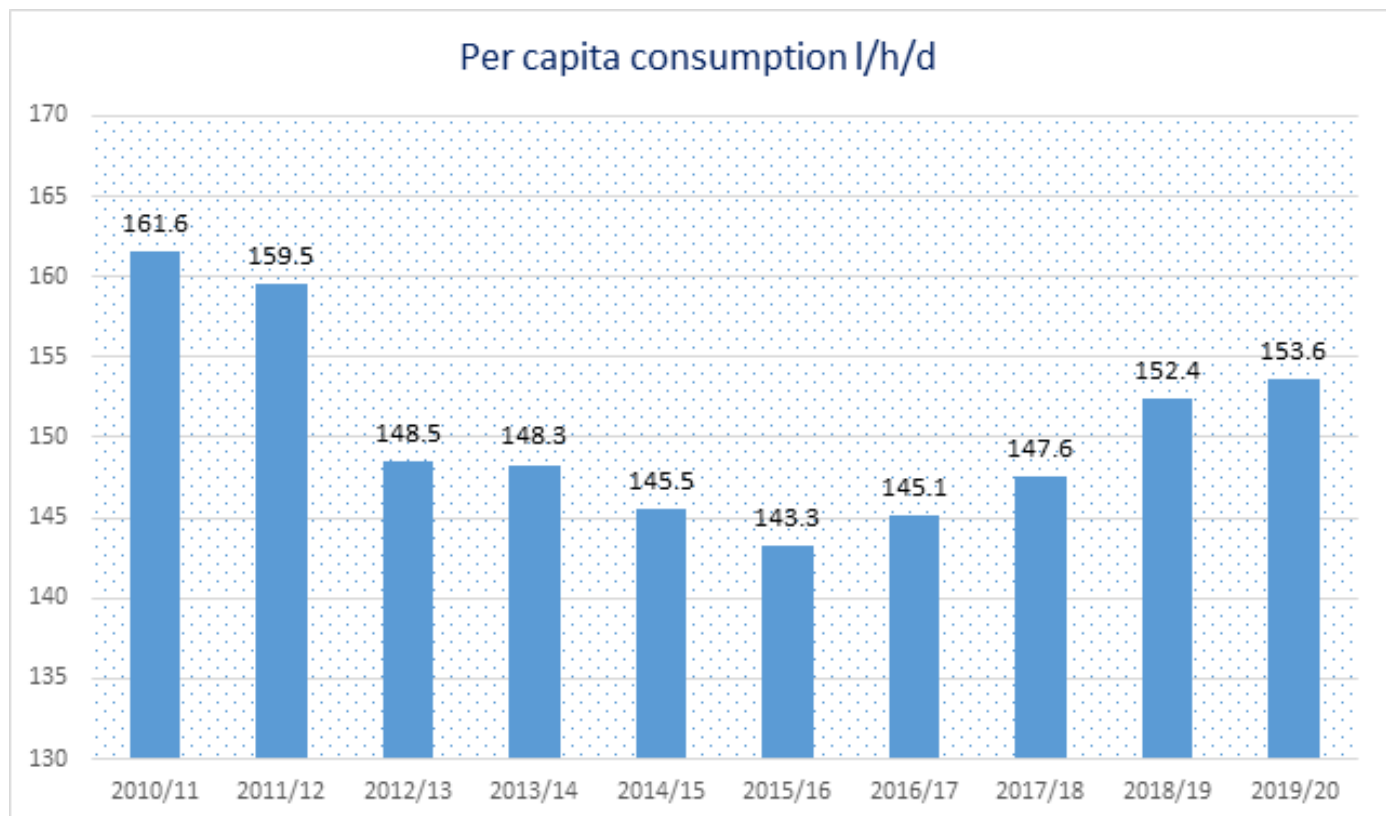
# An improved environment supporting biodiversity

## Reducing per capita consumption

Per capita consumption for 2019/20 was 153.6 l/h/d, which is an increase from 152.4 l/h/d in the previous year. This increase reflects customers using significantly more water than normal during the dry summer in 2019.

The increased demand did not have any adverse impact on our ability to supply water to customers, but our background communications throughout the summer to use water wisely and our support of initiatives such as water efficiency week had a very limited impact on customer behaviours.

The graph shows the reported per capita consumption since 2010/12, based on data reported to the Environment Agency in particular.



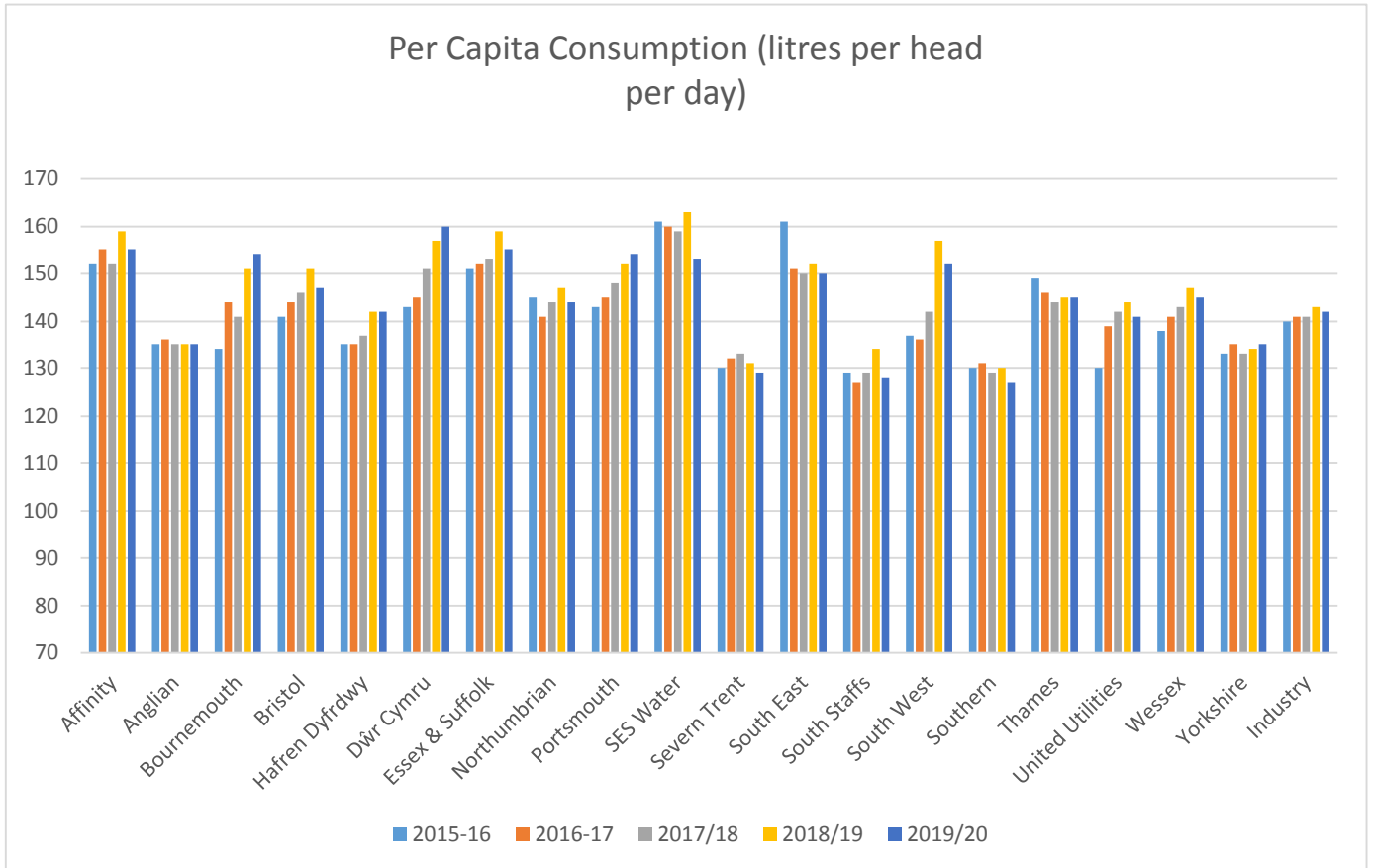
We continue to monitor household usage of our customers to calculate this measure. There are two groups of household customers, those who are metered and we have an explicit volume of usage and those who are not metered. For this latter group we monitor usage of over 1,000 households with their consent. 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 2019 were relatively dry with a corresponding increase in usage.

Company efforts to influence our customers consumption behaviours has resulted in the Water Efficiency programme distributing 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 PR14 ODI target is based on reaching a per capita usage figure of 143.9 l/h/d in 2019/20. Clearly this has not been achieved and a penalty of £333,000 will result in a reduction to customer bills in the five years period 2020-25.

There is significant variation in PCC across the industry. The graph below shows the variation by company and over time.



Generally people in the south of England use more water than those elsewhere in the country. There are a large number of reasons for this including weather patterns, socio-demographics and meter penetration.

Portsmouth Water, alongside the whole of the water industry, must work with its customers to ensure they understand the value of water and do not waste it.

## RETAIL

# Supporting the community 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 15 developers. These are a representative sample of active developers that Portsmouth Water dealt with in 2019/20.

There was a 93% satisfaction rate with 14 out of 15 developers reporting to be 'satisfied' or 'very satisfied' with their overall dealings with Portsmouth Water. This is a small % reduction from 2018/19, where 19 out of 20 developers, (95%) 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 has also provided assurance on these items, excluding GSS, see page 43.



**OTHER METRICS**

# 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).

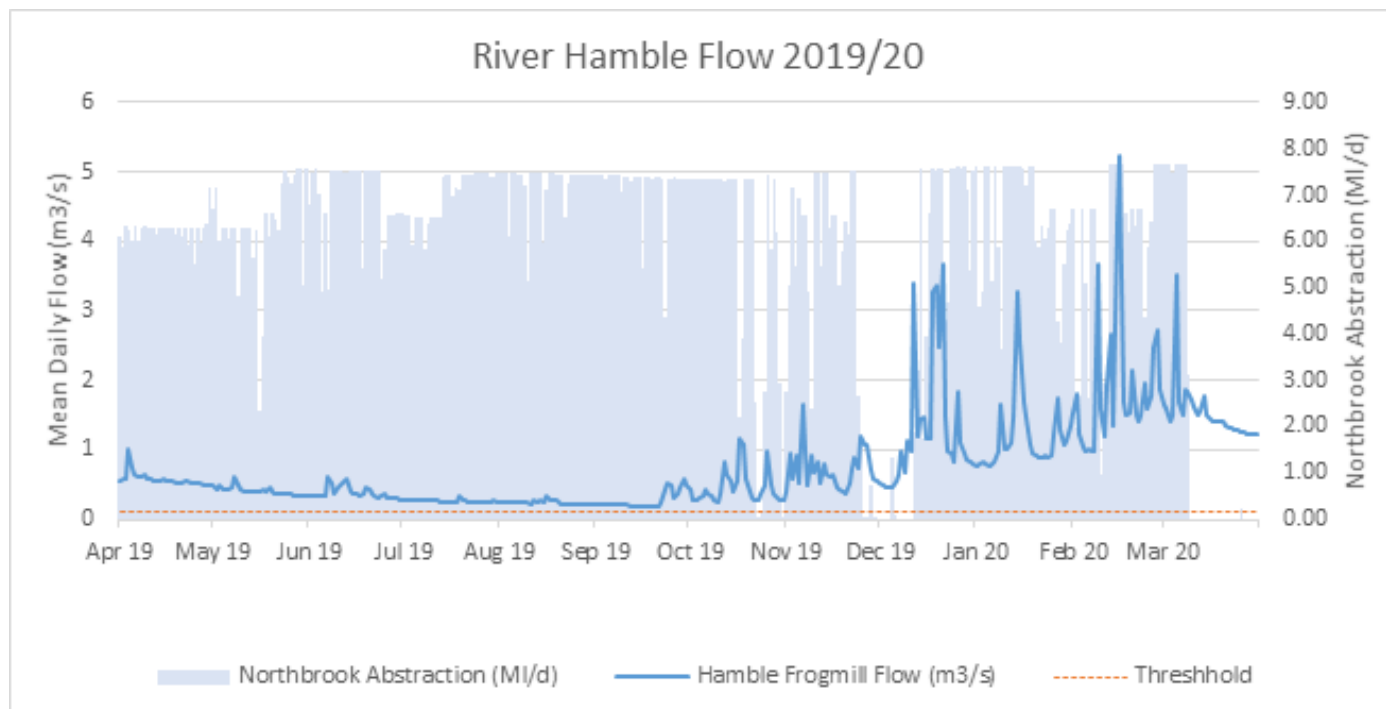
Northbrook is the only Portsmouth Water site remaining in the Abstraction Incentive Mechanism (AIM) as it is deemed to impact on flows on the River Hamble.

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 2019/20 the low flow trigger was not passed in any day, and therefore, annual reporting are all zero. The lowest recorded flow was 0.184 m3 / second on 20 September 2019.

The graph below also shows, on the right hand axis, the abstraction rate from Northbrook over the year. Although we have an annual licence of 20.5MI/d we took no more than 8 MI/d, as there is a long term issue with a pump at this site. Had the river level fallen below the trigger level AIM would have required us to reduce abstraction at Northbrook to the target value of 18.8 MI/d.

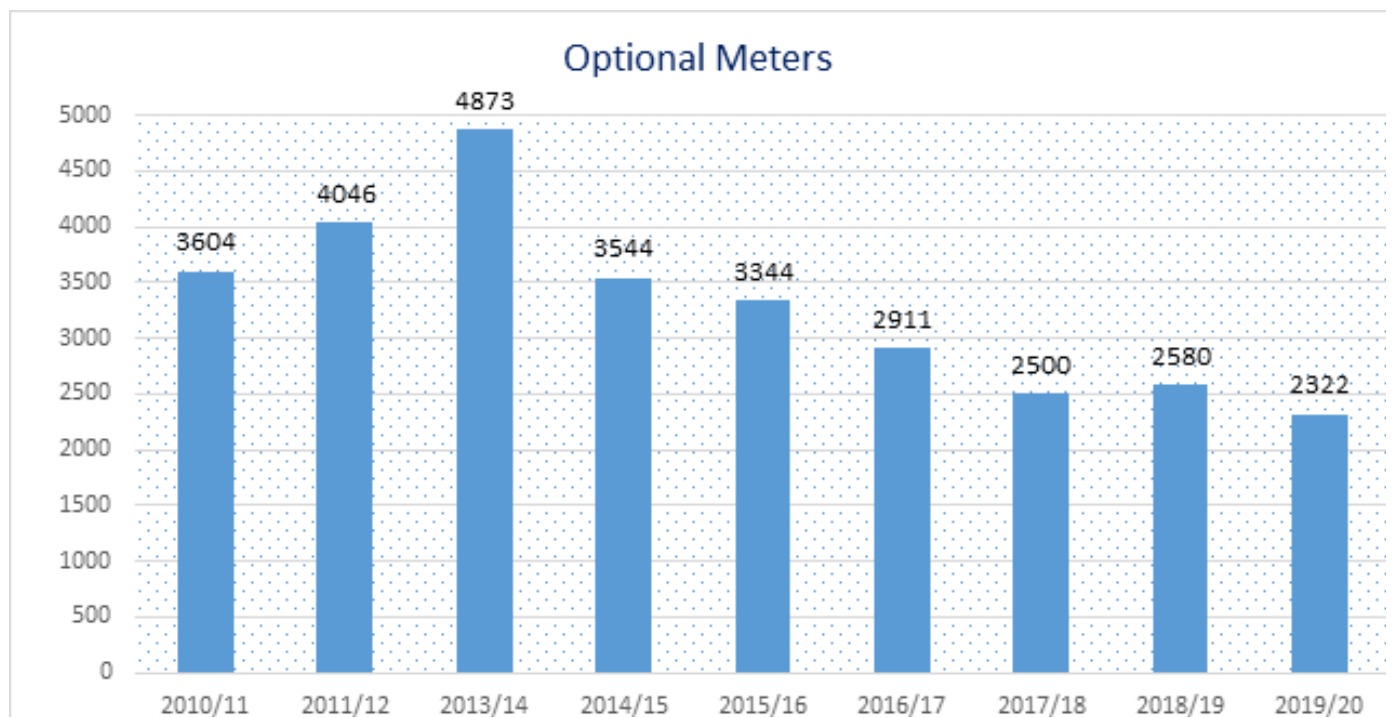


**OTHER METRICS**

# 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. We proposed to install 5,500 domestic meter options per year, and in 2019/20, and despite a number of initiatives just under 2,500 customers chose to switch to a measured supply as part of the optional metering.



Initiatives in 2019/20 to increase meter penetration, included 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 2019/20 was 32.5% of household customers, an increase of one percentage point from last year.



## OTHER METRICS

## Compliance with Annual Abstraction Licences

The annual average distribution input reduced by 4MI/d in the year to 170 MI/d. The volume of water distributed is influenced by many things, including the weather. We have experienced a dry period in the autumn in particular, which has resulted in increased demand. The peak day demand of 202 MI/d occurred on 28 August 2019.

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 our sources in 2019/20 was as shown in the table below.

Annual Abstraction - MI/Year				
Source	Source Licence	Source Actual 2019/20	Group Licence	Group Actual 2019/20
Northbrook	7,487	2,129	7,487	2,129
Lower Upham	640	0		
West Street	3,328	1,305		
West Meon	166	0		
River Itchen	15,916	10,445		
Maindell	2,040	0		
Soberton	3,294	2,074	3,294	2,074
Newtown	695	0.3		
Worlds End	8,296	3,896		
Lovedean	4,148	2,014		
Havant & Bedhampton	35,770	19,742		
Walderton	9,955	7,431	23,740	16,710
Woodmancote	1,103	208		
Fishbourne	3,741	3,053		
Funtington	2,920	1,165		
Lavant	9,950	3,799		
Brickkiln		1,056		
Eastergate	10358*	3,332	10,358	7,914
Westergate		1,773		
Slindon		494		
Aldingbourne		2,315		
<b>Total</b>	<b>119,807</b>	<b>66,228</b>	<b>44,879</b>	<b>28,827</b>

\*Group Licence

We have complied with our annual licence requirements and did not exceed any licence in 2019/20.

## OTHER METRICS

## 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)
- Meters not read in the year

In the year 2019/20 we made 395 GSS payments which is a significant increase from 67 in 2018/19. This heavily influenced by 3 interruptions to supply where we overran our published timings due to operational issues.

Detail is shown in the table below:-

	2015/16	2016/17	2017/18	2018/19	2019/20
<b>Making and keeping of appointments with customers</b>	27	26	30	37	40
<b>Responding to account queries</b>	10	22	11	6	6
<b>Responding to complaints</b>	4	3	3	1	1
<b>Dealing with interruptions to the water supply (planned and unplanned)</b>	63	191	97	1	314
<b>Meters not read</b>	6	1	17	22	34
<b>Total</b>	110	243	158	67	395

Customers therefore typically received a payment of £30 to compensate them for our failure in not returning their supply at the agreed time.

## OTHER METRICS

## Social Tariffs and affordability support

In recent years the country has seen increasing levels of household debt. Accordingly we pay 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 2019/20 this tariff caps customers' bills at our minimum charge, £81.14, 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 8,400 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 is exactly as at 31 March 2019 at 190.

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 335 customers on this scheme.

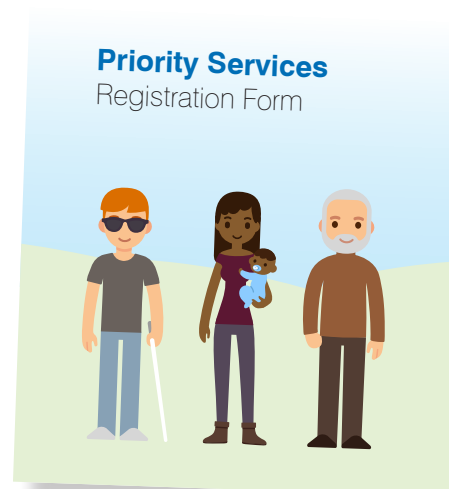
We also operate a scheme called Water Direct. Customers who receive certain benefits from the Department of Work and Pensions, and are in arrears on their bills, can request that water bill payments are deducted straight from their benefits. In recent years there has been a reduction in the number of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

Finally we have a Special Assistance Register, where customers inform us of particular issues they have, to ensure we can serve them in the event of an incident or more generally on a day to day basis. This is an important ODI for the next five year period.

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

	2015/16	2016/17	2017/18	2018/19	2019/20
<b>Social Tariff</b>	n/a	2806	5,312	7,411	8,401
<b>Watersure tariff</b>	255	234	210	190	190
<b>Arrears Assist</b>	240	218	183	261	335
<b>Water Direct</b>	1277	687	579	649	594
<b>Special Assistance</b>	205	225	315	419	730

We expect the number of customers requiring assistance to increase given the current Covid-19 situation. In May 2020 we wrote to over 32,000 customers and as a result have increased our Special Assistance Register accordingly.



**OTHER METRICS**

# 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 us to this important class of customer is consistently close to 100%.

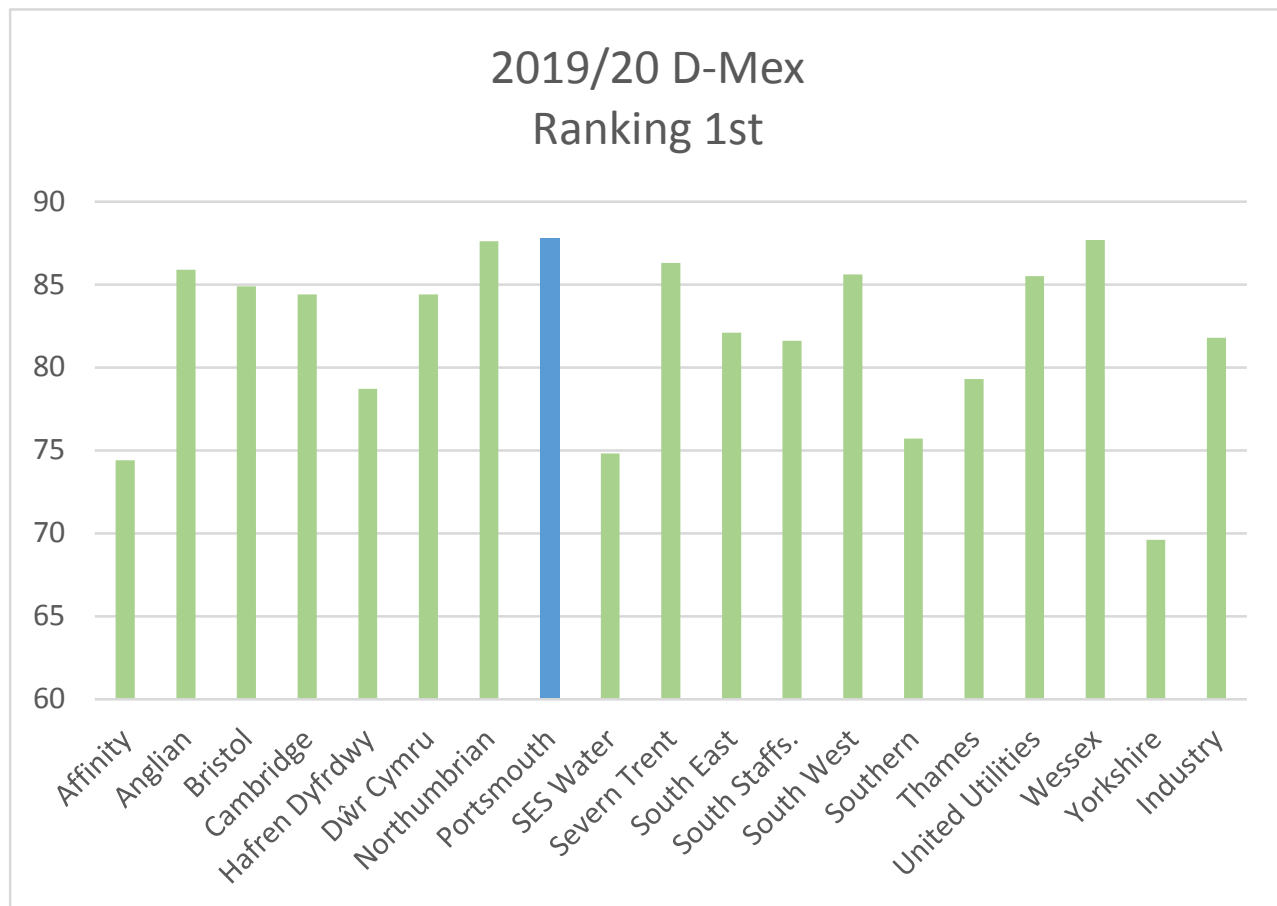
The levels of service being monitored relate to the following:-

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

At 98.7%, our levels of service to developers have improved in 2019/20 from 96.4% in 2018/19, when they were below the industry average of 97%.

Further, 2019/20 has been a trial year for a new satisfaction measure, designed by Ofwat for AMP7, D-Mex. The Ofwat customer satisfaction survey scores 78% and we are ranked second in the industry.

The industry performance for D-Mex is shown in the graph below for 2019/20. It shows that relative to other companies our D-Mex performance is the best in the industry.



D-Mex (2019/20)	Q1	Q2	Q3	Q4	Year
<b>Qualitative (survey)</b>	75.00	79.81	76.81	80.59	78.05
<b>Quantitative (LoS)</b>	94.58	99.33	96.44	99.91	97.57
<b>Total</b>	84.79	89.57	86.63	90.25	87.81

This KPI should be read in conjunction with our developer survey shown on page 30. We believe the level of service demonstrated in this table is consistent with the high degree of satisfaction achieved in the survey.

## OTHER METRICS

## Greenhouse gases

Our Gross Operating Emissions has fallen from 8,417 tCO<sub>2</sub>e to 7,321 tCO<sub>2</sub>e 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 <sub>2</sub> e	2016/17 tCO <sub>2</sub> e	2017/18 tCO <sub>2</sub> e	2018/19 tCO <sub>2</sub> e	2019/20 tCO <sub>2</sub> e
<b>Burning of fossil fuel</b>	444	400	315	452	254
<b>Transport for operational staff</b>	412	426	449	464	365
<b>Electricity</b>	10,025	9,292	8,016	6,758	5,814
<b>Business travel</b>	47	2	22	6	12
<b>Outsourced activities</b>	58	117	167	160	383
<b>Transmission and Distribution associated with electricity</b>	828	840	749	576	494
<b>Total</b>	11,813	11,079	9,718	8,417	7,321

Our GHG intensity ratio has reduced from to 132 kg CO<sub>2</sub>e / MI in 2018/19 to 114 kg CO<sub>2</sub>e / MI for 2019/20.

The most significant factor leading to the overall decrease is a 994 tCO<sub>2</sub>e reduction in Scope 2 emissions 'Total grid electricity used by company'.

The reduction can be attributed to both a 5% fall in total electricity used by us, and, the change in the UK grid Electricity generation mix. The UK has continued to see a reduced dependence on fossil fuels and a movement to low carbon generation. In 2019/20, the UK grid dependence on fossil fuels (Coal/Oil/Gas) was 34%, a reduction of 2% on the prior year and 9% since 2015/16<sup>1</sup>.

<sup>1</sup> Source: [www.ofgem.gov.uk/data-portal/electricity-generation-mix-quarter-and-fuel-source-gb](http://www.ofgem.gov.uk/data-portal/electricity-generation-mix-quarter-and-fuel-source-gb)



## OTHER METRICS

## Written Complaints

The number of household written complaints has increased by 21 in the year. We no longer report Non-household complaints, as the NHH customer base transferred to Castle Water as at 1 April 2017.

We critically review each complaint to ensure we understand why the customer has been dissatisfied and put actions in place to mitigate the risk of repeat.

Categories of written complaints	2015/16	2016/17	2017/18	2018/19	2019/20
<b>Charging and billing</b>	185	210	168	147	172
<b>Water service</b>	75	170	128	165	161
<b>Total</b>	260	380	310	312	333

We have 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 2019/20.

## OTHER METRICS

# Communication pipes

We have over 300,000 communication pipes connecting our mains to customer supply pipes. We continue to improve our data systems to accurately record this asset, following a data request from Ofwat in 2018.

As at the end of March 2020, we have the following communication pipes by material:

Lead	80,704
Galvanised Iron	17,983
Other	211,321
<b>Total</b>	<b>310,011</b>



## OTHER METRICS

# Meters Renewed

We have renewed 4,461 household meters in the year and 352 non-household meters in the year 2019/20. The household number is part of an on-going proactive replacement programme reflecting the age of the meter. This data is being provided following a request from Ofwat.



## OTHER METRICS

**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.

m hd	2017/18	2018/19	2019/20
<b>Water resources</b>	30.7	29.6	27.3
<b>Treatment</b>	2.2	2.0	2.1
<b>Distribution</b>	36.4	38.0	36.8
<b>Total</b>	69.3	69.6	66.3



## **APR20 Technical Assurance**

**APR20 Assurance Report**

**3 | Final**

**07 July 2020**

**Portsmouth Water**

**PRT**



## APR20 Technical Assurance

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### Document history and status

Revision	Date	Description	Author	Checked	Reviewed	Approved
1	20/05/20	Draft APR20 Interim Report	AKM	MC		AKM
2	16/06/20	Draft APR20 Report	WH	MC	AKM	AKM
3	07/07/20	Final APR20 Report	WH		AKM	AKM

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## 1. Introduction

For the period 2015-20 (AMP6) Ofwat requires companies to complete an Annual Performance Report (APR). Ofwat has expanded the scope of the APR throughout AMP6 (most recently through IN 20/03) to incorporate additional cost and non-cost data in section 4 and Common PCs in APR table 3S.

The APRs are an important element of Ofwat's framework for encouraging companies to be transparent about their performance and for collecting information it requires to perform its duties. They also allow stakeholders to hold companies to account when they do not deliver against their promises. It is therefore important that customers and other stakeholders can have trust and confidence in the information contained in companies' APRs.

You appointed Jacobs as your Technical Assurer in September 2019.

## 2. Scope

This is the first year that Jacobs has provided technical assurance for Portsmouth Water. We have spent some time familiarising ourselves with the Company and your approach to performance reporting in advance of year end reporting.

For your 2019-20 performance data you asked us to undertake a risk-based review of the following:

- AMP6 Performance Commitments – We reviewed the 2019-2020 full year reported performance for 11 of your 13 AMP6 PCs set out in your Final Determination (FD);
- APR section 4 cost assessment tables – We reviewed selected 2019-2020 data your teams proposed to report in Section 4 of the APR;
- Other performance data – We reviewed selected 2019-2020 data that you report internally or forms part of other external reporting; and
- APR common PC shadow reporting – We reviewed the 8 shadow measures including backcasting of prior years where appropriate.

For the majority of assurance areas above, you asked us to review and provide feedback on your data. For a number of areas which you considered to be higher risk, you also asked us to review and provide feedback on your processes. We undertook process reviews in March 2020 for the following areas:

- bottom-up leakage (AMP6 and AMP7 methodologies);
- the Water Balance and MLE (AMP6 and AMP7);
- PCC (AMP6 and AMP7); and
- Unplanned Outage (AMP7).

You also asked us to undertake early engagement sessions on your AMP7 drought resilience and your water quality contacts metrics. You asked us to provide you with an assurance note of key observations rather than apply our full process assessment for these metrics.

As agreed, we did not review any commentaries associated with the data and we did not audit the calculation of any rewards or penalties.

## 3. Approach

Our assurance is risk and sample based, based on the application of our three-stage approach (documentation, process and data). You asked us to review data and some processes through the programme we agreed with your Regulation Manager and based on your understanding of higher risk areas in these categories.

For the process stage of our assurance, we applied our 22-point assessment framework to your reporting, covering four key areas:

- Process management;
- Alignment to regulatory guidance;
- Methodology and inputs; and
- Checks and controls.

The result of our approach is a risk-based assessment of A, B, C or D against each assessment point and an overall score for the process which reflects the grade of the lowest scoring of the four key areas above. For the process stage the score reflects the risk associated with producing the output. For example, an overall score of D indicates there is a high risk that a process does not produce a robust output.

For the data stage of our assurance, we:

- checked whether your teams had been through your own internal assurance processes;
- checked whether any material actions from the process audits had been addressed;
- asked your teams to demonstrate how they had produced the proposed data;
- sampled data back to source inputs;
- tested teams' understanding of proposed data; and
- reviewed the appropriateness of the confidence grades your teams assigned to the proposed data.

The result of our approach is a risk-based assessment of A, B, C or D. The scoring criteria is shown in Figure 1.

**Figure 1: Data assurance score criteria**

Score	Meaning
A	Low risk – no weaknesses or deviations from methodology in production of data and confidence grade is appropriate
B	Low to medium risk - no material weaknesses or deviations in production of data and confidence grade is appropriate
C	Medium to high risk - material weakness or unjustified deviations (or number of minor ones with material effect) or confidence grade is not appropriate
D	High risk – two or more of: material weakness or deviation (or number of minor ones with material effect) or confidence grade is not appropriate

At the end of each audit (process or data) we provided you with a feedback note identifying material and non-material observations and the overall score.

We note that across the areas we reviewed, where we identified material issues, you asked us to complete further follow up audits. You also asked us to complete follow up audits for areas where we identified non-material issues that we recommended you resolve before the APR20 submission. For all follow up audits, you asked us to focus on how your teams had addressed the issues we identified. Where your teams provided evidence that they had addressed material issues, we upgraded our assessments.

Appendix A summarises the final assessments from our assurance.

Due to the timing of our assurance, our process audits were undertaken face to face at your offices but all data audits and follow up audits were undertaken remotely via Microsoft Teams due to Covid-19 restrictions.

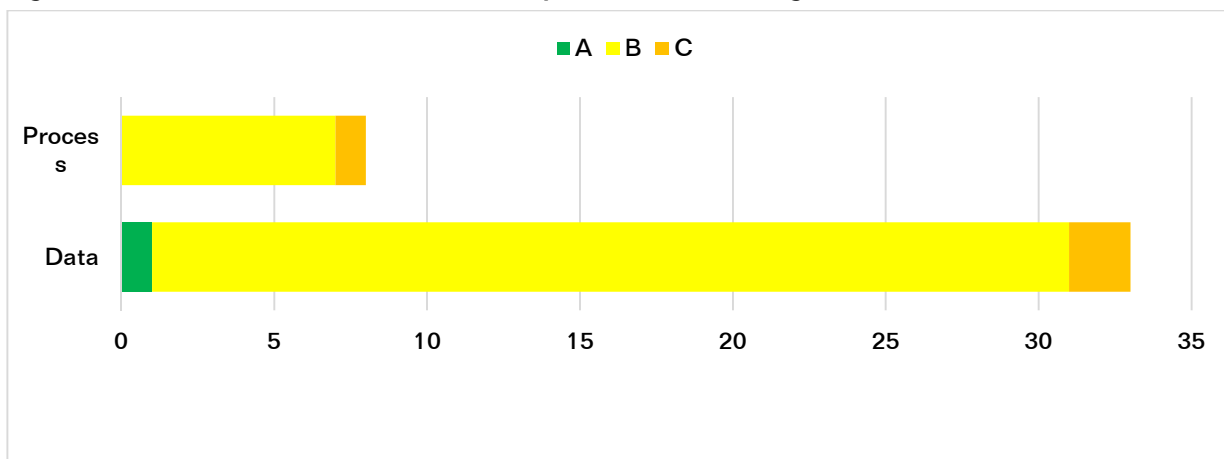
## 4. Observations

### 4.1 Overall findings

This is the first year we have worked with Portsmouth Water. We have found your teams to be very open, honest, helpful and respectful. Your teams are diligent and committed to producing accurate reporting data and have been receptive to our feedback. We consider we have worked constructively with your teams to identify key reporting risks and issues associated with your AMP6 PC data, Section 4 CAT data, other data and AMP7 common PC data. We look forward to continuing to build on the constructive work we have done together as you further strengthen your reporting for AMP7.

As noted above, for some areas you asked us to undertake follow up audits. Figure 2 below sets out the distribution of our assessments across the assurance stages, accounting for any updates to our assessments after follow up audits.

**Figure 2: Distribution of assessments for the process and data stages of our APR20 assurance**



As can be seen from Figure 2 above, at the end of our assurance, we had made 40 assessments across our process (eight) and data (33) audits.

#### Data assessments

Of the 33 data assessments we made, 30 were B 'low to medium risk' and one was A 'low risk'. This indicates we identified no material issues with your proposed data. At the end of our assurance work there remained two assessments of C 'medium to high risk' which indicates we identified material issues. Both of these items, unplanned outage and low pressure, are AMP7 ODIs, and were reviewed in preparation for reporting next year. They do not affect the performance reporting by the Company in 2019/20.

These results account for re-assessments after our follow up audits. Where we initially made assessments of C, our follow up audits focused on the resolution of the material issues we initially identified. Our updated assessments of B mean that we saw evidence that the material issues had been resolved by your teams. For the two remaining Cs you have committed to action for APR21 reporting.

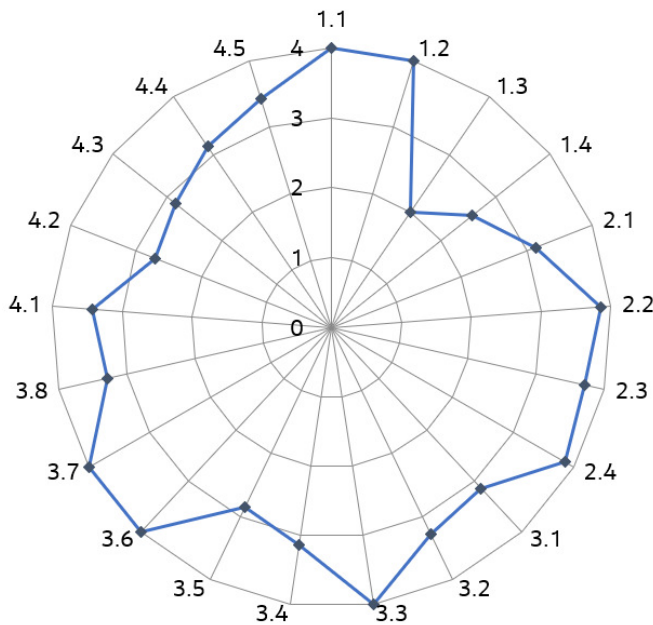
Of the APR shadow common PCs we reviewed leakage, PCC, and PSR were assigned a score of B and unplanned outage was scored C. We did not review the shadow measure for mains repairs or supply interruptions. These shadow measures are similar to the well-established AMP6 measures which both scored B. Mains repairs will be lower than the AMP6 reported mains bursts as this will exclude ferrule repairs.

**Process assessments**

Of the eight areas where you asked us to undertake process audits, we assessed seven as B. This indicates we identified no material issues with your process and there is only a 'low to medium risk' the process will produce data that is not robust in line with requirements. We assessed one process (W-A3 Water quality contacts) as C which indicates there is a 'medium to high risk' the process will produce data that is not robust or in line with requirements. We note the C assessed process relates to the risk of single point failure should your process owner be unavailable.

In Figure 3 below, we show the average scores of each of the 22 assessment points for where we applied our full process assessment framework. This shows where processes have areas in common which could be improved.

**Figure 3: Average score per question (A = 4, B = 3, C = 2, D = 1) across the processes we reviewed**



We identified opportunities to reduce process risks in a number of areas as highlighted by the results. You could, for example:

- 1.3** Implement formal process change control procedures
- 1.4** Produce process documentation with clear version controls and internal review schedules
- 3.5** Ensure methodologies are comprehensive, covering all steps and stages e.g. formalised feedback loops and escalation steps
- 4.2** Ensure teams have a wide-ranging understanding of risks and mitigations associated with the data production
- 4.3** Maintain up to date trigger points that prompt reviews of data outputs and include comprehensive independent internal checks and controls to mitigate risks.

We note the majority of the processes you asked us to review are high profile, established areas e.g. leakage; water balance; and Per Capita Consumption. They are owned and managed by teams that work closely together. Our overall process results in Figure 3 above heavily reflect this particular area of your reporting. We note there may be scope to expand our review of processes to other, more independent reporting areas.

**4.2 Material observations**

We identified a number of material observations (data score of C at initial audit) which should be addressed before data is submitted. We set these out in Table 1 below:

**Table 1: Material data issues we recommended you resolve before submission**

Assurance area	Material issue(s)	Resolution / Status
Unplanned outage	We note the team are basing PWPC on the actual peak 7 day rolling average from the last five years. This will result in a PWPC which is different every year. We do not consider this is the intention of the methodology and we recommend the team review this approach.	Resolved You committed to review your approach for reporting at APR21. We recommend a mid-year review of a revised approach

<b>Low pressure</b>	Your team struggled to evidence data that validates the properties on the 'at risk' list for low pressure e.g. elevation levels. This was explained as a consequence of the previous Low Pressure SME/data owner's retirement after 2018/19 and before 2019/20.	Resolved You committed to recording robust evidence for APR21 reporting.
<b>Wholesale service desk</b>	<p>We identified two issues during our audit:</p> <ul style="list-style-type: none"> <li>• A work order for a meter replacement was not entered in Swim-pool</li> <li>• A de-registration request has been deferred past a date requested by the customer.</li> </ul> <p>There is process documentation for this data but it is out of data and does not include how the Swim-Pool processes integrate with Portsmouth Water processes.</p> <p>We have assigned a C grade due to the small number of errors we found, the need for an updated process document and the need for additional first and second line assurance to be built into the process. We note that one of the two issues found appears to be a consequence of the change in work processes precipitated by COVID-19 and we recommend reviewing these processes as soon as possible.</p>	Resolved The team have reviewed the two issues identified. The deferral would have resulted in 1 additional late OPS tasks for 19/20 financial year, reducing the yearly OPS from 97.76% to 97.56%. This data is not reported in the APR.
<b>Properties</b>	<p>We audited property figures which are to be reported in tables 2F and 4Q. It was not clear what lines the data was to be reported against.</p> <p>The team explained they propose to report figures for household and non-household properties from the RAPID billing database. The team has also prepared the MOSL data for non-households. There are differences between how RAPID and MOSL account for billed properties and the team could not explain these differences.</p>	Resolved The team have clarified the property figures to be reported under each line in 2F and 4Q. The team reviewed their approach and explained the difference in numbers from Rapid and MOSL is due to Rapid numbers including non-household billing records for properties that no longer exist. They have now aligned property reporting to the market definitions of residential and commercial properties to avoid this. Following this the team also undertook a review of residential property records in Rapid and confirmed that they identified 25 residential properties that may be over-stated. This is less than 0.01% of the total number of residential properties and is not material.
<b>AMP6 water balance</b>	At the end of the water balance audit distribution input and bottom up leakage figures had not been audited. The issue related to properties had also not been resolved. Therefore, due to uncertainty over the inputs to the water balance the initial data score was C.	Resolved Bottom up leakage and DI audits were completed and no material issues identified. Property figures were updated following resolution of outstanding issues.
<b>Social Tariff</b>	The team is not yet confident in either the number of customers on the social tariff or the value of the contribution. The audit was based on the RAPID extract but the team explained there were inconsistencies with what they expected the output to be. The team are undertaking further work to review the data. They consider corrections identified last year may not yet have been made in RAPID and this may be contributing to the inconsistency.	Resolved The team confirmed the final figures based on the convergence of two data sources. See further comments in section 4.2 below.

As noted above, we provided detailed feedback to your teams after each stage of our assurance. For where you asked us to undertake follow up audits, we updated and re-issued the same feedback documents and revised our initial scores where appropriate.

### 4.3 Non-material observations

We have a number of non-material observations:

#### Carbon

The team were not clear where to report Green Tariff Electricity in the latest version of the Carbon Accounting Workbook (CAW14). This is significant as you are working towards a net emissions value and Green Tariff Electricity should be included.

#### Social Tariff

Your team demonstrated it had resolved the material data issues we initially identified. We note the resolution of the issues was based on the convergence of two data sources: Rapid reports and manual trackers. However, it is not clear that either source produces robust figures independently. We understand you plan to transition to automated Rapid reporting to report Social Tariff customers and contributions at APR21. There is a risk your automated reporting is not robust.

#### Water quality

During the data audit, your team told us the population figure it was using but did not provide evidence of its source. We asked the team to provide confirmation of the source of the population figure and we provided you a provisional feedback. We have not yet received confirmation of the source of the population figure to finalise our feedback.

We also observed a potential single point of failure risk. Your water quality process is reliant one person and there is only a draft methodology document. We recommend, both for consistency of application and to provide single point of failure mitigation, that the end-to-end process document is completed and reviewed for its suitability by a member of staff independent of the WQ team.

#### Non-material 'pre-submission' actions

For the following areas of our assurance scope, we identified non-material actions that we recommended you complete before submitting your APR. For some of these, you asked us to undertake focused follow up audits with your teams to evidence their completion. Table 2 below sets out areas where non-material actions were identified and whether we have seen evidence your teams have resolved them.

**Table 2: Areas where we identified non-material data issues we recommended you resolve before submission**

Assurance area	Pre-submission action(s) resolved?
Biodiversity Action Plan	Yes
Priority Services Register (PSR)	Yes
C-MeX / SIM Proxy & complaints	Yes
Arrears Assist	Yes
Written Complaints	Yes
AMP6 Leakage – bottom up	Yes
AMP7 Leakage – bottom up	Yes
AMP6 PCC	Yes
AMP7 PCC	Yes
D3 Carbon AMP6	No - see detailed feedback for actions

Carbon AMP7	No - see detailed feedback for actions
Interruptions to supply	Yes
Average Pumping Head - Table 4P	Yes
Water resources, treatment and distribution lines: 1-8, 20-23, 29-57, 71, 95-110	No – see table A3 and detailed feedback for actions
Meter optants and meters renewed	No -- see table A3 and detailed feedback for actions

## 4.4 Other observations

### Leakage AMP6 Methodology

We audited the bottom up leakage calculation and challenged the team to justify the adoption of the new HHNU data for AMP6 reporting. Our concern related to the risk that this could be viewed by Ofwat as a change in methodology which should not be applied until AMP7. The team provided supporting information and we reviewed this in detail including seeking input from the Jacobs Leakage Expert. We are subsequently satisfied that the rebasing of the new data to align with the beginning of AMP6 means it is an acceptable use of the data.

### RoSPA

You have again achieved Gold accreditation from RoSPA. You have been awarded the President's Award after 14 consecutive years of Gold Awards. You have provided evidence of this award following the audit.

### PSR

For 3S.14 (%age customers on the PSR) we reviewed the total number of customers on the PSR. We did not review the calculation of the percentage of customers on the PSR for reporting in table 3S as this is done centrally by the Regulation team.

### Meter renewals

We did not review the split of meters renewed between household and non-household (lines 4Q9 and 4Q10) as the team could only provide the totals. They advised the split is carried out by the Regulation Team.

### Leap Year

We noted that in a number of instances teams were using 365 days instead of 366 days for the leap year. Whilst this will have an immaterial impact on reported figures teams should account for leap years.

### Assurance programme

Our assurance approach is risk and sample based and we agreed a programme with your Regulation Manager based on your understanding of higher risk data in these categories. Through the course of our first year of assurance, we have developed a sound overview of your performance and areas of risk in your reporting. We recommend we work together to identify a programme for future years which allows 'deep dives' into key data on a rotational basis.

### Covid-19 precautions

We undertook the vast majority of our data audits in May 2020. Due to the Covid-19 pandemic, these data audits have taken place remotely using Microsoft Teams video-conferencing. Although this has created some difficulties in reviewing data and accessing corporate systems we have worked closely with your teams to ensure that it has not had an impact on the effectiveness of the overall assurance process. We were able to undertake the limited number of process audits we scheduled in March before restrictions came into effect.

## 4.5 General observations

During our auditing we have identified some common themes which would help reduce reporting risk.

### SME knowledge

We note as you are a smaller water company, more of your data owners have personal knowledge of your areas, customers and issues. This can be seen in the top tier industry performance for customer satisfaction metrics e.g. SIM.

Your staff have become highly knowledgeable in key performance areas and you have a high reliance on these individuals to produce performance data and bring it together in the APR. In many cases there is a single-point of failure risk. Development of process documentation as described below would help mitigate this risk.

### Methodology statements

You have some documentation for some processes and methodologies to derive reported data. However, across all the data you asked us to review there is limited documentation. Your reporting processes often rely on the SME knowledge of your data owners and some of the risks associated with this could be mitigated by the development of process documentation.

We recommend that you work to develop comprehensive methodology statements for all key performance data. We recommend a standard template is developed to record a consistent level of detail. Ideally, a full suite of documents would be available as early in the AMP7 period as possible to ensure consistent reporting throughout the period. However, we recognise that this is no small task and suggest that you create a programme focussing on high risk reporting data first.

### Check and controls

We observed there was a general lack of internal independent 1st and 2nd line assurance. In some instances, the single SME generates the data and checks it themselves. In these cases, the only independent checking is our external third line assurance.

We recommend as part of the development of process documentation you introduce some formalised checks, controls and sign-off. Again, we recommend you focus on high risk data first.

### Records and systems

We note there is a reliance on paper records and locally saved information in a number of cases. Reporting risk would be reduced if records were stored centrally. The lack of evidence for the Low Pressure data is an example of this.

We note some processes include multiple manual steps which present risks of transposition errors and inconsistencies. Automation of some of this would mitigate this risk.

### Confidence grades

We note a number of other water companies we work with have adopted the Ofwat confidence grades for key performance data even when not required as part of the submission. This helps teams to consider the accuracy of data and the confidence they have in it. It also helps target where improvement in accuracy may be needed.

### Line of Sight

We observed for much of the data we reviewed, the population and inclusion of the data into the APR is often managed centrally by the Regulation Manager who has responsibility for the submission process. We also observed that data owners and teams were not always aware of the PR14 PC codes or table and line references, referring at times to historic June Return guidance which has remained relevant for the PR14 reporting. This means that your teams have not always been able to clearly identify where the data we have reviewed will be reported. This presents a reporting risk as data could be incorrectly reported against tables and lines.



The property data is an example of this. The property data is also used in other processes and without clear identification of definitions there is a risk that the wrong data is used.

## 5. Conclusion

Overall, at the end of our assurance work, for the data we covered, and other than where indicated above and in our detailed feedback, we consider:

- data is competently sourced, processed and fit for purpose;
- data collection and reporting has not been impacted by COVID-19;
- teams demonstrated good understanding of the Ofwat guidance;
- for the shadow PCs
  - the teams' Red/Amber/Green compliance assessments appear appropriate;
  - where your teams have identified areas of minor non-compliance, they have developed plans to reach full compliance.

We have been impressed by the open and collaborative approach of your staff and look forward to working with you over the coming years