Bristol Water Mid-Year Performance Report 2019/20

December 2019

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Introduction

About Bristol Water

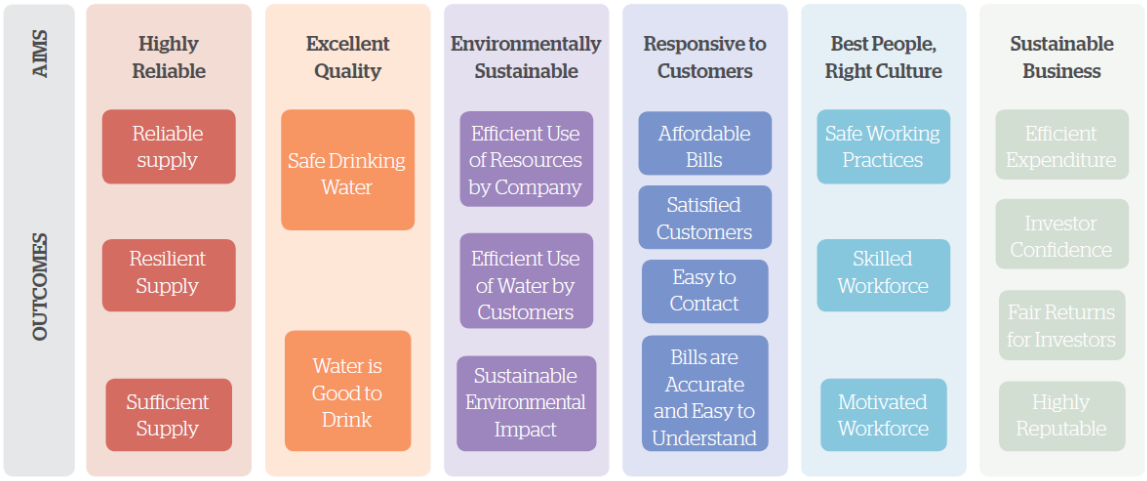
Bristol Water is a water supply company, responsible for the provision of water to 1.2 million customers in the city of Bristol and surrounding area.

We have been providing an essential public water service to the communities within and surrounding the city of Bristol since 1846. We were established by an Act of Parliament as a privately financed water company with a strong social purpose to improve public health by the provision of a clean and affordable supply of water to the whole city (not just the wealthy few).

We are one of 17 companies in England and Wales who distribute water and Bristol Water is one of six that focuses exclusively on water, not waste water. In our supply area, waste water services are provided by Wessex Water.

Our vision is to achieve trust beyond water – providing excellent customer experiences. Our mission is to be a company which our communities trust and are proud of. In doing so, we will deliver excellent experiences and create social and economic value.

In 2014 we published a business plan setting out our priorities for 2015-20. This included a number of key aims and the outcomes that we want to deliver for our customers and stakeholders.



Our PR19 business for 2020-25 sets out a new set of outcomes and stretching targets based around ten customer promises. These will build further on the outcomes that we have delivered in this period and report on in this document. All 2020-25 proposed targets set out in this document are based on our most recent proposals to Ofwat in August 2019, and will be updated to reflect the PR19 final determination due to be published by Ofwat on 16 December 2019 in our 2019/20 year end publication.

In 2019 we published the industry's first social contract. We see our social contract as a framework to help us to continue delivering societal benefits, but also as a way local people can hold us to account for how we deliver our actions. It goes far beyond the basic requirement of competitive markets, regulation, legislation and corporate social responsibility. We have published a separate social contract performance document.

About this Document

This document provides an update on Bristol Water's performance against our aims and outcomes and a forward-looking assessment of whether we are on track to meet the targets we have set ourselves for 2019/20.

It is important that customers can find out how we are performing against our targets. We are committed to providing this information on our website and have embraced a more open and accessible approach to customer communications over the last few years. We regularly publish information on our performance to demonstrate to customers, stakeholders and our regulators that we are delivering the services expected of us. This mid-year report is another example of our commitment to being as open and transparent with our customers and stakeholders as is possible. It is based on the performance commitments that will help us deliver our aims and outcomes. Some of these performance commitments are common to all other water supply companies (in England and Wales) and some are bespoke to Bristol Water. Where comparisons exist, provided through the Discover Water[1] website and in company Annual Performance Reports, we have framed our performance in the context of the rest of the industry. Comparative performance is considered using the latest set of data available (2018/19). It is not possible to consider our comparative performance against 2019/20 data because this data has not been published. Our ranking against these indicators is also included. The key confirms how our RAG rating for the ranking has been determined.

Key - Bristol Water's Ranking	
Lower Quartile	
Average	
Upper Quartile	
Frontier	

In our 2014 Business Plan, we stated we would publish an update on outcome performance every six months (including at a mid-year review) and present this to the Bristol Water Challenge Panel. To ensure the accuracy of the reported data we have had our performance information assured (where applicable) by our third party technical reporter, Atkins.

Transparency is important to us, and together with the Bristol Water's Challenge Panel[2], we constantly try to improve our approach to the presentation of our performance. Our view is that indicating our relative position to other companies using colour-coding helps to provide customers and stakeholders with more context than just whether we are meeting our targets.

Our reporting is based on year-to-date performance to the end of September 2019, and we include a forecast of whether we will meet our 2019/20 targets for the full year. We have provided a short explanation for our performance against each performance commitment. As noted above, where comparisons exist, we framed our performance in the context of the rest of the industry. Many performance commitments will be reported

[1] An online dashboard designed to provide clear and trustworthy information for customers about water companies in England and Wales – www.discoverwater.co.uk

[2] An independent group of representatives who ensure Bristol Water continues to be held to account for delivering our performance commitments and meeting the promises we make to our customers.

on in the next reporting period (from April 2020 to March 2025), although some of the definitions will be revised. The targets stated for 2020 to 2025 have not yet been finalised with Ofwat. They may still be subject to change.

Our performance information can be found at https://www.bristolwater.co.uk/about-us/performance/. Customers can also find further information on our mid-year interactive graphic at https://www.bristolwater.co.uk/about-us/performance/.

Chief Executive Officer's Update

I am pleased to present Bristol Water's mid-year performance for 2019/20; we are committed to being as open and transparent as possible and providing an update on our operational performance during the year. Maintaining the trust of our customers and stakeholders is an important part of everything we do.

I am pleased to report at mid-year that we have succeeded in reducing leakage from our network to a position well below our annual target, which we believe to be industry-leading. This builds on the progress we achieved in 2018/19, which was recognised by the Consumer Council for Water, which named us the industry's best performer in leakage.[3] We did however fall behind the mid-year target with short duration interruptions to supply. We know our customers expect much better service from us and have already reviewed our operational response and emergency practices in order to substantially improve our performance in the second half of the year.

Excellent water quality is fundamental to providing the level of service our customers expect from us and the quality of the water we supply is another success story this year. We have again reduced the number of customers who have felt the need to contact us about the appearance, taste or odour of their water. We will continue to invest in new treatment processes and renovation of water mains and build on the partnership work we have achieved with our catchment stakeholders, to ensure our customers continue to receive the appearance, taste and odour of water that they expect.

We take our social purpose as a local water company very seriously. This year we have continued our support for those customers who find themselves in difficulty with paying their water bills, by offering a range of social tariff assistance. I am pleased that we have accepted a further 2,170 customers onto our social tariffs and by doing so continue to exceed our affordability target by ensuring that none of our customers are in water poverty.

We are also pleased to be joined by our new Network Maintenance Partnership Contractors. This is not just a new contract but a new way of working and a new approach to our maintenance work. Lewis Civil Engineering and TK Gallagher will work with us to deliver positive impact for the communities we serve. Moving forward all planning, scheduling and prioritisation work will be done by our in house team allowing the new contractors to focus on the delivery of the work. This will result in an even more customer focused approach putting people at the heart of our everyday work.

Mel Karam
Chief Executive Officer
December 2019

[3] Consumer Council for Water's Water Water Everywhere? report

Bristol Water Challenge Panel Statement

Bristol Water Challenge Panel is the independent Customer Challenge Group for Bristol Water. One of the Challenge Panel's roles is to monitor, scrutinise, challenge and report on Bristol Water's performance against the 21 commitments set out in the final report of the Competition and Markets Authority dated 6th October 2015 and the Ofwat Price Review 2014 Final Determination of December 2014.

The Challenge Panel places great importance on the need for Bristol Water to provide its customers with clear, high quality information on its service performance, on billing matters and on operational issues.

Here the Challenge Panel reports on its examination of two aspects of the company's mid-year performance. Firstly, it reviewed the mid-year performance and forecasts against its commitments for 2019/20. Secondly it received the company's information assurance regime in place for the year and the mid-year audit findings. The findings of the company's independent technical assurer, Atkins, have reassured the Challenge Panel that the information provided is sufficiently robust to enable us to rely upon the published results. This reassurance addresses both the company's reporting methodologies and the resulting data for all the performance commitments and audit findings.

The Challenge Panel has been reassured also that Bristol Water's 2019/20 Mid-Year Performance Report accurately reflects the company's performance. We note that Bristol Water has again produced an easily readable performance summary, complemented by an interactive presentation found on its website that aids the understanding of this information by customers and stakeholders alike. We are also pleased that the company has for the first time this year introduced an interactive presentation specifically on progress of its social contract initiatives.

The Challenge Panel is pleased that the company is on track to achieve or exceed the targets for thirteen of its commitments, which is a significant improvement compared to its 2017/18 and 2018/19 performance. The reduction in leakage will be particularly welcomed by customers. However, we are disappointed that the company forecasts that it will not meet eight performance commitments. The Challenge Panel continues to challenge Bristol Water to make improvements where it has not met its targets. We will continue to monitor progress and challenge the company to make sure it remains on track.

On behalf of the Bristol Water Challenge Panel.

Mrs Peaches Golding OBE
Independent Chair
December 2019

Technical Assurance Statement

This statement is part of a continuous improvement process that has involved detailed consideration of the methodologies and their applications by which Bristol Water reports on its performance at financial year-end and at the mid-year point. We have been providing this service since 2015.

For the areas we cover and from the information we have been provided with, we conclude that the Company has a full understanding of and has sufficient processes and internal systems of control to meet its reporting obligations and manage its reporting risks.

Our approach to technical assurance is to draw upon our experiences at previous rounds of audit and to plan in detail who should be present, what information will be covered, where and when. We issue a notification, carry out the audit, provide immediate verbal feedback, provide key issue feedback within 24 hours and a formal feedback summary including requests for further information or clarification with a table of issues raised. The issues across all of the audits are gathered into an Issues Log, which is used to manage the resolution of reporting issues before the finalisation of the technical assurance process. This statement reflects the technical assurance position after the iterative process of resolving outstanding issues has concluded.

Bristol Water has 21 Performance Commitments (PCs), ten of which have associated financial penalties and rewards. We note that since the 2016/17 Annual Performance Report (APR), Bristol Water has reached agreement with Ofwat for a corrigenda to the company-specific appendix that accompanied its final determination for AMP6.

As part of our independent assurance of Bristol Water's Mid-Year Performance Report 2019/20, we have been engaged to audit the following performance measures:

- Data and commentary reported relating to Performance Commitments;
- Shadow reporting of leakage, customer supply interruptions, unplanned outage, PCC, mains repairs, risk of severe restrictions in a drought, customer vulnerability;
- Reporting of other metrics (C-Mex, D-Mex and CCWater customer complaints; and
- GSS payments.

In a series of approximately 11 meetings and six remote audits in October and November 2019, we carried out combined methodology and data audits designed to test:

- The Company's internal control systems to produce the submission;
- Whether reporting appears to align with relevant guidance;
- If data has been compiled in accordance with Company methods and procedures; and
- Whether commentary is consistent with our observations on performance levels, trends and the information we were provided with at audit.

Bristol Water met nine of its 21 committed performance levels for 2018/19 and will incur financial penalties on four of the 12 PCs where it has underperformed. However, the

Company's 2019/20 mid-year performance shows that asset reliability, raw water quality of sources, carbon emissions, waste disposal compliance, value for money, ease of contact from surveys and negative billing contacts all show an improvement since APR 2018/19. Notable observations on Bristol Water's 2018/19 mid-year performance are set out below.

- The Performance Commitment (PC) A1: Unplanned customer minutes lost continues to be a challenge for Bristol Water. Although it is forecast to be in the penalty range (14.3), it is still being forecast to improve from the 2018/19 position (14.7). If further large incidents can be avoided for the remainder of the reporting year, it is possible that the Company will be successful in achieving its end-AMP6 target.
- It can be seen from the APR 2019 burst data that Bristol Water continues to remain in the middle of the water industry pack, and the rising trend shown in recent years appears to be have been reversed.
- Based on the mean zonal compliance data to date and the forecast performance, a comparative assessment would suggest the Company will be above that of the mid-performing Company.
- The rate of increase of meter penetration has slowed since last year and the Company recognises that it will not meet the target for 2019/20.
- We reviewed the readiness of Bristol Water and Pelican for reporting C-Mex in AMP7 and found that there are a number of challenges, such as reporting repeat contacts and the 24 hour rule, to overcome in interpreting the guidance and bedding in new systems and processes. We note that these challenges are currently being experienced across the industry.
- For leakage we confirmed that the process used remains appropriate for the reporting of both 'legacy' AMP6 ODI and actual reporting, plus the requirements of the AMP7 common metric 'shadow' reporting. We note that, although we did not encounter any errors at audit, the common metric method in particular relies on a large number of manual, spreadsheet-based processes, which are not covered by a written procedure, and therefore currently represents a relatively high risk process.
- For PCC Bristol Water has not reported mid-year results using the Annual Return method. This is consistent with the approach the Company undertook as part of last year's mid-year reporting, and is understandable because the cul-de-sac monitoring approach that is used requires that measured customer data in the cul-de-sac is representative of the year overall, and the data set will be biased towards summer demand at the half year point. The PCCs that have been reported are based on a 'top down' estimate derived from Distribution input, and we do not therefore have any updates to our 2018/19 Annual Return report. We note that Bristol Water is currently acting on the key recommendation from that audit with regards to the representativeness of the household monitor sample, which relates to both PCC and the household night use element of leakage reporting. We understand that the review part of the project should be complete in time for the 2019/20 Annual Return audit.

During the assurance activities, we have had free access to the Director of Strategy and Regulation and his team and the full cooperation of the people responsible for preparing and reporting the 2019/20 Mid-Year Performance Report and the supporting information.

We are pleased to provide assurance that, overall, we consider the information published by Bristol Water has been compiled using information which is accurate, reliable and complete. We have traced selected information to data sources and information systems. We consider the published metrics and commentary provide a fair and reasonable account of Bristol Water's mid-year performance in 2019/20 and progress towards achieving its 2020 targets.

While we observed a number of issues for which we provide comment within our main report, we believe these do not impact materially upon the potential to sign-off the Company submission. Each is an area we believe should be given further consideration as part of continuing improvement to performance reporting by Bristol Water.

Jonathan P Archer
Regulation Director
Reporter providing Technical Assurance Services to Bristol Water

Mid-Year Performance 2019/ 20

Mid-Year Performance Summary

Metric				Bristol Water Historical Performance					2018/19 Industry Performance				2019/20 Bristol Water Performance		
Aim	Outcome	Performance Commitment	Unit	2015/16	2016/17	2017/18	2018/19	Trend	Lower Quartile	Average	Upper Quartile	Our Position	Mid-year	End-year Target	On Track?
Highly Reliable	Reliable Supply	Unplanned customer minutes lost	Mins/ prop/ year	15.5	13.1	73.7	14.7		15.5	11.9	8.1	Behind others	7.6	12.2	
		Asset Reliability - Infrastructure	Text	Stable	Stable	Marginal	Marginal						Stable	Stable	
		Asset Reliability - Infrastructure (Bursts)	No. of bursts (per 1,000km of mains for comparison)	764 (124)	1,034 (153)	1,222 (179)	1,074 (157)		161	155	130	Average	320	950	
		Asset Reliability – Infrastructure (Low Pressure)	No. of properties (per 10,000 connections for comparison)	71 (1.3)	94 (1.8)	65 (1.2)	61 (1.1)		1.9	1.5	0.5	Average	58	69	
		Asset Reliability – Non-Infrastructure	Text	Stable	Stable	Stable	Stable						Stable	Stable	
		Asset Reliability – Non-Infrastructure (Turbidity)	No. of failures	0	0	0	0						0	0	
		Asset Reliability – Non-Infrastructure (Unplanned Maintenance)	No. of jobs	3,353	2,870	3,279	2,913						1,687	3,976	
	Resilient Supply	Population in Centres >25,000 at Risk of Asset Failure	No. of people	288,589	288,589	9,063	9,063						9,063	9,063	
	Sufficient Supply	Security of Supply Index	%	100	100	100	100		100	99.97	100	Leading	NA	100	
		Hosepipe Ban Frequency	No. of days	1.5	3.1	3.1	3.1						NA	10.2	

On target and a financial outperformance payment is likely to be due

Target met

Potential for year-end target to be missed

Target not met, which has incurred a financial penalty (which will result in lower customer bills)

No data available

Metric				Bristol Water Historical Performance					2018/19 Industry Performance				2019/20 Bristol Water Performance		
Aim	Outcome	Performance Commitment	Unit	2015/16	2016/17	2017/18	2018/19	Trend	Lower Quartile	Average	Upper Quartile	Our Position	Mid-year	End-year Target	On Track?
Excellent Quality	Safe drinking water	Mean Zonal Compliance	%	99.93	99.97	99.93	99.99		99.95	99.96	99.98	Leading	99.97	100	
	Water is good to drink	Negative Water Quality	No. of contacts (per 1,000 people for comparison)	2,329 (1.8)	2,162 (1.7)	1,711 (1.5)	1,934 (1.6)		1.7	1.5	0.8	Behind others	1,324	2,221	
Environmentally Sustainable	Efficient use of resources by company	Actual Leakage	Ml/d (Litres / property/ day for comparison)	44.2 (84)	46.4 (87.5)	46.6 (87)	41.7 (77.1)		120.5	107.7	87.1	Leading	34.4	43.0	
	Efficient use of water by customers	Meter Penetration	%	47.3	49.3	52.7	56.0		44.1	55.8	64.7	Average	57.5	65.9	
		Actual Per Capita Consumption	Litres/ head/ day	141.1	143.5	146.3	150.7		153.6	146.6	140.3	Behind others	163.1	142.0	
	Sustainable environmental impact	Total Carbon Emissions	KgCO2e/ person	35	32	28	23						10	20	
		Raw Water Quality of Sources	% of AMP5 baseline aggregate of algal bloom	+20	+11	-1	-14						-23	+/-<+10% for >2 years	
		Biodiversity Index (BI)	No. of BI points	17,649	17,650	17,657	17,668						17,668	17,653	
		Waste Disposal Compliance	%	96	96	98	98						98	100	
Responsive to customers	Affordable bills	Percentage of Customers in Water Poverty	%	0.4	0.9	0.0	0.0						NA	1.8	
	Satisfied customers	SIM	SIM score	85.1	85.9	83.4	84.7		81.3	84.4	87.4	Average	NA	87.6	
		General Satisfaction from Surveys	%	83	86	87	89						NA	>93	
		Value for Money	%	70	72	69	68						76	72	
	Easy to contact	Ease of Contact from Surveys	%	95.0	94.4	93.1	91.4						91.6	>96.5	
	Bills are accurate and easy to	Negative Billing Contacts	No. of contacts	2,301	3,096	2,300	1,595						705	2,170	

Unplanned Customer Minutes Lost

The aim of this performance commitment is to minimise supply interruptions.

Keeping water flowing is an essential part of our role as a water company; we know from talking to our customers that they value avoiding interruptions, particularly when they last a long time and are unexpected. This performance commitment is measured as the total number of minutes that customers have been without a supply of water in the year, through unplanned interruptions, divided by the total number of properties served by the company in the year.

Our performance in previous years has been impacted by a number of exceptional events, such as the 'Beast from the East' freeze/ thaw event in March 2018 and then the hot, dry summer of that same year. However despite these weather-related events, we are improving the speed of our response to supply interruptions, and investing in our network monitoring and operational response in order to reduce supply interruptions further.

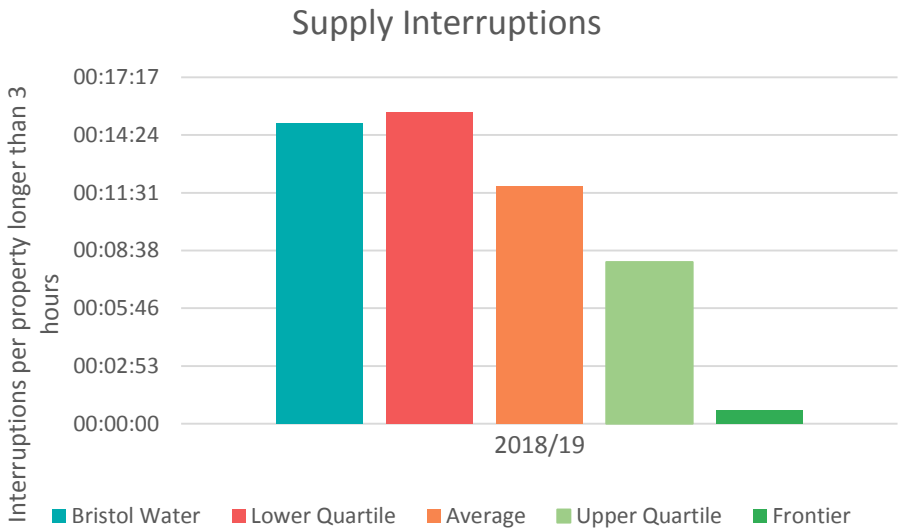
The mid-year reported figure of 7.6 minutes includes a contribution of 1.6 minutes for a single incident on the Royate Hill Trunk main in July 2019. Throughout 2019 we have instigated a new strategy, designed to focus responses to supply interruptions on keeping customers in supply instead of our old approach, which was to prioritise the repair of the faults that lead to the supply interruptions. As part of this strategy, new techniques and equipment have been successfully deployed on a number of unplanned events, avoiding interruptions to supply, including direct infusion through tankers, as well as the temporary deployment of "Arlington" tanks which subsequently pumped water directly to a number of customers. Further plans are being put in place to extend the use of this equipment, train staff and develop processes and introduce a process of change to ensure that these activities become business as usual from 2020/21.

Mins/customer/year	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	13.4	13.1	12.8	12.5		12.2
Performance	15.5	13.1	73.7	14.7	7.6	TBC
CPL met?	No	Yes	No	No		No (forecast)
Outperformance Payment/ Underperformance Penalty £m	-0.7389	0	-0.7389	-0.7389		TBC

In order to calculate any reward or penalty the ODI performance is compared against the target performance. If the performance falls within the reward or penalty-zone then we multiply the resulting difference by the incentive rate. For average minutes lost, the incentive reward rate is £0.5097m and the penalty is £0.7389m per minute lost per property per year.

Although this metric considers all unplanned interruptions (of any length of time), most companies report on supply interruptions as any interruptions (either planned or unplanned) greater than three hours. The results are below.

Supply interruptions >3hours per total properties served	Bristol Water	Bristol Water's Rank	Lower Quartile	Average	Upper Quartile	Frontier
2018/19 Actual (Mins/ customer/ year)	15.02	14/19	15.53	11.87	8.07	0.67
2018/19 Actual (hours: mins: secs)	00:15:01		000:15:32	00:11:52	00:08:04	00:00:40



Customers can compare our performance on supply interruptions against other companies in the industry at **https://discoverwater.co.uk/loss-ofsupply.**

Looking ahead to 2020, we will be amending how we report on customer supply interruptions to align with the rest of the industry, so that our customers will be able to compare our performance against other companies' performance. This new standard measure will report on interruptions (both planned and unplanned) that last for 3 hours or more. We are currently exploring alternative supply technology and early warning ('Smart Network') alerts to reduce the average number of minutes our customers are without supply of their water, ahead of reporting on this revised measure. Based on our mid-year performance to date, we anticipate that we will come under the 2019/20 final year position of 12 minutes and 12 seconds. Our proposed targets are below; our targets would reflect a 75% reduction in supply interruptions over the five-year period compared to the starting position at 12 minutes and 12 seconds of interruptions.

Supply interruptions >3hours per total properties served	2020/21 Target	2021/22 Target	2022/23 Target	2023/24 Target	2024/25 Target
Performance Commitment (hours:mins:seconds)	00:05:34	00:04:48	00:04:12	00:03:36	00:03:00

Asset Reliability – Infrastructure

This measure is broadly based on Ofwat's historic serviceability assessment; it relates to the total number of bursts in each year and the number of properties assessed to be at risk of low pressure.

Our performance against these two sub-indicators is used to assess our capability of delivering our customers' expected level of service both now and in the future.

Ensuring that we maintain a reliable supply of water is a key company outcome. We are aiming to achieve this at the same time as having to meet the increased water demand of a growing population and the risks associated with an ageing infrastructure and assets. We anticipate that the measure will revert back to a stable level in 2019/20 based on our performance against the two sub-indicators.

Asset health assessment	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	stable	stable	stable	stable		stable
Performance	stable	stable	marginal	marginal	stable	TBC
CPL met?	Yes	Yes	No	No		Yes (forecast)
Underperformance penalty £m	0	0	0	-0.6850		TBC

In order to calculate any penalty, the ODI performance is compared against the target performance. If the performance falls within the penalty-zone (a marginal assessment

i.e. an assessment that is worse than a stable assessment) for a second year then we apply the incentive rate of £0.685m. If the performance falls within the penalty-collar-zone (a deteriorating assessment i.e. an assessment that is worse than a stable or marginal assessment) then we apply the incentive rate of £2.1054m. The ODI penalty for this measure will be taken as a Regulatory Capital Value (RCV) adjustment, which will have an impact on our customers' bills but over a longer period of time compared to revenue adjustments. This form of penalty is appropriate because this performance commitment relates to the long-term health of our assets, which reflects investment over a significant amount of time.

Asset Reliability – Infrastructure – Bursts

This is the total number of burst pipes recorded in the year.

A burst pipe is the most common cause of loss of water supply and is an indicator of the health of our pipes, so, as a minimum, we aim to keep the number of bursts stable over a long period of time. The improvement that we forecast primarily reflects the benefit from our activities to reduce leakage and supply interruptions.

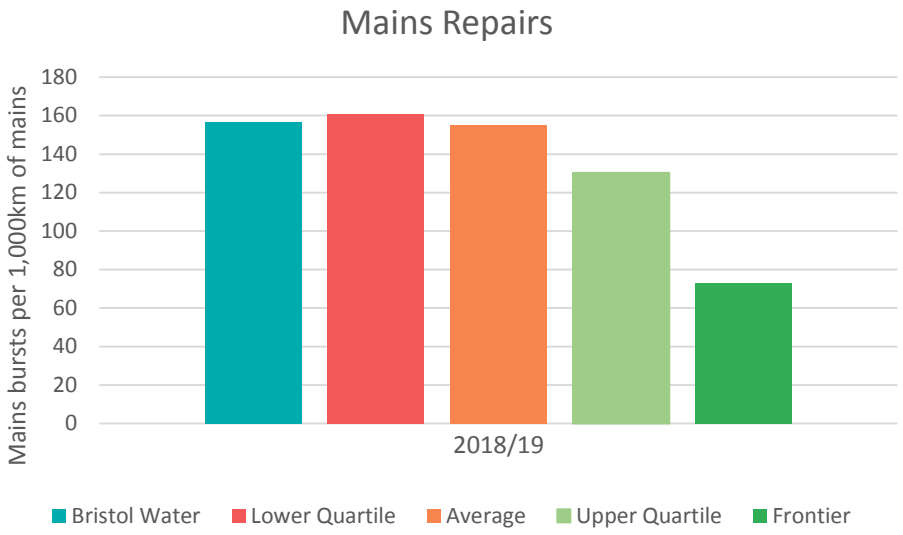
Our performance in this area is partly impacted due to the historic age of our network assets, which are the oldest in Europe on average. We currently plan to renovate 100km of mains in the next reporting period, averaging 20km per year in order to offset further deterioration levels.

Bristol Water has historically reduced bursts using a bespoke predictive burst model. Over the last year we have sought to improve this predictive modelling capability and will continue to make significant improvements into 2020/21. This takes the form of introducing far more sophisticated models which use many more environmental and asset related factors. As a result of the work already undertaken to date, we are confident that we will reduce the number of bursts below the 2019/20 reference level.

No. of bursts	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Upper Control Limit	1,166	1,166	1,166	1,166		1,166
Reference Level	950	950	950	950		950
Lower Control Limit	734	734	734	734		734
Performance	764	1,034	1,222	1,074	320	TBC

Comparative information is available for this metric, normalised as the number of burst pipes for every 1,000km of water main. The results are below.

Mains bursts per 1000km mains	Bristol Water	Bristol Water's Rank	Lower Quartile	Average	Upper Quartile	Frontier
2018/19 Actual	157	13/18	161	155	130	73



Customers can compare our performance on bursts against other companies in the industry at **https://discoverwater.co.uk/loss-of-supply.**

Looking ahead to 2020, we will be amending how we report on mains bursts, to align with the rest of the industry, so that our customers will be able to compare our performance against other companies' performance. Instead of reporting on the total number of bursts, this new standard measure will report on water mains bursts per 1,000km of pipe. Our proposed targets are below.

Mains bursts per 1000km mains	2020/21 Target	2021/22 Target	2022/23 Target	2023/24 Target	2024/25 Target
Performance Commitment	133	133	133	133	133

Asset Reliability – Infrastructure – Low Pressure

Water pressure determines the water flow from customer taps.

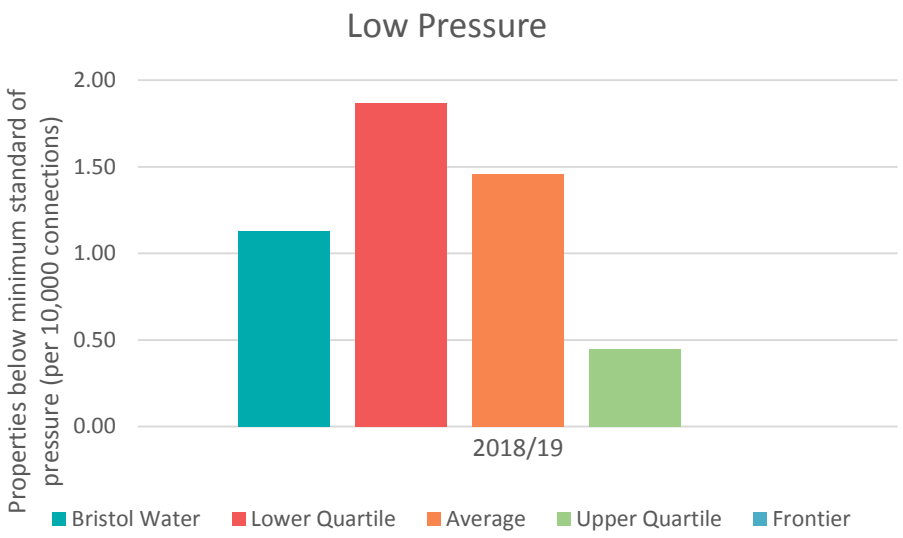
This is measured as the total number of properties in our area of water supply which, at the end of the year, have received, and are likely to continue to receive, a pressure or flow below the reference level. Our standard of service for mains water pressure is ten metres head (or 1 bar) at the property boundary of a home or business. This normally means that in a customer's home or business, water pressure should be strong enough to fill a 4.5 litre (one gallon) container in 30 seconds from a ground floor tap. This is the minimum level of pressure we expect each house or business to receive, although pressure can be higher. It is unlikely that customers will experience water pressure below the minimum standard and we have successfully maintained the number of properties on our Low Pressure register safely below our penalty threshold, with an approved remedial works program to drive this number even lower by the end of the year.

Identifying new properties at risk can arise as a consequence of our proactive monitoring of our network or as a consequence of poor pressure complaints raised by customers. Three properties in Radstock have been removed from our low pressure register in the last six months; these properties now receive a sufficient level of water as they have now been removed from a shared supply pipe that was originally being used to supply ten separate properties. We are proud to report that since 2016/17 we have continued to reduce the total number of properties on the low pressure register. As a result of our improvements we have reduced the number of properties at risk by 38% since 2016/17 and by 18% throughout this reporting period to date.

No. of properties at risk	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Upper Control Limit	129	129	129	129		129
Reference Level	69	69	69	69		69
Lower Control Limit	9	9	9	9		9
Performance	71	94	65	61	58	TBC

Comparative information is available for this metric, normalised as the number of properties below minimum standard of pressure per 10,000 connections. The results are below.

Properties below reference level pressure per 10,000 connections	Bristol Water	Bristol Water's Rank	Lower Quartile	Average	Upper Quartile	Frontier
2018/19 Actual	1.13	11/19	1.86	1.46	0.45	0.0



Customers can compare our performance on low water pressure against other companies in the industry at **https://discoverwater.co.uk/waterpressure**.

We will continue to report on this performance commitment in the next reporting period. Our proposed targets are below, as we plan to continue to reduce properties at risk of low pressure and are currently making good progress compared to these future targets.

No. of properties at risk	2020/21 Target	2021/22 Target	2022/23 Target	2023/24 Target	2024/25 Target
Performance Commitment	65	61	57	53	49

Asset Reliability – Non-Infrastructure

To ensure we provide a reliable, clean and wholesome supply of water we must ensure that our assets are performing well and available when required.

This measure is broadly based on Ofwat's historic serviceability assessment; it relates to unplanned maintenance events and turbidity at our water treatment works. Our performance against these two sub-indicators is used to assess our capability of delivering an expected level of service and expected level of water quality to customers and the environment, both now and in the future.

At Bristol Water we effectively manage and maintain our assets to achieve high levels of asset reliability. Water quality is at the heart of our monitoring and maintenance to ensure high standards are maintained. We effectively use maintenance strategies and risk tools to ensure plant is available and unplanned events are kept to a minimum.

The measure has been consistently stable throughout the reporting period. It is anticipated that the measure will continue to be stable for the remainder of the reporting period based on our performance to date against the two sub-indicators.

Asset health assessment	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	stable	stable	stable	stable		stable
Performance	stable	stable	stable	stable	stable	TBC
CPL met?	Yes	Yes	Yes	Yes		Yes (forecast)
Underperformance penalty £m	0	0	0	0		TBC

Although no penalties are forecast for this performance commitment, in order to calculate any penalty, the ODI performance is compared against the target performance. If the performance falls within the penalty-zone (a marginal assessment i.e. an assessment that is worse than a stable assessment) for a second year then we apply the incentive rate of £0.706m. If the performance falls within the penalty-collar-zone (a deteriorating assessment i.e. an assessment that is worse than a stable or marginal assessment) then we apply the incentive rate of £2.119m. The ODI penalty would be taken as a Regulatory Capital Value (RCV) adjustment, which would have an impact on our customers' bills but over a longer period of time compared to revenue adjustments.

Asset Reliability – Non-Infrastructure – Turbidity at Water Treatment Works

Turbidity is a measure of the cloudiness of water, normally caused by suspended minerals. It is an important water quality control parameter at our water treatment works.

Factors such as turbidity affect the effectiveness of disinfection. This metric enables us to consider the following:

- The use of turbidity as a measure to provide assurance of the optimal operation of filter performance, where filtration is used to address identified risks associated with chlorine resistant pathogens in the source water;
- The impact of turbidity on the efficiency of disinfection processes;
- The effect that turbidity has on the aesthetics of the treated water.

We have a long track record of achieving zero turbidity events (and this is the case for all reporting years in AMP), and we are forecasting to again be successful in ensuring consistently good treated water enters our supply system.

Turbidity failures	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Upper Control Limit	1	1	1	1		1
Reference Level	0	0	0	0		0
Lower Control Limit	0	0	0	0		0
Performance	0	0	0	0	0	TBC

Our future plans are designed to maintain our high level of performance on this metric. We will continue to report on turbidity performance in the next reporting period. Our proposed targets are below.

Turbidity failures	2020/21 Target	2021/22 Target	2022/23 Target	2023/24 Target	2024/25 Target
Performance Commitment	0	0	0	0	0

Asset Reliability – Non-Infrastructure – Unplanned Maintenance Events

This metric records the total number of unplanned maintenance events occurring throughout the year, as a result of equipment failure or reduced asset performance.

It typically relates to jobs identified at our treatment works, pumping stations and service reservoirs.

Unplanned events mean potential interruptions to the treatment and supply of clean and wholesome water. The more we can reduce the occurrence of unplanned events on our treatment works the more reliable the supply of water; a lower number in this sub indicator identifies reduced asset downtime and increased reliability for our customers.

We have a long track record of achieving outperformance on this measure and we are again forecasting to outperform against our target, which is an encouraging indicator of the long-term health of our above-ground assets.

We use the information from the work orders to better understand our assets and help to implement appropriate measures to ensure reliability. Effective maintenance and management of assets using such information allows us to run our plant in a resilient manner that will consistently produce high quality water.

No. of maintenance jobs	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Upper Control Limit	5,083	5,083	5,083	5,083		5,083
Reference Level	3,976	3,976	3,976	3,976		3,976
Lower Control Limit	2,869	2,869	2,869	2,869		2,869
Performance	3,352	2,870	3,279	2,913	1,687	TBC

The number of unplanned maintenance activities remains low which indicates that they remain fit for purpose. Work is prioritised on the most strategically important assets, without this creating a backlog of more minor works that reduces the effectiveness of our operations or risk to customers.

We will continue to report on this performance commitment in the next reporting period and our proposed targets are below.

No. of maintenance jobs	2020/21 Target	2021/22 Target	2022/23 Target	2023/24 Target	2024/25 Target
Performance Commitment	3,272	3,272	3,272	3,272	3,272

Population in Centres Greater than 25,000 at Risk from Asset Failure

We aim to provide a resilient supply of water to our customers, all year round.

A resilient supply means that we are able to cope with extreme or unusual events, and this is measured by the number of people (in supply areas of more than 25,000 consumers) at risk from the failure of a single source above ground asset, such as a treatment works.

The £27 million Southern Resilience Scheme comprises 30km of large diameter mains and a new pumping station. It provides the capability to transfer water between three of Bristol Water's larger treatment works ensuring enhanced security of supply should any one of them be out of service for an extended period of time. Put simply, it means if there is an emergency we can get customers' water back into supply more quickly.

Completion of this scheme in March 2018 has provided improved security of supply to over 280,000 customers and has already been utilised to ensure continued supply to customers in the Weston Super Mare and Cheddar areas. An additional benefit to our customers is enhanced security of supply by having the ability to conserve resources such as Chew Valley Lake and Blagdon Lakes during extended hot, dry periods such as were experienced this summer, by supplying water from other sources.

The scheme will also help us meet the increase in demand for water over the coming years. Weston-Super-Mare is one of Europe's fastest growing towns, and we need to supply all of the new residents and businesses coming to the area.

Population at risk	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	288,589	288,589	9,063	9,063		9,063
Performance	288,589	288,589	9,063	9,063	9,063	TBC
CPL met?	Yes	Yes	Yes	Yes		Yes (forecast)
Outperformance Payment/ Underperformance penalty £m	0	0	0	0		TBC

As we delivered the Southern Resilience Scheme by the required deadline, no incentive payment is due. We have also decided that no data audit was therefore required as part of the mid-year review.

From April 2020 we will be reporting on a new resilience performance commitment. Our current measure removes people in population in centres greater 25,000 from being at risk from above ground asset failure related to a single source of supply – the 9,063 people remaining under our current metric are located in the Glastonbury Street area.

Our proposed revised measure will incentivise the company to reduce the risk of asset failures affecting the water supply of customers in areas with a population greater than 10,000 and protects customers should the company not deliver specific defined resilience outputs that provide this enhanced protection. It will improve the reliability of the water supply provided to customers (including the resilience of the water supply in the Glastonbury Street area by providing a secondary source of supply). It would be measured by the expected number of months delay to deliver any of the 40 proposed investment schemes intended to deliver the improvements, by 31 March 2025. Our proposed targets are below.

Months' delay to schemes	2020/21 Target	2021/22 Target	2022/23 Target	2023/24 Target	2024/25 Target
Performance Commitment	0	0	0	0	0

Security of Supply Index (SOSI)

One of our customers' most important requirements is an unrestricted water supply. Our performance of this is measured by an assessment of the percentage of population served at risk of experiencing water shortages, measured using the 'security of supply index' (SOSI).

This takes into account the supply of water that we have available and the demand from our customers, calculated as the proportion of customers at risk of experiencing water shortages during dry weather under our stated customer levels of service for demand restrictions. If a score of less than 100 is calculated, this would indicate that there could have been a higher risk of water use restrictions for our customers that year.

The index takes into account that there may be restrictions on water use at certain points in time during dry years (as set out in our levels of service). As a result it is possible to have a 100% security of supply index at the same time as requiring water restrictions, such as hosepipe bans.

As this measure is based on annual calculations a data audit was not included as part of the mid-year review. We are however confident about our forecast for the end of this reporting year; we have reported a SOSI value of 100 for every year to date in this reporting period, indicating a sufficient supply under our current level of service for drought restrictions. This is due to our effective operational management in response to dry weather conditions.

SOSI Index	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	100	100	100	100		100
Performance	100	100	100	100		TBC
CPL met?	Yes	Yes	Yes	Yes		Yes (forecast)

There is no financial incentive related to our performance against this commitment.

Hosepipe Ban Frequency

This measures the likelihood in any one year that temporary usage restrictions, such as on the use of hosepipes, will be implemented. It is reported as the number of expected days of restriction in the year.

The commitment is based on the assumption that a restriction would last for five months (153 days), and that we have a one-in-fifteen year probability of an interruption: 153 / 15 = 10.2 expected days.

If a Temporary Usage Ban were to be introduced, our customers would be restricted from undertaking a number of activities using a hosepipe, such as watering their garden, or cleaning their cars. In order to prevent such events, we monitor the water resource situation throughout the year and across our operating area as part of our day to day operations. This monitoring enables us to identify when a drought is developing and ensures steps can be taken early to help reduce the demand for water, and secure water supplies. We use drought indicators to identify when a drought is starting and if actions should be implemented. We monitor rainfall, reservoir storage, groundwater levels, river flow and other indicators such as demand for water to identify when we need to take action.

As this measure is based on annual calculations a mid-year position is not reported. However, we are forecasting that for the fifth consecutive year, we will be able to report that our hosepipe ban risk frequency is better than our target. In fact by the end of this reporting year it will have been 30 years since we last introduced a hosepipe ban (in 1990).

No. of days	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	10.2	10.2	10.2	10.2		10.2
Performance	1.5	3.1	3.1	3.1		TBC
CPL met?	Yes	Yes	Yes	Yes		Yes (forecast)
Underperformance penalty £m	0	0	0	0		TBC

A penalty of £0.043m would be incurred per day at risk of restriction over the 10.2 day target. Although no penalty has accrued or has been forecast, any ODI penalty would be taken as a revenue adjustment, which would have an impact on our customers' bills (by lowering them) in 2020-25.

Further information on implementing temporary use bans (including hosepipe bans) and the risk of a drought, can be found on our website at **https://www.bristolwater.co.uk/about-us/planning-for-drought/.**

We will not be reporting on either hosepipe ban frequency or SOSI as performance commitments from 2020, although we will continue to monitor our performance. We will instead be reporting on a new industry measure of performance known as 'Risk of severe Restrictions in a Drought'. This will measure the 25 year average percentage of the population we serve that would experience severe supply restrictions (for example,

standpipes or rota cuts) in a 1 in 200 year drought. Its purpose is to take into account the supply of water that the company has available in a 1 in 200 year drought event and the likely demand from our customers (taking account of temporary water use restrictions in such a drought event). Bristol Water has worked for many years to create a water supply system that is resilient to drought, water pollution and other operational issues. Works undertaken include reinforcement and interconnection within the company's potable mains network, flood protection, and improved water treatment systems. By monitoring performance in this way, we are able to minimise the risk of long-term impacts on water availability for our customers. Our proposed targets are below.

% population at risk of drought restrictions	2020/21 Target	2021/22 Target	2022/23 Target	2023/24 Target	2024/25 Target
Performance Commitment	38.0	29.8	29.8	29.8	25.6

Mean Zonal Compliance (MZC)

Drinking water must meet strict standards that ensure it is safe to drink and the quality is acceptable to consumers.

The MZC performance commitment is a water quality compliance measure based on a series of 39 parameters (e.g. levels of lead, nitrate levels etc.) determined by the Drinking Water Inspectorate, commonly referred to as the DWI. It is calculated based on sampling each parameter at supply points and customer taps in a number of specified zones.

Our water quality team collects samples 365 days a year from across our 2,400 square kilometre supply area to ensure we comply with the sampling regime, with no exemptions applicable for example for weather conditions. The sampling schedule is aligned to a sophisticated computer-controlled programme so that water quality is checked right from source to customers' taps. We will not meet our target of 100% compliance, but the compliance failures have resulted from property-specific issues. Our performance still represents a high level of compliance, which reflects the high quality of water supplied to our customers.

As this measure is reported to the DWI it is measured on calendar year, rather than a financial year basis, in line with the DWI reporting timetable. Regulatory failures for MZC parameters such as lead, taste and odour are often attributed to the customer's domestic plumbing system and therefore are out of the control of the company. These are the reasons behind are performance to date in 2019; we have very little influence over these results.

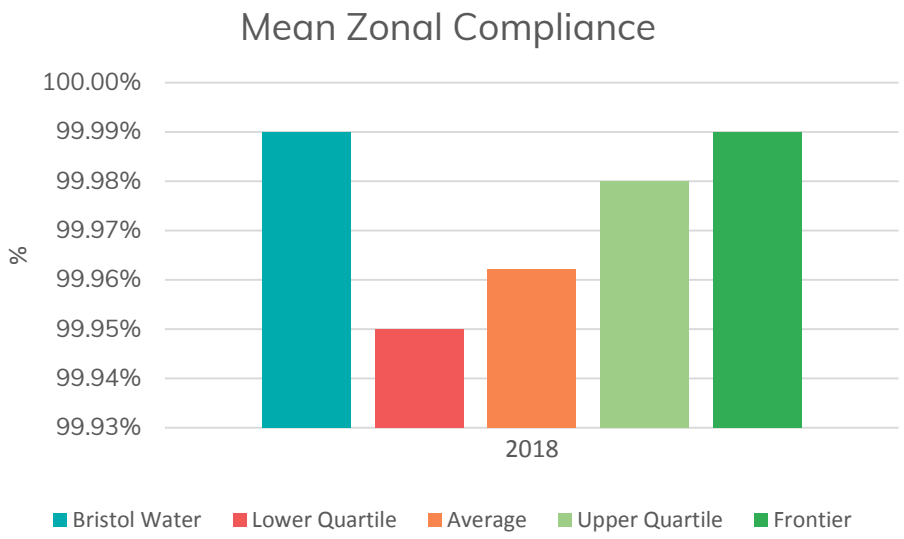
% MZC	2015	2016	2017	2018	2019 Mid-Year	2019
Committed Performance Level ("CPL")	99.96	99.96	100	100		100
Performance	99.93	99.97	99.93	99.99	99.97	TBC
CPL met?	No	Yes	No	No		No (forecast)

Underperformance penalty £m	-0.284	0	-0.284	0		TBC

There is no outperformance payment available to us for this performance commitment as companies are expected to comply with their legal drinking water quality obligations at all times. In order to calculate any penalty the ODI performance is compared against the target performance. If the MZC score falls within the penalty-zone then the incentive is calculated based on a penalty rate of £0.284m for 0.01. The ODI penalty, currently totalling £0.568m, will be taken as a revenue adjustment, which will be deducted from customers' bills during 2020-25.

As MZC is a performance commitment that all companies in the sector must report on, we have been able to analyse our comparative performance for the latest set of data available (2018/19). The results are below.

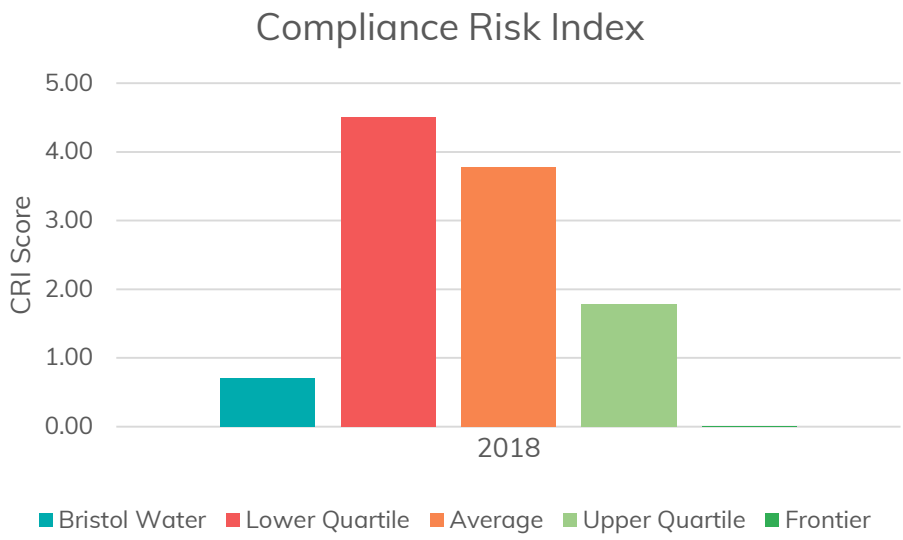
% MZC	Bristol Water	Bristol Water's Rank	Lower Quartile	Average	Upper Quartile	Frontier
2018 Actual	99.99	=1/19	99.95	99.96	99.98	99.99



Looking ahead to 2020, the DWI is replacing Mean Zonal Compliance as the preferred measure of water quality with the Compliance Risk Index (CRI). The CRI has been introduced by the DWI to provide a numerical value that reflects the risk arising from treated water compliance failures. It does this be assigning a value to the significance of the failing parameters, the proportion of consumers potentially affected and an assessment of the company's response to the failure. Zero represents an ideal score (where risk has been eliminated).

During 2017 we had our best ever CRI score of 0.03. This is one of the best water quality performance levels in the industry; we have a track record of achieving frontier or upper quartile performance since CRI calculation commenced in 2015. In 2018 we achieved a CRI of 0.7. The full results for CRI, in comparison to the rest of the sector, are below.

CRI Index	Bristol Water	Bristol Water's Rank	Lower Quartile	Average	Upper Quartile	Frontier
2018 Actual	0.70	3/17	4.50	3.78	1.78	0.01



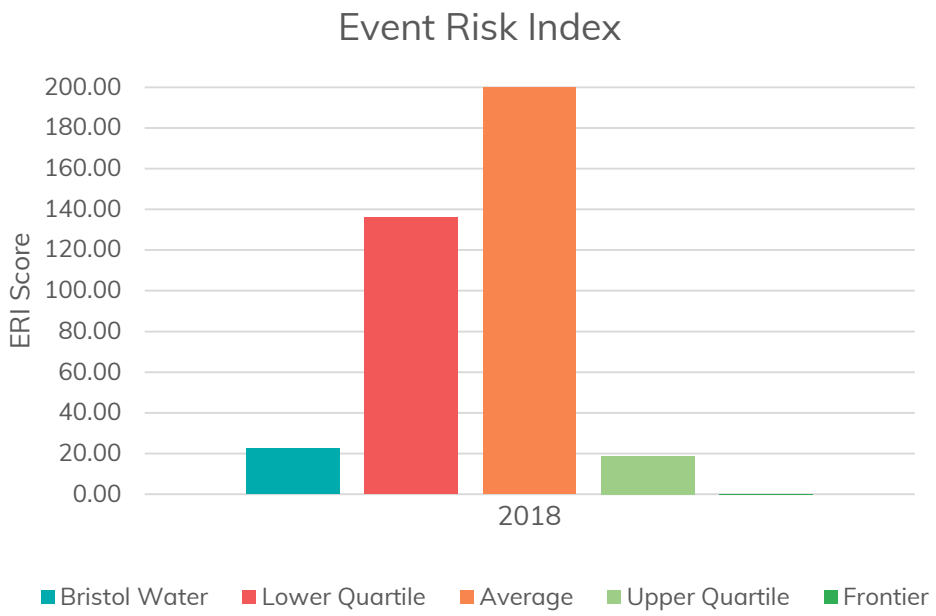
For 2019 we are forecasting a CRI of 1.5, which takes into account that events may happen in the remainder of the year. Our forecast CRI is higher than in previous years due to a number of reasons. We have had two turbidity failures from treatment works this year (one due to disturbance of sediment in the outlet main from Barrow, and the second due to disturbance in a sample line). These two failures unfortunately attract a high multiplier as they are two of our largest output works so the reported CRI failure is multiplied against this. We have also had the same number of iron compliance failures as last year (which get multiplied against the population of the zone), and also had a coliform failure from a customer's property. As we did not feel we had compelling enough evidence to demonstrate categorically that this failure was property specific, we therefore also expect this to be multiplied against the zone population.

Our targets for CRI in the next reporting period will be to achieve full compliance (0 CRI points), repeating the level of our performance we achieved in 2017. Our targets are below for completeness.

CRI Index	2020 Target	2021 Target	2022 Target	2023 Target	2024 Target
Performance Commitment	0	0	0	0	0

The DWI has also introduced the Event Risk Index (ERI), which has been designed to illustrate the risk arising from drinking water quality events. Put simply, while CRI indicates the risk that a water quality event will occur, the ERI indicates the potential consequences of such an event when it does occur. Like the CRI, zero represents an ideal score (where risk has been eliminated). Unlike CRI we have not adopted the ERI as a performance commitment in 2020 but we will monitor and report on our performance to the DWI. The results for ERI in 2018 are below.

ERI Index	Bristol Water	Bristol Water's Rank	Lower Quartile	Average	Upper Quartile	Frontier
2018 Actual	22.50	6/17	135.94	558.87	18.70	0.10



Customers can compare our performance on water quality standards against other companies in the industry at **https://discoverwater.co.uk/quality.**

Negative Water Quality Contacts

It is important that our water not only meets stringent standards but is also good to drink.

This metric measures the total number of consumer contacts (telephone, letter and email) about the appearance, taste and odour of the water for the previous calendar year. As this measure is reported to the DWI it is measured on calendar year, rather than a financial year basis.

The appearance of water is a consistent top priority across all our customer research and engagement. We are pleased to report that based on our performance to date, we anticipate that will meet our target for this year, as we have done for every year of this reporting period.

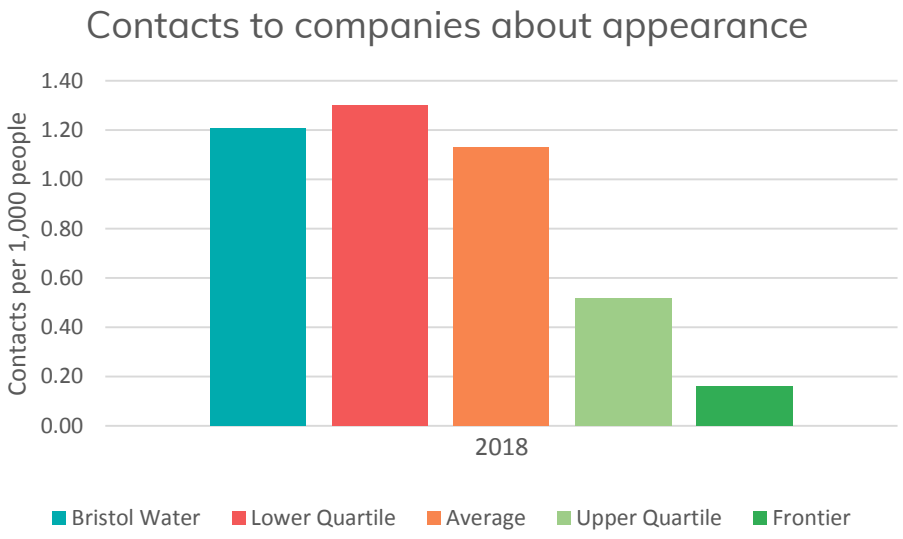
The number of contacts for the appearance of our customers' water remains the greatest proportion of our overall contacts. Despite significant activity on the network, including an ambitious mains renovation programme, the number has reduced compared to the previous year. We have done so through improvements in our network monitoring (such as installing pressure monitors into every district meter area and flow loggers into every waste water meter district); by doing so we able to understand more intelligently how water moves around our network and thus enabling us to take action to reduce areas where there is little water movement. It is in these areas of low water movement that sediment can accumulate, which can then understandably generate customer contacts about the appearance of water.

No. of contacts/ year	2015	2016	2017	2018	2019 Mid-Year	2019
Committed Performance Level ("CPL")	2422	2409	2322	2275		2221
Performance	2329	2162	1711	1934	1324	TBC
CPL met?	Yes	Yes	Yes	Yes		Yes (forecast)
Outperformance Payment/ Underperformance penalty £m	0	0	0	0		TBC

In order to calculate any incentive payment, the ODI performance is compared against the target performance. If the performance falls within the reward or penalty-zone then we multiply the resulting difference by the incentive rate. For negative water quality contacts the incentive penalty rate is £5,895 per contact and the reward is £1,230 per contact. Any ODI payment would be taken as a revenue adjustment, which would have an impact on customer bills over 2020-2025.

Some companies report on water quality contacts by reporting the number of appearance contacts and the number of taste/ odour contacts separately. Rather than reporting on a total number, the results are reported as the number of contacts per 10,000 customers, to ensure comparability. The results for appearance contacts are presented below as contacts per 1,000 customers to ensure consistency with how this metric will be reported over 2020-2025.

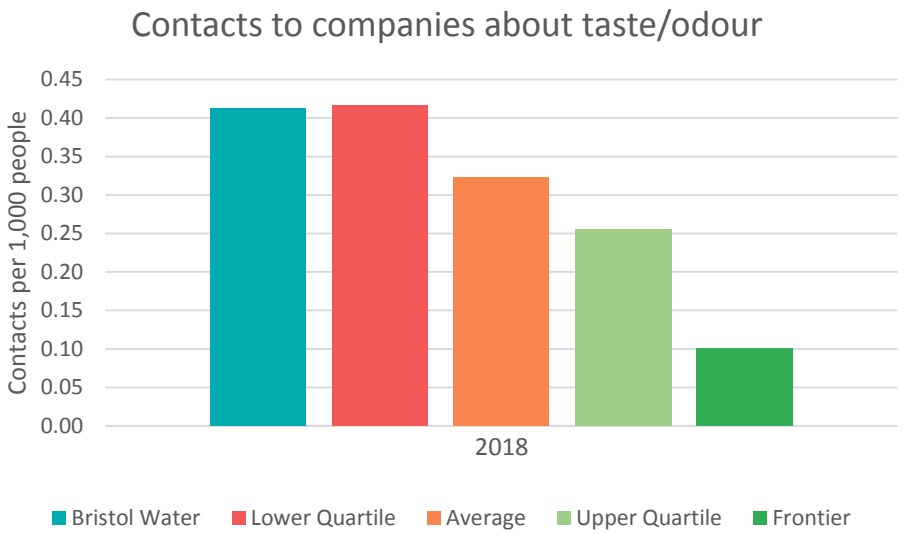
Appearance contacts per 1,000 customers	Bristol Water	Bristol Water's Rank	Lower Quartile	Average	Upper Quartile	Frontier
2018 Actual	1.21	13/19	1.30	1.13	0.52	0.16



Customers can compare our performance on appearance contacts against other companies in the industry at **https://discoverwater.co.uk/colour.**

The results for taste/odour contacts are below as contacts per 1,000 customers to ensure consistency with how this metric will be reported over 2020-2025.

Taste/ odour contacts per 1,000 customers	Bristol Water	Bristol Water's Rank	Lower Quartile	Average	Upper Quartile	Frontier
2018 Actual	0.41	13/19	0.42	0.32	0.26	0.10



Customers can compare our performance on taste/odour contacts against other companies in the industry at **https://discoverwater.co.uk/taste.**

Looking ahead to the next reporting period, we will be reporting on water quality contacts by reporting on the number of appearance contacts and the number of taste/ odour contacts separately. These contacts will be reported per 1,000 customers, to be consistent with industry practice.

Appearance contacts per 1,000 customers	2020 Target	2021 Target	2022 Target	2023 Target	2024 Target
Performance Commitment	0.83	0.73	0.63	0.53	0.43

Taste/ odour contacts per 1,000 customers	2020 Target	2021 Target	2022 Target	2023 Target	2024 Target
Performance Commitment	0.40	0.36	0.32	0.28	0.25

Leakage

Water is supplied to customers' homes through thousands of kilometres of underground pipes. For various reasons, including ground movement and degradation of materials, pipes can leak and some water is lost between the treatment works and the home.

This measure is the amount of water that enters the distribution system but is not delivered to customers because it is lost from either the company's or customers' pipes.

There are multiple benefits to managing leakage effectively including reducing the risk of having to impose water restrictions if our area experiences sustained periods of dry weather, reducing our impact on the environment by reducing the amount of water we need to abstract, and reducing disruption to customers when making repairs. For the period 2015-20 we have set challenging leakage targets (to reduce leakage by 12%) at a level where the overall value of the water lost is balanced against the costs of increased leakage control activity. Achieving this target helps us to maintain our leading position in the industry on leakage.

The combination of targeted investment in our network, improved monitoring and control activities, and our proactive approach to leakage management and leakage reduction initiatives, such as pressure management, continues to see us reduce leakage levels further. As a result of this, we expect to outperform our leakage target. We have been recognised as the top performer in leakage, after setting ourselves ambitious targets and working hard to achieve them[4].

PR14 ODI Leakage (Ml/d)	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL") (annual)	48.0	47.0	45.0	44.0		43.0
Performance (annual)	44.2	47.4	49.6	45.8	37.3	TBC
Committed Performance Level ("CPL") (averaged)	48.0	47.5	46.7	46.0		45.4
Performance (averaged)	44.2	45.8	47.1	46.8	44.9	TBC
CPL met?	Yes	No	No	No		Yes (forecast)
Outperformance Payment/ Underperformance penalty £m	0	0	-1.0824	-1.8040		TBC

The leakage ODI is based on our average performance over 2015-2020 on leakage performance before any technical adjustments are taken into consideration (the 'PR14 ODI' leakage). Our average leakage levels between 2015/16 – 2018/19 are 46.8 Ml/day, which is 0.8 Ml/day above the average end of year target of 46.0 Ml/day. Therefore we have accrued so far in 2015-20 a penalty of £2.8864m based on our average performance between 2015/16 – 2018/19. However our mid-year performance in 2019/20 suggests that an outperformance payment may be due in order to reflect our final average performance for all five years of the reporting period.

[4] Consumer Council for Water's Water Water Everywhere? report

We want to always report leakage based on the most up-to-date assumptions to provide the most accurate figure possible. Since 2017/18 we have also been reporting our leakage performance based on our view of the actual level of leakage, based on the latest technical assumptions. Ofwat published a corrigenda notice to the PR14 Final Determination on 25 April 2018[5] confirming that our approach to dual-reporting leakage during the remaining years of this reporting period was prudent. The technical improvements relate to aligning the measurement of one of the components of leakage measurement, known as non-household night use (NHHNU). In 2016/17 we identified that the assumptions for the NHHNU component had not been updated since 2007 i.e. the outdated assumptions for this component was providing an inaccurate view of our actual leakage data. We have since carried out an updated assessment, which has brought our sampling for this component in line with best practise across the industry. To ensure consistency, as these technical changes were identified since the original leakage targets were set, we have agreed with Ofwat that our leakage ODIs (whether these are rewards or penalties) will be linked to the leakage performance before any technical adjustments are taken into consideration (the 'PR14 ODI' leakage). We will however continue to include performance information on our actual level of leakage for completeness. We have also applied this approach to our Household Night Use measurement, as we have more accurate information from improved network loggers, that wasn't available when the target was set. This does improve leakage, but by calculating penalties in this way we ensure that customer bills benefit from any doubt about how leakage should be calculated.

Our performance, based on this adjusted view of the calculation, is set out below.

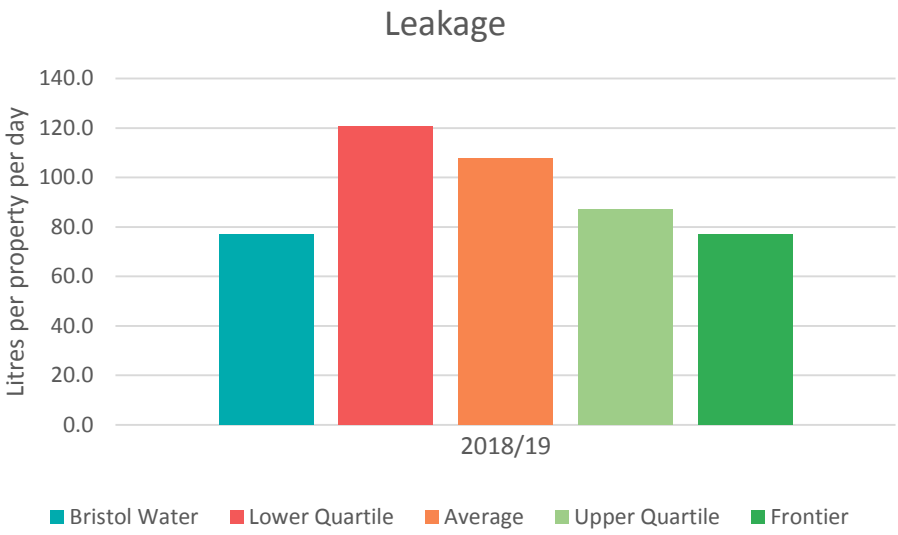
Actual Leakage (Ml/d)	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL") (annual)	48.0	47.0	45.0	44.0		43.0
Performance post-technical changes (annual)	44.2	46.4	46.6	41.7	34.4	TBC
Committed Performance Level ("CPL") (averaged)	48.0	47.5	46.7	46.0		45.4
Performance post-technical changes (averaged)	44.2	45.3	45.7	44.7	42.7	TBC
CPL met?	Yes	Yes	No	Yes		Yes (forecast)

Our actual level of leakage using the updated data is expected to beat the annual target of 43Ml/day for 2019/20, but we will continue to calculate our leakage ODI without consideration of the technical adjustments for the purposes of the ODI performance. In other words, our customers' bills are not impacted by our performance based on this adjusted view of the calculation

[5] Corrigenda to Bristol Water's Final Determination https://www.ofwat.gov.uk/wp-content/uploads/2018/04/Corrigenda-Bristol-Water-Limited.pdf

As leakage is a performance commitment that all companies in the sector must report on, we have been able to analyse our comparative performance for the latest set of data available (2018/19). Leakage performance is presented in megalitres per day because this is how Ofwat expects companies to report on performance. To compare companies of different sizes, performance has instead been presented below by measuring litres of water leaked per property per day.

Leakage per litres per property per day	Bristol Water	Bristol Water's Rank	Lower Quartile	Average	Upper Quartile	Frontier
2018/19 Actual	77.1	1/20	120.5	107.7	87.1	77.1



Leakage reduction is consistently a top priority across all our customer research and engagement. We are therefore proud to continue to deliver for our customers industry leading levels of leakage reduction. Customers can compare our performance on leakage against other companies in the industry at **https://discoverwater.co.uk/leaking-pipes**.

We will continue to report on our leakage performance in the next reporting period and we will continue to reduce leakage. We have promised that we want to remain the top performer in the industry for years to come. Our proposed targets are below. Our targets reflect a 15% reduction from our performance in 2019/20 over the five-year period (reported on a three-year average).

Leakage (three-year average)	2020/21 Target	2021/22 Target	2022/23 Target	2023/24 Target	2024/25 Target
Performance Commitment - % reduction	2.3	4.7	8.1	11.6	15.1
Performance Commitment - Megalitres per day (Ml/d)	40.2	39.2	37.8	36.3	34.9

Meter Penetration

As you should only pay for what you use, many people regard water meters as the fairest way to charge for your water services.

We encourage our customers to be more efficient in the way they use water by increasing the number of household customers who are billed based on their actual water consumption. We measure this by meter penetration, expressed as the percentage of household customers who have a water meter installed at their property. We also provide water-saving fittings and advice on reducing water consumption to help our customers save water.

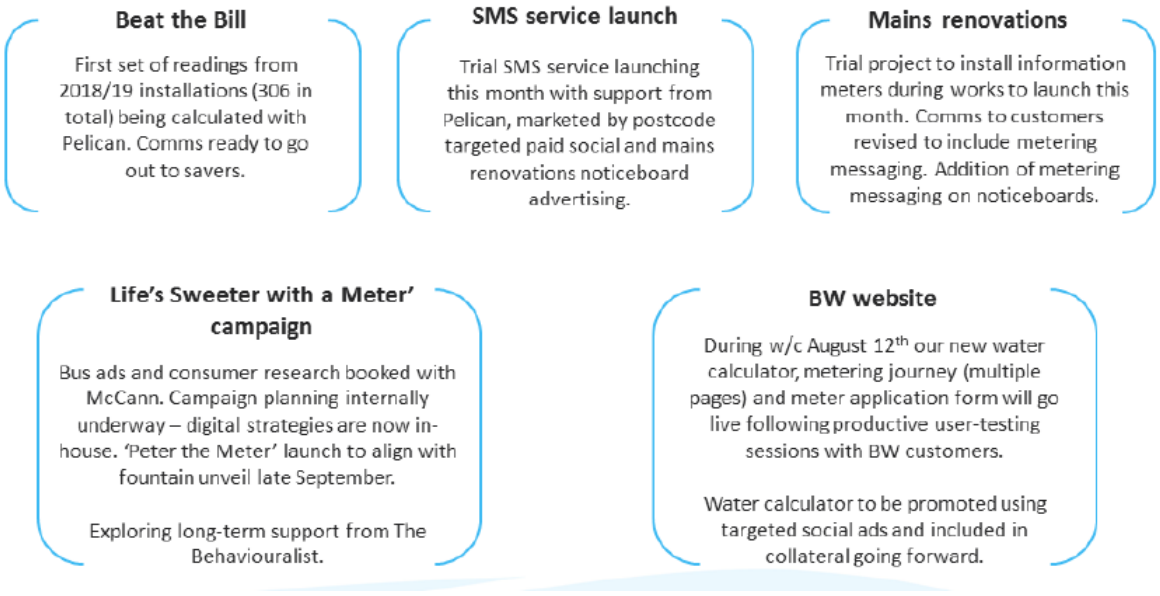
On average customers who switch to a meter save £100 per year on their water bill. However in comparison to other areas in England and Wales, Bristol Water customers are not in a 'serious water stressed' area. We know from continuous engagement activities that our customers on the whole do not wish to see full compulsory metering introduced and we do not have plans to introduce such a programme. In this context, we no longer expect to achieve the end of year target of 65.9% meter penetration. This is due to waning customer demand and a slowing housing market, which are not directly inside company control. Key activities that will help increase our meter penetration rate include:

- All unmetered properties will be metered on change of occupier;
- All void properties will be metered where possible - we have also reduced our "wait time" before metering a void property from 6 months to 1 month;
- We will increase our promotion of metering;

- Water efficiency and the links to metering will be promoted including our new resource efficiency partnership "Resource West" and our Social Contract partnership approach on education and public engagement;
- Specialist plumbers will be hired for more technically demanding internal meter installations;
- Benchmarking visits to other water and utility companies to establish best practice in improving meter penetration rates; and
- We also offer a range of free water saving products that could help our customers maximise the money they can save. Customers can find out more information on applying for a water meter and on the products available at **https://www.bristolwater.co.uk/your-home/water-meters/**.

In recognition of the slowdown in the property market in our supply area, we know that we must also transform our promotion of water meters in order to ensure that customers are attracted to this opportunity. We have therefore designed an extensive marketing programme, including work with Aardman Animations, to help increase metering uptake. The summary and artwork below shows our indicative programme and new character "Peter the Meter", designed to build on the strong identity of the region.

Our marketing activity to date in 2019 is summarised below.



% Meter penetration	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	50.4	54.8	58.8	62.5		65.9
Performance	47.3	49.3	52.7	56.0	57.5	TBC
CPL met?	No	No	No	No		No (forecast)
Outperformance Payment/ Underperformance penalty £m	-0.118	-0.152	-0.152	-0.152		TBC

Our mid-year performance is below the target and we anticipate an ODI penalty may apply again this year. In order to calculate any incentive payment the ODI performance is compared against the target performance. If the performance falls within the reward or penalty-zone then we multiply the resulting difference by the incentive rate. For meter penetration, the incentive penalty rate is £0.038m per 1% variance and the reward is £0.036m per 1% variance. The total ODI penalty (which currently totals £0.574m) will be taken as a revenue adjustment, which will lower customer bills between 2020-25.

We will continue to report on meter penetration in the next reporting period. Our proposed targets are below.

% meter penetration	2020/21 Target	2021/22 Target	2022/23 Target	2023/24 Target	2024/25 Target
Performance Commitment	67.7	69.5	71.3	73.1	75.0

Per Capita Consumption (PCC)

Per Capita Consumption measures how much water we use every year. It is defined as the average amount of water used by each person each day.

By knowing this information, the intention is to encourage behaviours to reduce the amount of water we use, thereby helping customers save money for the future and further adapt to the challenges of climate change. It is measured in litres per person per day.

One of our biggest challenges we face is customer perception and their understanding of the value of water, and in how we work with customers and other stakeholders to educate them on demand management and the benefits of water efficiency. Our future water availability and keeping water in the environment relies heavily on customers, consumers and communities really understanding the value of water and by working with us to make sure we have a better, more resilient future. We have already instigated the creation of the Resource West partnership with University of West of England (UWE), Bristol Waste, Bristol Energy and other organisations to enhance the promotion of water efficiency in our supply area, and we aim to work with neighbouring water companies through the West Country Water Resources group on water efficiency promotion. Despite these efforts, water consumption has again increased this year. Our recent research suggests increased shower use in those below 35 is a key driver of increased consumption, and we are targeting our activity on this emerging challenge. Further details can be seen in our social contract publication.

PR14 PCC (L/p/d)	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	145.2	144.4	143.6	142.8		142.0
Performance	141.1	144.1	144.5	148.3	160.6	TBC

CPL met?	Yes	Yes	No	No		No (forecast)

This performance commitment has no impact on our customers' bills as there is no financial ODI.

Our reporting of our leakage performance commitment has implications for our reported PCC figure (due to the inclusion of leakage from customers' pipes). We have presented the information on both for transparency (the impact of the adjusted view of the leakage calculation on PCC is below).

Actual PCC (L/p/d)	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	145.2	144.4	143.6	142.8		142.0
Performance	141.1	143.5	146.3	150.7	163.1	TBC
CPL met?	Yes	Yes	No	No		No (forecast)

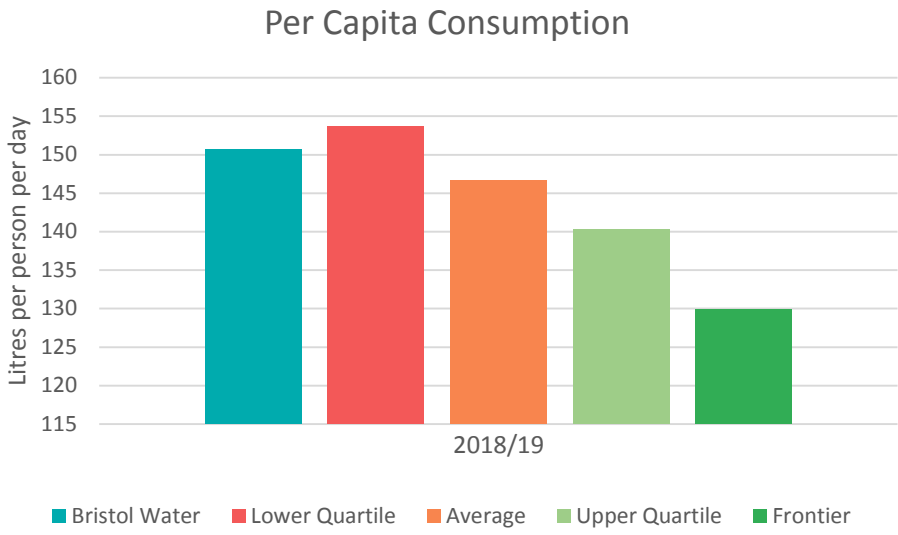
We will continue to help customers reduce water consumption, through supportive and voluntary measures. However, we recognise that we have to do more to help customers reduce water consumption in line with our long-term ambition to reduce water consumption to 110 litres per person per day by 2045. In order to achieve this, we are implementing an ambitious metering programme, with the aim to achieve 75% of domestic properties metered by 2025. As well as metering, our Water Resources Management Plan includes a number of initiatives to help reduce consumption, including:

- The continued provision of free water efficiency equipment
- The continued provision of bespoke water efficiency calculations through our website to empower customers to understand their usage and advice on how to become more efficient
- Developing new partnerships with stakeholders across our region to create new and innovative ways to help customers to become more resource efficient
- Developing our evidence base and research programme on the most effective water efficiency measures
- Continuing and expanding our school education programme
- Working with the industry to share experience and knowledge and lead development of initiatives like the water label
- Working with retailers to help their non-household customers to use water efficiently

In addition, our household customers receive an annual newsletter called Watertalk that offers advice to help reduce water consumption as well as money saving tips and we have water saving kits available on request. We have also installed ten free water fountains in the centre of Bristol and offered a 'water bar' at local festivals and events, to help promote the benefits of water.

As PCC is a performance commitment that all companies in the sector must report on (sometimes referred to as 'total water consumption'), we have been able to analyse our comparative performance for the latest set of data available (2018/19). The results are below.

Litres per person per day (l/p/d)	Bristol Water	Bristol Water's Rank	Lower Quartile	Average	Upper Quartile	Frontier
2018/19 Actual	151	12/20	154	147	140	130



Customers can compare our performance on the average amount of water used by each household each day against other companies in the industry at **https://discoverwater.co.uk/amountwe-use.**

We will continue to report on this performance commitment in the next reporting period. Our proposed targets are below. Our targets reflect a 6.3% reduction from our performance in 2019/20 over the five-year period (reported on a three-year average).

PCC (three-year average)	2020/21 Target	2021/22 Target	2022/23 Target	2023/24 Target	2024/25 Target
Performance Commitment - % reduction	1.3	2.6	3.9	5.1	6.3
Performance Commitment - Litres per head per day (l/h/d)	147.8	145.8	143.9	142.1	140.3

Total Carbon Emissions

This is the total carbon emissions produced by the Company and contractors working on our behalf.

We calculate our carbon emissions through the electrical energy we use in our operations, our consumption of gas and the fuel we use for transport, plant operation and site heating. This equals our annual operational greenhouse gas emissions, based on the Carbon Accounting Workbook and is expressed in kilograms of CO_2 (carbon dioxide) equivalent divided by the population supplied.

We are proud that our overall energy management is accredited to the ISO:50001 standard. Our performance for this metric is however largely driven by the UK Emissions factor for electricity not meeting the government's own predictions. In previous years we had forecast that we would fail our 2019/20 target as a result of the UK Emissions factor for electricity not meeting DEFRA/DECC predictions, a factor outside of Bristol our control.

Our performance is predominantly driven by the change in the national grid electrify factor used to compute emissions, which is outside the Company's control. However other influential factors include the wet weather over the past year causing a reduction in business demand, preferential use of sources from which water can be transported gravitationally, the enhanced leakage programme and the Company's energy optimisation programme, have all helped to reduce the use of carbon. As a result we are forecasting to meet this year's target.

We are continuing to develop and implement a programme of improvements to operational efficiency and a number significant capital investment schemes that aim to reduce overall energy consumption. Projects currently in progress include:

- The roll out of an automated pump scheduling system, that will look to optimise individual pumps, pump-sets and whole source selection; and
- Installation of solar PV at our key sites.

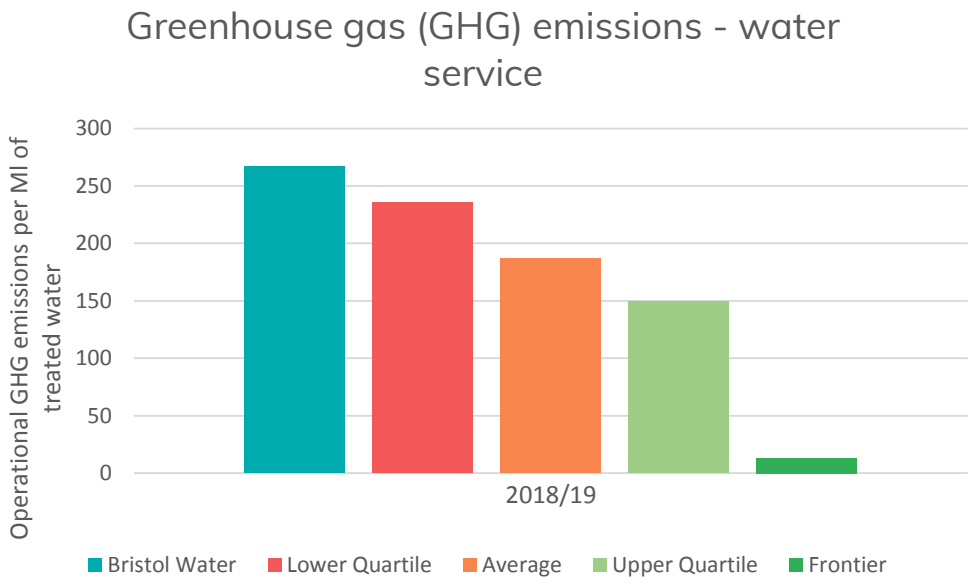
As a result of these improvements we are proud to be forecasting to achieve our end of AMP target.

KgCO2e / person	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	32	25	23	22		20
Performance	35	32	28	23	11	TBC
CPL met?	No	No	No	No		Yes (forecast)

This performance commitment has no impact on our customers' bills as there is no financial ODI. We will not continue reporting on this as a performance commitment from 2020 but we will be reporting on energy performance throughout the period.

All companies must report on their total greenhouse gas emissions (GHG). As such we have been able to analyse our comparative performance for the latest set of data available (2018/19). The results are below.

GHG Emissions (kgCO2e/Ml)	Bristol Water	Bristol Water's Rank	Lower Quartile	Average	Upper Quartile	Frontier
2018/19 Actual	267	16/19	235	187	150	13



Raw Water Quality of Sources

The quality of our water sources, particularly in the Mendip lakes, can be impacted due to nutrients and sediment that can enter the watercourses from land and activities in the catchment area of the source.

This measure is an assessment of the quality of our raw water sources that are at risk of deterioration due to increased levels of pesticides and nutrients in their catchments. This is measured as the percentage of the AMP5 baseline aggregate of algal bloom frequency across our reservoirs.

This is measured on a calendar year basis. Our mid-year improving assessment of a reduction in algal bloom frequency of 35% in the year is based on only six months' of data; algal fluctuations are seasonal and so it is likely that this assessment will have significantly changed when we report at the year-end (although we still expect to have outperformed our target for 2019/20. The data suggest that algal bloom frequency has reduced consistently through the first four and a half years of this reporting period compared to blooms seen between 2010 and 2014.

Similarly to last year, we have seen an unusually warm and dry summer; normally dry, sunny and warm summer weather would be ideal conditions for algal blooms. However, the mid-year numbers suggests that our catchment management initiatives have been much more successful than expected in improving water quality. This means that water will not be as expensive to treat as would have been the case had algal bloom frequency continue to increase as it did in the previous reporting period. It also means that the ecological condition should be more favourable than would be the case had the algae been allowed to continue to proliferate. This is important as the reservoirs are nationally, and in the case of Chew Valley Reservoir, internationally designated habitats (SSSI and SPA).

% of aggregate of algal bloom frequency across reservoirs	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	>+10%	>+10%	+/-≤+10%	+/-≤+10%		+/-≤+10% for ≥2 years
Performance	+20% (deteriorating)	+11% (deteriorating)	-1% (marginal)	-14% (improving)	-23% (improving)	TBC
CPL met?	Yes	Yes	Yes	Yes		Yes (forecast)

Ofwat published a corrigenda notice to the PR14 Final Determination on 25 April 2018, including confirmation of the reporting basis for this performance commitment[6]. This allowed us to improve the reporting for this performance commitment by converting the target from a categorisation (as either deteriorating, marginal, stable or improving) to reporting on the percentage of AMP5 baseline of 8,059 aggregate of algal bloom frequency.

Performance against this commitment has no impact on our customers' bills as there is no financial incentive.

From 2020 we will be reporting on a revised measure, which will be an assessment of our progress in implementing catchment management of nutrients across our catchments. The measure will relate to the level of nutrient loss reduction, modelled as kilogrammes (kg) of phosphorus (P) not lost to the environment as a result of the interventions taken up by farmers across source catchments. Our proposed targets are below. This metric will more directly measure our delivery of catchment management than our current methodology.

Kg of P loss reduction achieved by Bristol Water scheme	2020/21 Target	2021/22 Target	2022/23 Target	2023/24 Target	2024/25 Target
Performance Commitment	109	216	322	427	531

[6] Corrigenda to Bristol Water's Final Determination https://www.ofwat.gov.uk/wp-content/uploads/2018/04/Corrigenda-Bristol-Water-Limited.pdf

Biodiversity Index

We monitor our protection and enhancement of the natural environment through an innovative approach that we have called the biodiversity index which was introduced in 2014/15 as a new and innovative approach to protecting the environment.

This quantifies the environmental value of our sites and creates a "direction of travel" for the way we manage our assets, helping us to protect and enhance the natural environment by using the index to quantify the impact of our actions on the broader environment. It is measured by the cumulative hectares and meters of habitat (e.g. hedges) and the quality of this habitat. This calculation and method is a tool we will continue to develop, using it to measure our performance on habitat protection and enhancement. We report this measure as the number of Biodiversity Index (BI) points.

Our mid-year performance is currently reflecting our position at the end of 2018/19. This is due to the known seasonality of work delivery. Both negative and positive impacts on the BI score will be delivered during the late autumn to spring months. In other words, any changes to the BI score will not materialise until year-end. For example, works which disturbs trees and hedgerow will not take place until after the bird nesting season, which ends in September. The autumn and spring periods are also the optimal time to plant trees and therefore positive impacts are also delivered towards the end of the financial year. It is therefore not unusual at the mid-year review to not have completed biodiversity improvements. Examples of our improvements we plan to make this year include:

- Our maintenance of grass embankments around our Head Office building in Bishopsworth in Bristol
- Our maintenance of Dry Hill Reservoir
- Our maintenance of Durdham Down Pumping Station

BI points	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	17,649	17,650	17,651	17,652		17,653
Performance	17,649	17,650	17,657	17,668	17,668	TBC
CPL met?	Yes	Yes	Yes	Yes		Yes (forecast)

Ofwat published a corrigenda notice to the PR14 Final Determination on 25 April 2018, including confirmation of the reporting basis for this performance commitment[7]. This allowed us to improve the reporting for this performance commitment by converting the target from a categorisation (as either deteriorating, marginal, stable or improving) to reporting on the number of Biodiversity Index points that have increased each year (from a baseline of 17,613 in 2014/15).

This performance commitment has no impact on our customers' bills as there is no financial ODI.

We will continue reporting on our Biodiversity Index in the next reporting period. Our proposed targets are below.

BI points	2020/21 Target	2021/22 Target	2022/23 Target	2023/24 Target	2024/25 Target
Performance Commitment	17,668	17,678	17,689	17,700	17,711

Waste Disposal Compliance

This measures compliance (as a percentage) of the number of Bristol Water samples taken of discharged trade effluent from designated Company sample points that meet the consent requirements in the Environment Agency (EA) permits.

Trade effluent, if not controlled, can have harmful effects, which include harm to the environment, particularly our surrounding rivers, streams and estuaries.

The EA does not prescribe the number of samples that are required from each site. The number of samples we do collect takes into account the size of the site and the resources we have available to undertake the technical tasks. We target, for example, to collect 40

[7] Corrigenda to Bristol Water's Final Determination https://www.ofwat.gov.uk/wp-content/uploads/2018/04/Corrigenda-Bristol-Water-Limited.pdf

samples at Purton and Blagdon fisheries. We have followed this approach for a number of years now.

Unfortunately, we have failed to achieve our target for this performance commitment for each year of this reporting period and we anticipate that we will not achieve full compliance for this year too.

Our performance is significantly impacted by the introduction of a discharge consent (which came into force from 1 February 2018) at Blagdon fisheries (downstream of the trout rearing pens). Compliance for samples collected at this site has proved challenging, particularly with respect to ammonium, dissolved oxygen and phosphate parameters. We are continuing to work with the EA to assess how to measure the environmental need at this site, which is subject to significant seasonal changes in the quality of the various inflows which supply the pens, including Blagdon Lake and a number of springs. The introduction of this consent has meant that the number of compliance failures has increased, even though improvements at other major treatment sites such as Purton have reduced the number of failures elsewhere.

This data is measured on calendar year, rather than a financial year basis. Our performance forecast for the end of 2019 without the Blagdon fisheries permit would be 99.6%, which would have been our best performance in this reporting period and demonstrates that our continuing work in this area is seeing improvements in the long-term.

% Compliance	2015	2016	2017	2018	2019 Mid-Year	2019
Committed Performance Level ("CPL")	100	100	100	100		100
Performance	96	96	98	98	98	TBC
CPL met?	No	No	No	No		No (forecast)

This performance commitment has no impact on our customers' bills as there is no financial ODI.

We will continue to report on this performance commitment in 2020-25. We are currently in a consultation stage for the design of a new fish rearing system to improve compliance and fish welfare, and we are aiming to install real-time water quality monitoring to enable us to respond more quickly to changes in inflow quality and configure the various sources to improve discharge compliance. Our proposed targets are below.

% Compliance	2020 Target	2021 Target	2022 Target	2023 Target	2024 Target
Performance Commitment	100	100	100	100	100

Percentage of Customers in Water Poverty

This performance commitment is defined as the percentage of customers within our supply area for whom their water bill represents more than 2% of their disposable income, defined as gross income less income tax.

This measure allows us to understand the impact of our bills on our customers. To calculate this we use a population analytics model to estimate the gross percentage of customers in water poverty, and then deduct those customers who we support through our Assist social tariff.

Using this measure, we are able to offer advice, assistance schemes and capped tariffs, known as 'social tariffs' (including our Assist Tariff, WaterSure Plus and Pension Credit Tariff) to customers who fall within this category. This measure then also allows us to evaluate the success of our tariffs and assistance schemes for customers who are experiencing difficulty paying their bills.

By the end of the last reporting year (in March 2019) there were 15,620 customers benefitting from our social tariffs. We currently support 17,790 customers through our social tariffs; in the first six months of 2019/20 we have accepted a further 2,170 customers onto our social tariffs. We are committed to ensuring that those who struggle to pay will be given the help they need. In particular, we are able to offer the following social tariffs:

- In the first six months of 2019/20 an additional 1347 have been accepted our 'Assist' social tariff. This tariff offers significant bill discounts to those customers least able to afford their bill, following a means assessment.

- In the first six months of 2019/20 an additional 89 have been accepted onto our WaterSure Plus metered tariff. This tariff is for metered customers in receipt of certain benefits and are defined by the government as 'vulnerable', either because they have a medical condition or a large family.

- In the first six months of 2019/20 an additional 734 have been accepted our Pension Credit social tariff. This tariff gives a 20% discount on water bills to customers who live in a household where all members over the age of 18 are in receipt of Pension Credit.

As this measure is based on annual calculations a data audit was not included as part of the mid-year review. There is no financial incentive applied to this performance commitment.

% Customers in water poverty	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	2	2	1.9	1.9		1.8
Performance	0.4	0.9	0.0	0.0		TBC
CPL met?	Yes	Yes	Yes	Yes		Yes (forecast)

Customers can find further information and support on the range of social tariffs we have available on our website at https://www.bristolwater.co.uk/struggling-to-pay/#payment-schemes.

We have proposed to continue to report on performance in the next reporting period. Our proposed targets are below, as we intend to ensure that our social tariffs are available to all those who are eligible so customers do not experience water poverty.

% Customers in water poverty	2020/21 Target	2021/22 Target	2022/23 Target	2023/24 Target	2024/25 Target
Performance Commitment	0.0	0.0	0.0	0.0	0.0

Service Incentive Mechanism (SIM)

This is Ofwat's measure for comparing the customer service performance of water companies in England and Wales.

It includes quantitative measures of the numbers of complaints and unwanted contacts that companies receive and performance in handling telephone contacts. It also includes a survey of customers' views on the service provided. The score is reported as an index out of 100, in line with the methodology set out by Ofwat in 2015[8]. This year the SIM methodology has been significantly revised and the data requirements were not available for assessment in time for this report.

We do expect our SIM performance to improve by the end of the reporting year as we have increased the resource in our contact centre and we are continually working on improvements to give our customers the answers they need as quickly as possible, such as improvements in how customers can contact us online. We are not however forecasting to meet our target, which is to achieve a level of SIM performance that would mean we were ranked at least 5th in the sector.

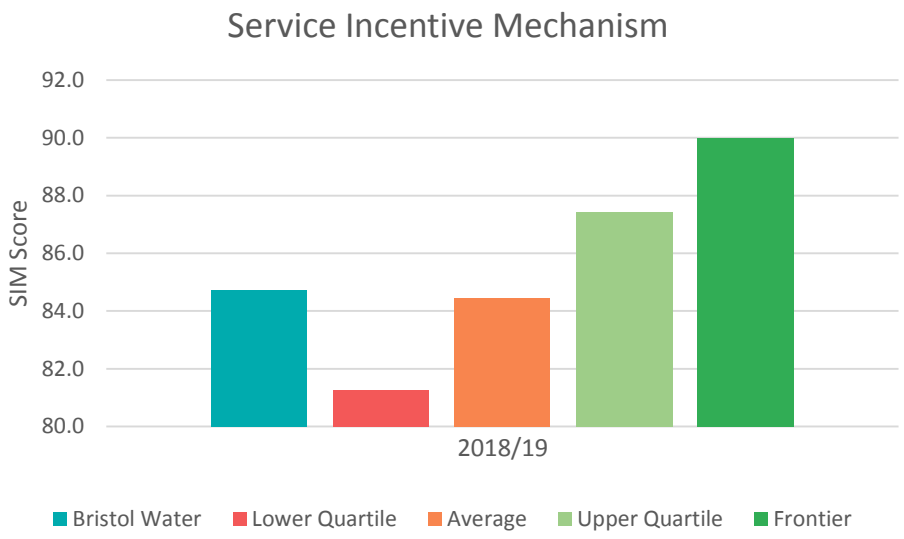
[8] https://www.ofwat.gov.uk/wp-content/uploads/2015/11/gud_pro201503sim.pdf

SIM score	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	85.0	85.0	86.0	87.0		87.6[9]
Performance	85.1	85.9	83.4	84.7		TBC
CPL met?	Yes	Yes	No	No		No (forecast)

A financial incentive will be applied based on companies' SIM performance. Ofwat will announce further details of this in its determination of price limits for 2020-25. At present we forecast that our performance will be around the industry average, and that no financial adjustment will be made to our customers' bills in respect of SIM.

As SIM is a performance commitment that all companies in the sector must report on, we have been able to analyse our comparative performance for the latest set of data available (2018/19). The results are below.

SIM score	Bristol Water	Bristol Water's Rank	Lower Quartile	Average	Upper Quartile	Frontier
2018/19 Actual	84.7	11/18	81.3	84.4	87.4	90.0



[9] Target derived from the 5th ranked company for 2018/19, which was Bournemouth Water

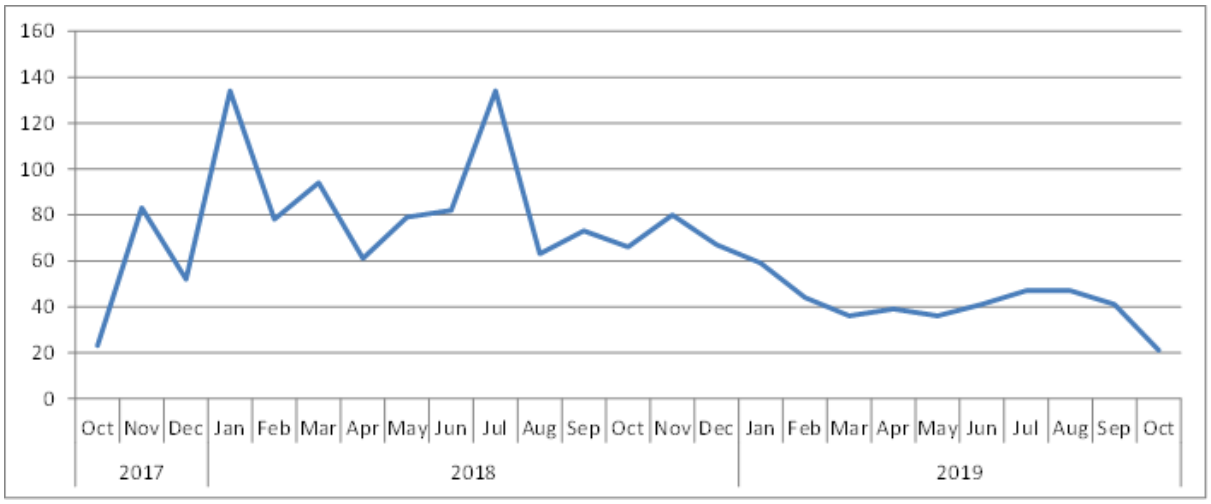
Company	2018-19 SIM score	2018-19 rank
Affinity	81	14
Anglian	90	1
Bournemouth	88	5
Bristol	**85**	**11**
Dŵr Cymru Welsh Water	87	7
Hafren Dyfrdwy	78	17
Northumbrian and Essex & Suffolk	86	9
Portsmouth	89	2
SES Water	81	16
Severn Trent	81	13
South East	85	10
South Staffs incorporating Cambridge	86	8
South West	88	4
Southern	81	15
Thames	75	18
United Utilities	88	3
Wessex	87	6
Yorkshire	84	12

Customers can compare our performance on customer service against other companies in the industry at **https://discoverwater.co.uk/customerexperience-rating**.

From 2020, SIM will be replaced as a measure of customer satisfaction by Ofwat's new measure of customer experience, known as C-MeX. C-MeX includes measuring the satisfaction of all customers, not just those who contact us. The design of this measure is still being finalised by Ofwat but will be based on two types of surveys. One will be based on customers who have directly contacted the company, focusing on complaints. The other will be based on customers selected at random, focused on the overall customer experience, such as in relation to street works, and will not therefore just be based on those who have made direct contact with the company. In addition, from April 2020 we have proposed to report on a new performance commitment on total customer complaints. This definition aligns with CCWater's reporting of this metric. Our performance in 2019/20 is still based on written complaints only (complaints made to the company via email, letter and webform), as CCWater are still focusing on written complaints in this reporting year.

Complaints (household only)	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Performance (total)	667	1112	1560	1330	407	TBC
Performance (total per 10,000 household connection)	13.56	22.12	31.04	26.07	15.97	TBC

Overall we have seen a decrease in written complaints over the last few years.



General Satisfaction from Surveys

This measure relates to the percentage of customers responding to our annual household customer tracking survey who rate their satisfaction in respect of our service as excellent, very good or good.

This is different from our other customer measures as most of the customers surveyed will not have had direct contact with us apart from receiving their bills and customer newsletters, as well as their perception of us from external sources, including media coverage and social media.

As this measure is based on annual calculations a data audit was not included as part of the mid-year review.

Despite the challenging target, we are continuing to improve our performance for our annual survey year on year; there has been a continuing upwards trend since 2015. We did not hit our challenging target of 93% last year, however results from the Consumer Council for Water's report 'Water Matters' were positive.[10] Water Matters in an annual survey which compares our service to other water companies in the UK and we ranked on top of the league table for overall satisfaction with water supply with 97% satisfaction. We have ranked in the upper quartile in the CCWater Matters survey for the last two years.

[10] CCWater Research Report Water Matters 2018-19 Summary of Research Findings for Bristol Water

% satisfaction	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	93	93	93	93		>93
Performance	83	86	87	89		TBC
CPL met?	No	No	No	No		No (forecast)

This performance commitment has no impact on our customers' bills as there is no financial ODI.

We will not continue reporting on this performance commitment from 2020; we will instead measure our customers' satisfaction, experiences of interacting with us and their views on our services using the industry comparative metric known as C-MeX.

Value for Money

This measure is calculated as the percentage of respondents to our monthly customer survey who have made contact with us, about either a billing or a water supply enquiry, to rate the service we provided in terms of the value for money they received.

Value for money is an important concept in measuring whether customers consider that the service that we provide is worth what they pay for it. We are pleased to report that based on our performance to date, we anticipate that will meet our target for this year; we have achieved a value for money satisfaction rate of 78% in two of the surveys undertaken to date this year and our current position represents an increase by 8.4% compared to our position at the end of 2018/19.

Regardless of our promising performance in the first half of the year, we are continuously reviewing all causes of customer dissatisfaction and this has helped us to find areas that we can improve on, such as the introduction of real time feedback, 'Live Chat', a redesign of our bill and the increased use of social media to keep customers informed of incidents and planned works. The measures we are taking to improve overall affordability across our entire customer base involve:

- Finding efficiencies by improving our digital offering and leveraging new technologies to reduce our cost to serve;
- Continuing to refine our processes for bad debt reduction; and
- Helping customers find ways to reduce their own bills through reducing their consumption.

% satisfaction with value for money	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	71	71	71	72		72
Performance	70	72	69	68	76	TBC
CPL met?	No	Yes	No	No		Yes (forecast)

Our performance against this commitment has no impact on our customers' bills as there is no financial incentive.

We will continue to report on this performance commitment in 2020-25 but it will be reported on using a revised methodology. The revised methodology aligns with CC Water's reporting of this metric and will therefore be more transparent for our customers to help them understand our performance. Our proposed targets are below.

% satisfaction with value for money	2020/21 Target	2021/22 Target	2022/23 Target	2023/24 Target	2024/25 Target
Performance Commitment	80	81	82	83	83

Ease of Contact from Surveys

This measure is calculated as the percentage of respondents to our monthly customer survey who consider the ease of contact to our operational contact centre to be 'very good' or 'good'.

While we understand the importance of providing a range of channels through which customers can contact us, telephone is still the preferred and primary method, so it is important that we monitor the satisfaction of this service.

Although we forecast to again miss our target, we have delivered a variety of projects to address our performance in the first six months of 2019/20:

- We have piloted triaging customer contact in the operation contact centre using more customer photos and videos. This enables us to better understand our customers' problems, which helps to speed up the resolution of the issue after the first point of contact.
- We have also been upskilling and knowledge sharing between our operations and customer teams. This has involved district inspectors and district managers being based in the operational call centre so that they can provide the call operator with immediate technical knowledge and solutions during a customer enquiry.
- We have increased the scope of the Customer Care Team to track customer requests throughout the journey and keep customers fully informed with progress made against their jobs.
- In July we held customer focus groups with 37 customers to identify how we can improve our service and make it easier to contact us. We tested different methods of updates as well as customers appetite to self-serve. We are now implementing some of the initiatives that were formed following customer feedback in our focus groups. Initiatives for delivery include SMS confirmations for all appointments and reminders as well as new and improved online videos to support customers' appetite to self-serve.

% satisfaction with ease of contact	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	96.3	96.4	96.5	>96.5		>96.5
Performance	95.0	94.4	93.1	91.4	91.6	TBC
CPL met?	No	No	No	No		No (forecast)

Our performance against this commitment has no impact on our customers' bills as there is no financial incentive.

We will not continue reporting on this performance commitment from 2020; we will instead measure our customers' satisfaction, experiences of interacting with us and their views on our services using the industry comparative metric known as C-MeX.

Negative Billing Contacts

This metric measures the number of 'unwanted' calls received in relating to customers' bills.

An 'unwanted' customer contact is defined by Ofwat as calls which the customer would prefer not to make, in the sense that they are dissatisfied because they are experiencing a problem or concern, are making a repeat or chase call, or want to complain. A lower volume of unwanted contacts is therefore a positive position to be in.

We are pleased to report that our mid-year position reflects an improving trend in this area; the year on year performance of customers having to contact us is declining. This is a positive in that our customers are clearly having less need to contact us, suggesting that they are satisfied with the responses we give to them. The trend is what we expected to happen by introducing this performance commitment in 2015; by explicitly monitoring these sorts of calls, we have been able to put measures in place to prevent unwanted calls.

The decrease in negative billing contacts is, for this year, partly as a direct result of the '10 a week program' that was put into place to proactively 'clear down' open customer contact jobs. Following the introduction of this programme we were able to reduce the numbers of customers having to chase us for a resolution of an issue.

Contacts/ year	2015/16	2016/17	2017/18	2018/19	2019/20 Mid-Year	2019/20
Committed Performance Level ("CPL")	2,408	2,395	2,315	2,240		2,170
Performance	2,301	3,096	2,300	1,595	705	TBC
CPL met?	Yes	No	Yes	Yes		Yes (forecast)

Our performance against this commitment has no impact on our customers' bills as there is no financial incentive.

We will not continue reporting on this performance commitment from 2020; we will instead measure our customers' satisfaction, experiences of interacting with us and their views on our services using the industry comparative metric known as C-MeX

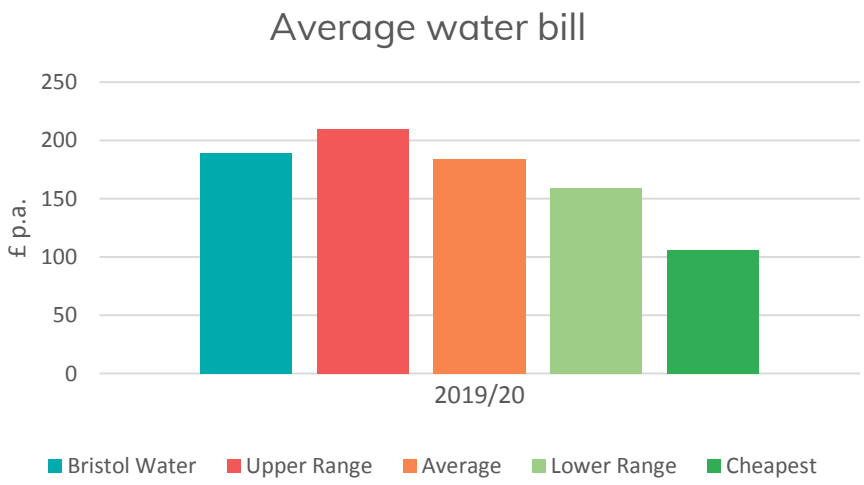
Average Water Bill

Each year we set our charges for our services based either on how much water our customers use (for a metered charge) or the rateable value (RV) of their property (for an unmetered charge).

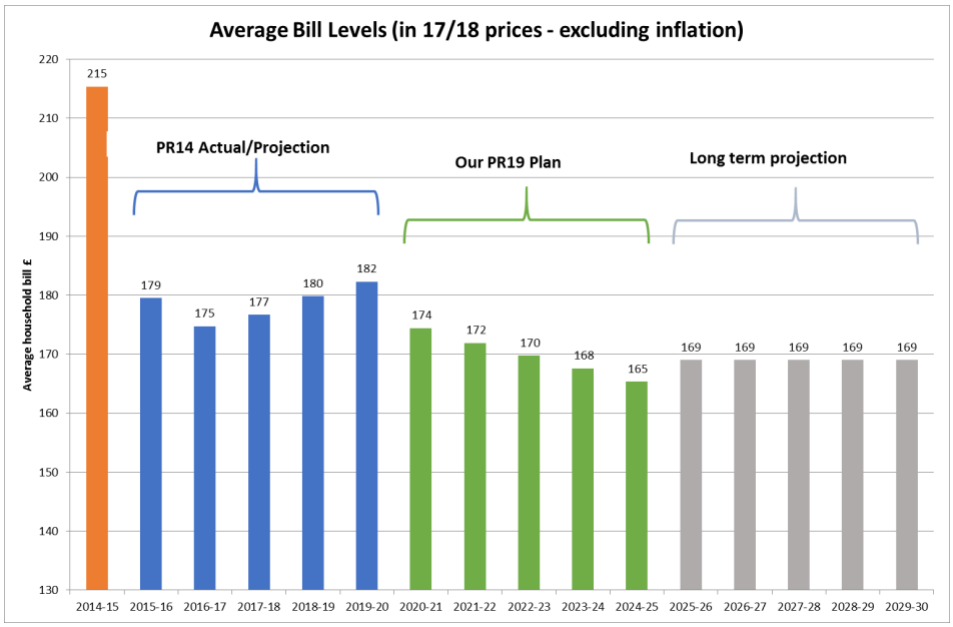
This figure is the average amount paid by each of our customers for their water bill, although as many factors determine individual households' bills, customers' bills may be higher or lower than this average figure. This does not include the charges for sewerage services which are calculated separately by Wessex Water, but included within a combined bill for most of our customers.

Comparing the average water bill level is however a useful tool for customers to benchmark the value of our services against the average bills of other companies in the water sector. Bristol Water's average bill is close to the industry average for 2019/20.

Average bill (£)	Bristol Water	Bristol Water's Rank	Upper Quartile	Average	Lower Quartile	Cheapest
2019/20	189	13/22	210	185	159	106



Looking ahead to the next reporting period (between 2020 and 2025) following discussions with Ofwat over our next business plan, the average household bill will reduce in real terms by 5% in 2020 and 9% by 2025.


Average Bill Levels (in 17/18 prices - excluding inflation)
Average household bill £
220
210
200
190
180
170
160
150
140
130
PR14 Actual/Projection
Our PR19 Plan
Long term projection
215
179
175
177
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182
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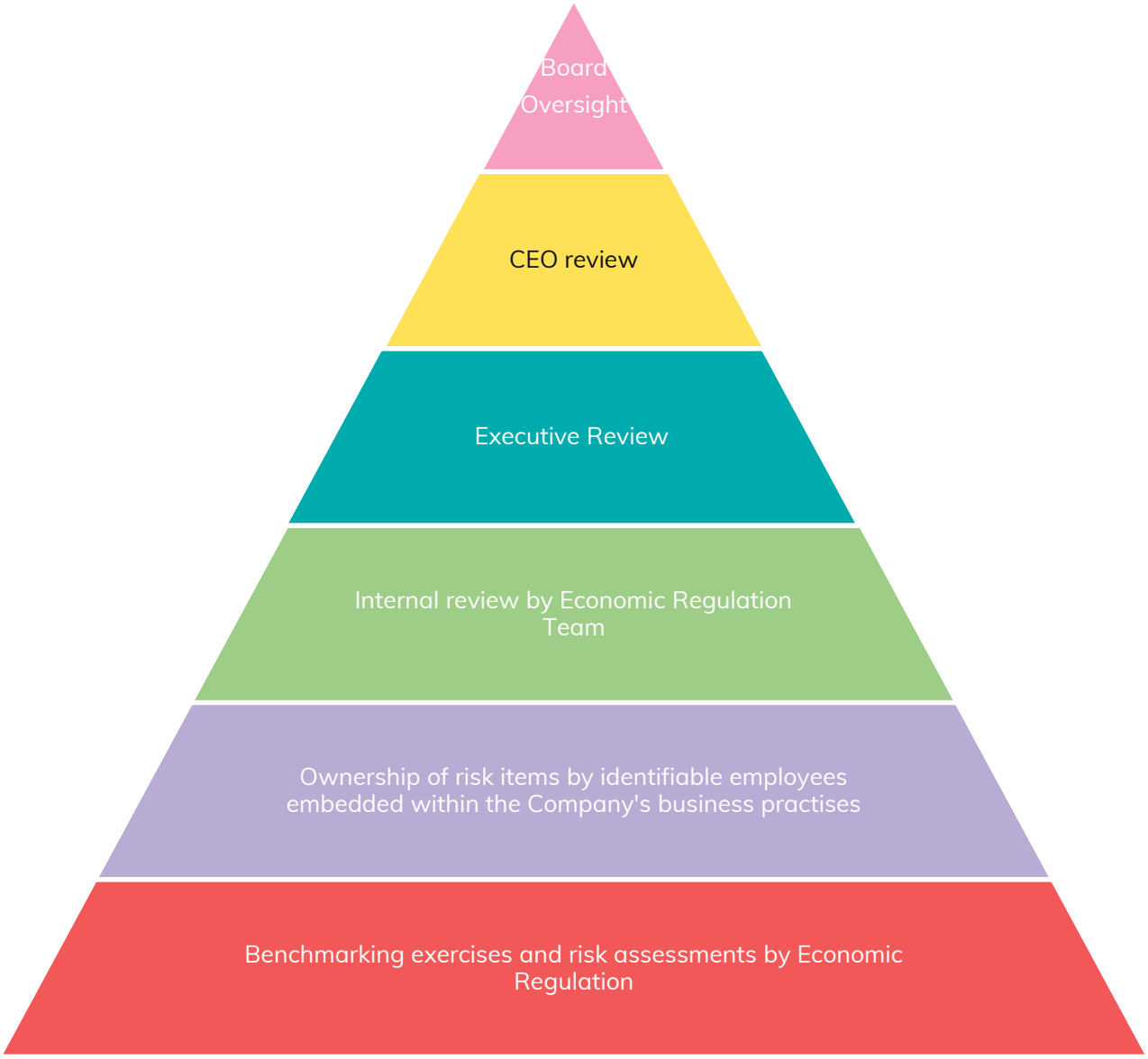
169
169
169
169
2014-15
2015-16
2016-17
2017-18
2018-19
2019-20
2020-21
2021-22
2022-23
2023-24
2024-25
2025-26
2026-27
2027-28
2028-29
2029-30

Assurance of Information

Internal Assurance

We use a thorough system of controls to make sure that the information we report and publish is as accurate as possible. For the data items that are most critical to our customers' understanding of our performance (information reported in sections 3 and 4 of our Annual Performance Report), each piece of information has a specific owner and reviewer, responsible for production and updating the reporting methodology statement. Data owners and reviewers are required to provide signed confirmation that the data has been compiled in accordance with the relevant methodology, and that the data is a true representation of the facts. This form provides the opportunity for the data owner to identify any concerns with the quality of the data, for investigation by senior managers and Directors. A data approver (the Executive Director responsible for the area the data item relates to) then approves the quality of the data.



A committee of Executive Directors reviews key data and information before it is published. Progress against key metrics is reviewed in detail monthly so that emerging trends in both performance and data quality can be addressed. Major regulatory submissions, including annual reports, tariffs, accounts and business plans are subject to Board review and approval prior to submission.

We also use external expert auditors to review our methods, systems and processes for reporting key data and information. In particular, the engineering consultancy, Atkins, provides technical assurance on our regulatory submissions, and financial auditors, PwC, audit our key financial data. We also have an internal audit function, which is currently outsourced to Mazars. These auditors provide reports to our Board to provide confidence in the accuracy of the information produced. Our main regulatory submissions are subject to sign off by the Board before we send them to Ofwat.

External assurance

The data published for each performance commitment (except for performance commitments that are assessed on an annual basis) and the methodology documents used to determine the collation of the data were reviewed by Atkins as part of their 2018/19 mid-year audit. These audits tested:

1. Our internal control systems and control checks to produce the submission;
2. Whether reporting aligns with relevant guidance;
3. The appropriateness of our performance commentaries; and
4. Whether data has been compiled in accordance with our methods and procedures.

The outcome of these two audits on our data and methodology documents, as well the assessments for previous years, is presented in the tables below.

Table 1 – Atkins' Data Categories for each Performance Commitment

Data								
Performance Commitment	2015/16	2016/17 Mid-Year	2016/17	2017/18 Mid-Year	2017/18	2018/19 Mid-Year	2018/19	2019/20 Mid-Year
Unplanned customer minutes lost	Green	Green	Green	Green	Green	Green	Green	Green
Asset reliability - infrastructure (bursts and DG2 low pressure)	Green	Green	Green	Green	Green	Green	Green	Green
Asset reliability - non-infrastructure (turbidity and unplanned maintenance)	Green	Green	Green	Green	Green	Green	Green	Green
Population in centres >25,000 at risk from asset failure	Green	Green	Green	Green	Green	Green	Green	Not included – scheme completed
Security of supply index (SOSI)	Green	Not included	Green	Not included	Green	Not included	Green	Not included
Hosepipe ban frequency	Green	Not included	Green	Not included	Green	Not included	Green	Not included
Mean zonal compliance (MZC)	Green	Green	Green	Green	Green	Green	Green	Green
Negative water quality contacts	Green	Green	Green	Green	Green	Completed Jan 2019	Green	To be completed Jan 2020
Leakage	Green	Green	Green	Green	Green	Green	Green	Green
Per capita consumption (PCC)	Green	Green	Green	Green	Green	Green	Green	Green
Meter penetration	Green	Green	Green	Green	Green	Green	Green	Green
Total carbon emissions	Green	Green	Green	Green	Green	Green	Green	Green
Raw water quality of sources	Green	Not included	Green	Green	Green	Green	Green	Green
Biodiversity index	Green	Not included	Green	Green	Green	Green	Green	Green
Waste disposal compliance	Green	Green	Green	Green	Green	Green	Green	Green
Percentage of customers in water poverty	Green	Not included	Green	Not included	Green	Not included	Green	Not included
Service incentive mechanism (SIM)	Green	Green	Green	Green	Amber	Green	Green	Green
General satisfaction from surveys	Green	Not included	Green	Not included	Green	Not included	Green	Not included
Value for money	Green	Green	Green	Green	Green	Green	Green	Green
Ease of contact from surveys	Green	Green	Green	Green	Green	Green	Green	Green

Data								
Performance Commitment	2015/16	2016/17 Mid-Year	2016/17	2017/18 Mid-Year	2017/18	2018/19 Mid-Year	2018/19	2019/20 Mid-Year
Negative billing contacts	Green	Not included	Green	Green	Green	Green	Green	Green

This assessment provides us with confidence that there are no material issues with the quality of our data systems for reporting on our performance measures.

Table 2 – Atkins' Methodology Categories for each Performance Commitment

Methodology								
Performance Commitment	**2015/16**	**2016/17 Mid-Year**	**2016/17**	**2017/18 Mid-Year**	**2017/18**	**2018/19 Mid-Year**	**2018/19**	**2019/20 Mid-Year**
Unplanned customer minutes lost	Amber	Amber	Green	Green	Green	Green	Green	Green
Asset reliability - infrastructure (bursts and DG2 low pressure)	Amber	Amber	Amber	Green	Green	Green	Green	Green
Asset reliability - non-infrastructure (turbidity and unplanned maintenance)	Amber	Green	Green	Green	Green	Green	Green	Green
Population in centres >25,000 at risk from asset failure	Amber	Amber	Green	Green	Green	Green	Green	Not included – scheme completed
Security of supply index (SOSI)	Amber	Not included	Green	Green	Green	Green	Green	Not included
Hosepipe ban frequency	Amber	Not included	Green	Green	Green	Green	Green	Not included
Mean zonal compliance (MZC)	Green	Green	Green	Green	Green	Green	Green	Green
Negative water quality contacts	Green	Green	Green	Green	Green	Completed Jan 2019	Green	To be completed Jan 2020
Leakage	Amber	Green	Green	Green	Green	Amber	Green	Green
Per capita consumption (PCC)	Amber	Green	Green	Green	Green	Amber	Green	Green
Meter penetration	Green	Green	Green	Green	Green	Green	Green	Green
Total carbon emissions	Green	Green	Green	Green	Green	Green	Green	Green
Raw water quality of sources	Amber	Not	Green	Green	Green	Green	Green	Green

Methodology								
Performance Commitment	2015/16	2016/17 Mid-Year	2016/17	2017/18 Mid-Year	2017/18	2018/19 Mid-Year	2018/19	2019/20 Mid-Year
		included						
Biodiversity index	Amber	Green	Amber	Green	Green	Green	Green	Green
Waste disposal compliance	Green	Green	Green	Green	Green	Green	Green	Green
Percentage of customers in water poverty	Green	Not included	Green	Not included	Green	Green	Green	Not included
Service incentive mechanism (SIM)	Green	Green	Green	Amber	Amber	Amber	Green	Assessed at component level due to overlap with C-MeX
General satisfaction from surveys	Green	Not included	Green	Not included	Green	Green	Green	Not included
Value for money	Green	Amber	Green	Green	Green	Green	Green	Green
Ease of contact from surveys	Green	Amber	Green	Green	Green	Green	Green	Green
Negative billing contacts	Green	Not included	Green	Green	Green	Green	Green	Green

This assessment provides us with confidence that there are no material issues with the quality of our internal procedures for reporting on our performance measures.

Next Steps

We will continue to make improvements to the way we work in order to improve on our performance. We will publish our Annual Performance Report, which will include information on our 2019/20 year-end performance and any financial consequences of our performance, in July 2020. We also publish an annual "Trust Beyond Water" statement, where the Board sets out its view of the Company's performance.

In advance of the publication of our year-end performance information, we will also publish our Assurance Plan in March 2020, which will set out our approach to assurance of the information that we will publish during 2019/20. The purpose of our Assurance Plan will be to give customers and others with an interest in our business (known as stakeholders) trust and confidence in our data and in how we use this data to report on our performance. It will cover all the key information that we report and publish throughout 2019/20. This includes information reported for regulatory purposes and that produced for the benefit of customers. This document will explain what updates have been made to our assurances processes since our mid-year audits took place. A draft version of the Assurance Plan will be published in early 2020 as a consultation. This document will take into account the final performance measures for 2020-2025 following Ofwat's PR19 Final Determination.

The full timetable for the publication dates of all our performance reporting requirements is summarised below.