

Review of Bristol Water's performance during 2020/21

Outcome: Excellent Customer Services

C-Mex

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
Score (& industry position)	No target. Industry position is determined by Ofwat	83.31 (6 th position)	No target. Industry position is determined by Ofwat	No target. Industry position is determined by Ofwat	No target. Industry position is determined by Ofwat	No target. Industry position is determined by Ofwat

The customer measure of experience (C-MeX) is a measure of customer satisfaction common across the industry. A company's C-MeX score is calculated as the weighted average of customer satisfaction (CSAT) scores from customer service (CS) and customer experience (CE) surveys. Three points are deducted from the C-MeX score if the company does not offer at least five communication channels, including three online channels, to receive contacts from customers.

The company's C-MeX score (determined before the application of any adjustment for the number of channels offered) is calculated using the following formula:

$$\text{C-Mex score} = 50\% \times (\text{CS} - \text{CSAT}) + 50\% \times (\text{CE} - \text{CSAT})$$

Each CSAT score is rescaled to be out of 100.

The incentive associated with this commitment is revenue based (both outperformance and underperformance payments), calculated using Ofwat-determined formulae and is relative to the performance of other water companies. Two incentive rates are used, standard and enhanced, and depend on the company's level performance relative to its peers. A performance deadband does not apply to this PC. The incentive is paid each year in the AMP period.

Bristol Water achieved a C-Mex performance of 83.31 in 2020/21. This level of performance placed it sixth in the industry. The frontier company scored 86.21 and the median was 82.35. The company was shadow reporting C-Mex in 2019/20 and achieved a score 81.22 in that year which placed it eighth in the industry.

The company's C-Mex performance in 2020/21 means it is likely that it will earn an out-performance payment for this PC, but this is subject to confirmation by Ofwat at the time of writing this report.

The Challenge Panel notes that it was Bristol Water's ambition for C-Mex to be fifth in the industry in 2020/21. While this was not achieved, the Challenge Panel was pleased to see the company's good performance in 2020/21 and the improvement from the previous year.

Turner & Townsend has confirmed that the company's reporting process for this measure is robust, and the resulting C-Mex data are sound.

D-Mex

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
Score (& industry position)	No target. Industry position is determined by Ofwat	86.81 (8 th position)	No target. Industry position is determined by Ofwat	No target. Industry position is determined by Ofwat	No target. Industry position is determined by Ofwat	No target. Industry position is determined by Ofwat

D-MeX is a measure of developer services customer satisfaction and common across the industry. A company's overall D-MeX score is calculated from two components that contribute equally:

- a qualitative D-MeX score, based on the ratings provided by developer services customers who transacted with the company throughout the reporting year to a customer satisfaction survey; and
- a quantitative D-MeX score, based on the company's performance against a set of selected Water UK performance metrics throughout the reporting year.

The company's D-MeX score (out of 100) is calculated using the following formula:

D-Mex score = 50% x Qual + 50% Quant, where

- 'Qual' is a simple average of satisfaction scores given by developer customers surveyed in the developer customer satisfaction survey in the reporting year; and
- 'Quant' is a simple average of the selected Water UK performance metrics which have non-zero volumes in the reporting year.

The incentive associated with this commitment is revenue based (both outperformance and underperformance payments), calculated using Ofwat-determined formulae and is relative to the performance of other water companies. A performance deadband does not apply to this PC. The incentive is paid each year in the AMP period.

Bristol Water achieved a D-Mex performance of 86.81 in 2020/21. This level of performance placed it eighth in the industry. The frontier company scored 89.70 and the median was 85.88. The company was shadow reporting D-Mex in 2019/20 and achieved a score 84.92 in that year which placed it eighth in the industry.

The company's D-Mex performance in 2020/21 means it is likely that it will earn an out-performance payment for this PC, but this is subject to confirmation by Ofwat at the time of writing this report.

The Challenge Panel notes that it was Bristol Water's ambition for D-Mex to be fifth in the industry in 2020/21. While this was not achieved, the Challenge Panel was pleased to see the company's relatively good performance in 2020/21 and the improvement from the previous year. It noted that the D-Mex performance scores (and relative industry position) can be volatile during the reporting year, and that Bristol Water was placed first in the industry at mid-year 2020/21.

Turner & Townsend has confirmed that the company's reporting process for this measure is robust, and the resulting D-Mex data are sound.

Priority Services Register (PSR) services

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
% households registered on PSR	3.1	2.6	4.1	5.1	6.1	7.0
% households registered on PSR (contacted)	17.5	35.5	35.0	35.0	35.0	35.0
% households registered on PSR (attempted contact)	45.0	48.6	90.0	90.0	90.0	90.0

This common performance commitment consists of the following criteria:

- The PSR reach: percentage of households that the company supplies with water services that are registered on the company's PSR;
- Actual contact: percentage of distinct households on the PSR that the company has actually contacted over a two- year period;
- Attempted contact: percentage of distinct households on the PSR that the company has attempted to contact over a two-year period.

To achieve compliance with this performance commitment the reach, attempted contact and actual contact targets should be achieved.

The detailed calculation formulae for the three PSR PC components are provided in Ofwat's PR19 Final Determination for Bristol Water.

The associated incentive is reputational.

In 2020/21 Bristol Water significantly outperformed its targets on actual and attempted PSR contacts but fell short of the target for the number of households registered on the PSR. However, it significantly improved its performance over the shadow values for the three components reported last year, which were:

% households registered on the PSR = 1.5

% households registered on the PSR (contacted) = 3.0

% households registered on the PSR (attempted contact) = 3.0

The Challenge Panel welcomes the company's achievements on actual and attempted PSR contacts. It understands that the main factor preventing the company from meeting its target for the number of households registered on the PSR was the planned data share with other organisations being put on hold. The Challenge Panel is aware that other water companies have been similarly affected. During the year, the Challenge Panel sought information on the company's plans to mitigate the impact of this and was pleased to learn of the ongoing training of field staff in identifying eligible customers in a manageable and efficient way, and that IT improvements had been introduced for these staff. The Challenge Panel will monitor progress against the company's PSR commitments during the coming year.

Turner & Townsend confirmed that the company's procedures for reporting PSR information are sound and the resulting data are accurate.

Customers in water poverty

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
% households	0	1	0	0	0	0

This is a commitment bespoke to Bristol Water. It is defined as the percentage of customers within the company's supply area for whom their water bill represents more than 2% of their disposable income, defined as gross income less income tax.

The Commitment was also used in the previous AMP. The associated incentive is reputational.

In 2020/21 Bristol Water did not meet its target for this commitment, the first time it has not done so since it was first introduced in 2017/18. The score achieved in 2020/21 was 0.63%, rounded to 1%.

The Challenge Panel notes there is no agreed way of defining water poverty consistently across the industry. It was informed by Bristol Water that water poverty in 2020/21, as defined by its PC, was affected by the Covid-19 pandemic. While the Challenge Panel can understand this, it challenged the company over its awareness and preparedness for likely increases in customer debt and long-term indebtedness resulting from the pandemic.

In addition, the Challenge Panel is aware that difficulties arise for many people who can't use the phone to seek debt and payment advice and that such people are difficult to reach by the support agencies and that there are many people not coming forward for help. Advice agencies haven't been able to hold their usual drop-in sessions because of the pandemic and are starting to see a resurgence of debt problems and that this may only be the start of a bigger problem later in 2021. The Challenge Panel believes that companies need to be more innovative in finding individuals in debt and must be ready to flex to deal with any increase in water poverty.

The Challenge Panel was pleased to learn that Bristol Water monitors the number of customers in debt. It offers debt advice surgeries as part of its Social Contract work. The company has also identified the geographic areas within its supply area with high poverty and that it intends to focus its efforts more in these areas. While the company increased its customer support by 8% during 2020/21 by providing discounted tariffs, it recognises that it still has work to do.

The Challenge Panel will closely monitor performance against this commitment in 2021/22.

Townsend & Turner has confirmed that the reported number continues to come from a third-party model and is robust.

Value for money

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
% customers surveyed	80	83	81	82	83	83

This PC is bespoke to Bristol Water and relates to the percentage of customers surveyed through the company's annual household customer tracking survey, who consider that the company provides good value for money. This is determined by customers either responding "very good" or "good" to the question:

"Thinking about value for money, overall how would you rate Bristol Water in relation to the service they provide?"

The survey is conducted by phone by an external third party market researcher.

The Commitment was also used in the previous AMP. The associated incentive is reputational.

Bristol Water has achieved an 83% performance for this measure in 2020/21, up from 75% the previous year. The Challenge Panel is pleased that performance against this Commitment has been increasing.

While the Challenge Panel welcomes the company's performance in 2020/21 and that customers' perception of value for money of the services provided, it has concerns over likely rising water poverty customer indebtedness as described in the section on water poverty above.

Turner & Townsend confirmed that the company's procedures for reporting its value for money information are sound and accurately reflect the external third-party survey results.

Satisfied vulnerable customers

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
% customers surveyed	85	82	85	85	85	85

This bespoke PC is new for AMP7. It measures how satisfied vulnerable customers on the company's PSR are with the services they receive.

The survey is conducted by phone by an external third-party market researcher and includes a single question that asks customers to rate their satisfaction with the services they receive through the PSR. Customers who respond that they are 'satisfied' or 'very satisfied' are counted toward the total.

The associated incentive is reputational.

The company achieved a score of 82% for this PC in 2020/21, below the target of 85% (which remains the same each year during the AMP).

The Challenge Panel notes that there were seven customers who were dissatisfied or very dissatisfied with the PSR out of 450 surveyed. While recognising that this is a relatively small adverse number, the Challenge Panel understands that over 16% responded neither satisfied nor dissatisfied and is disappointed the target wasn't met.

The company explained the improvements it is planning to increase satisfaction levels. These include using case studies to better understand PSR customer needs, increased communication with PSR customers by letter and a data cleanse of the Register. The Challenge Panel will monitor progress against this Commitment during the coming year.

Turner & Townsend confirmed that the company's procedures for reporting its PSR satisfaction numbers are sound and accurately reflect the external third-party survey results.

Void properties

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
% household properties	1.90	1.80	1.90	1.80	1.80	1.80

This is a PC bespoke to Bristol Water. It measures the number of household properties classified as void as a percentage of the total number of household properties served by the company. A property is deemed to be void if it is connected to the public water supply network but, because it is unoccupied, it does not receive a charge.

The Commitment was shadow reported by Bristol Water in 2019/20. The incentive is financial with underperformance payments. A performance collar is in place for this PC, beyond which incentive payments are fixed. Payments are made in period.

Bristol Water's household void property score in 2020/21 was 1.80% and so outperformed the target of 1.90%. The corresponding score in 2019/20 was 2.54%.

During 2020/21 the Challenge Panel undertook a 'deep-dive' review of the company's void property identification and management process. This covered:

- Joint working Bristol Water undertakes with Wessex water on voids

- Possible double counting if a void has both a Bristol Water water connection and a Wessex sewerage connection
- The reporting of the cost of dealing with a water and sewerage void
- Reducing the number of voids reduces all customer bills
- Properties with a very low Rateable Value means the cost of keeping the void (even if water is used) would be less than the bad debt arising from no payment of bills
- Bristol Water were 8th in the table of water companies in 2019/20 for voids and at 2.54% had a lower than average % of voids (2.67%)

The Challenge Panel welcomed the company's strong performance against this Commitment. It noted that metering potentially void properties has helped Bristol Water outperform its target while at the same time increasing meter penetration.

Turner & Townsend confirmed the company's methodology for reporting void is robust and the resulting data are accurate.

Total customer complaints

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
Household complaints per 10,000 connections (industry upper quartile from previous year)	87.3	58.9	Industry upper quartile (from 2020-21)	Industry upper quartile (from 2021-22)	Industry upper quartile (from 2022-23)	Industry upper quartile (from 2023-24)

This PC is bespoke to Bristol Water and measures the total complaints by household customers received by the company per 10,000 connections.

It includes the combined total of unwanted contacts (i.e. telephone complaints), written complaints (letter and email) and contacts via new contact channels (such as social media or webchat). The performance commitment each year is to meet the upper quartile performance in England and Wales from the previous year.

The PC was shadow reported by Bristol Water in 2019/20. The associated incentive is reputational.

Bristol Water's total customer complaints per 10,000 household connections score in 2020/21 was 58.9%, significantly outperforming the target of 87.3%. The corresponding score in 2019/20 was 73.4%.

The Challenge Panel was very pleased to note the company's performance in 2020/21 and the improvement over the previous year.

Turner & Townsend confirmed that the company's procedures for reporting customer complaints are sound and produce accurate data.

Outcome: Safe and Reliable Supply of Water

Water quality compliance

Unit	Target 2020	Actual 2020	Target 2021	Target 2022	Target 2023	Target 2024
Compliance Risk Index (CRI)	0.00	3.02	0.00	0.00	0.00	0.00

This is a PC common to all companies and is measured on a calendar year basis. The definition for this performance commitment is set by the Drinking Water Inspectorate (DWI) in collaboration with the industry. A CRI score is calculated for every individual compliance failure at water supply zones, supply points and treatment works, and service reservoirs. The annual CRI for a company, for any given calendar year, is the sum of the individual CRI scores for every compliance failure reported during the year.

The PC was shadow reported by Bristol Water in 2019. The incentive is financial with underperformance payments only. A performance deadband (within which no incentive payments apply), plus a performance collar (beyond which payments are fixed), are in place for this PC. Payments are made in period.

Bristol Water's CRI score for 2020 was 3.02, against the target of zero. The corresponding score in 2019 was 2.31. the company incurred a penalty of £195,000 as a result of its performance in 2020.

While the Challenge Panel is disappointed that the company didn't meet its CRI target, and that its performance in 2020 was worse than the year before, it appreciates that the metric is very sensitive. It notes that one incident in December 2020 contributed 2.27 to the 3.02 CRI total. It was reassured by the company that the level of performance does not indicate a deterioration in its network condition. The Challenge Panel will continue to encourage the company to achieve the highest possible water quality it supplies to its customers. It will also review the CRI measurement methodology to better understand the sensitivity of the metric to water quality compliance failures.

Turner & Townsend confirmed the company's methodology for reporting the CRI is robust and the resulting data are accurate.

Water supply interruptions

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
HH:MM:SS per prop per year	0:06:30	0:30:17	0:06:08	0:05:45	0:05:23	0:05:00

This PC is common to all companies and is calculated as the average number of minutes lost per customer for the whole customer base for interruptions that lasted three hours or more.

The PC also applied during AMP7. The incentive is financial with both outperformance and underperformance payments. A performance cap and collar are in place for this PC, beyond which incentive payments are fixed. Payments are made in period.

Bristol Water's performance against this PC for 2020/21 was 0:30:17 HH:MM:SS, against the target of 0:06:30 HH:MM:SS. The corresponding score in 2019/20 was 0:09:17 HH:MM:SS. The company incurred a penalty of £1.544 million in 2020/21 as a result of its performance.

Performance against this measure can be significantly impacted by large unplanned supply interruptions. The company suffered three such incidents during 2020/21 and the Challenge Panel was kept informed of these, the causes of them and the company's responses. One was caused by third part damage to the company's network. The Challenge Panel understand that without these three large interruptions, the company would have achieved a score of 0:5:12 HH:MM:SS and so would have met its 2020/12 target for this PC.

The Challenge Panel reviewed the company's improvements to its operational processes and systems to help minimise the impact of unplanned supply interruptions. These have included improved use of data to predict where problems may occur, increased readiness to respond, use of new operational methods to keep water in supply, and better communications with developers and landowners over the location of mains. Most of these initiatives were in place before the large interruptions happened. These, plus a cultural shift towards keeping customers in supply, had mitigated the effects of other interruptions that occurred during the year.

While the Challenge Panel welcomes these initiatives and can see the benefits of them, it regards many as reactive. During the coming year, the Challenge Panel will be reviewing the effectiveness of the proactive work the company is now undertaking. This will include the use of smart visual analytics to identify potential problems and the targeting of mains renovations.

Turner & Townsend confirmed that the company's procedures for reporting supply interruptions are sound and produce accurate data.

Mains repairs

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
Nr per 1,000km of mains	138.4	150.1	136.5	134.6	132.7	130.7

This PC is common across the industry. It is reported as the number of mains repairs per thousand kilometres of the entire water main network (excluding communication and supply pipes).

The PC was shadow reported by Bristol Water in 2019/20. The incentive is financial with underperformance payments (penalties) only. A performance collar is in place for this PC, beyond which incentive payments are fixed. Payments are made in period.

The company undertook 150.1 repairs per thousand km of mains in 2020/21 against a target of 138.4. The corresponding figure for the previous year was 115.5. The company incurred a penalty of £68,000 as a result of missing the target in 2020/21.

Bristol Water explained that the number of repairs in early 2021 was double the norm for that time of year. This was due to freeze-thaw events. The Challenge Panel understands that such conditions can cause structural and operational problems on the pipe network, and that these are largely difficult to predict. The Challenge Panel welcomes the new operational practices introduced by the company which aim to provide a continuous supply of water to customers in such events. However, in the coming year, the Challenge Panel will review in more detail the measures the company is taking to reduce the need for mains repairs.

Turner & Townsend confirmed the company's methodology for reporting mains repairs is robust and the resulting data are accurate.

Unplanned outage

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
% of peak week production capacity	2.34	0.20	2.34	2.34	2.34	2.34

This PC is common across the industry. It is reported as the temporary loss of peak week production capacity in the reporting year (M/d) weighted by the duration of the loss (in days). Unplanned outage for each water production site is calculated separately and then summed over the reporting year to give a total actual unplanned outage for the associated water resource zone. The company water resource zone weighted outage is then summed and normalised based on overall company peak week production capacity to be reported as a percentage.

The PC was shadow reported by Bristol Water in 2019/20. The incentive is financial with underperformance payments (penalties) only. A performance collar is in place for this PC, beyond which the penalty is fixed. Any penalties are incurred in period.

Bristol Water's outage performance in 2020/21 was 0.20%, significantly better than the target of 2.34%. The reported outage in 2019/20 was 0.72%.

The Challenge Panel is pleased to note the company's performance in 2020/21 and the improvement over the previous year.

Turner & Townsend confirmed that the company's procedures for reporting unplanned outages are sound and produce accurate data.

Risk of severe restrictions in a drought

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
% population at risk	38.0	56.9	29.8	29.8	29.8	25.6

This PC is common across the industry. It is reported as the percentage of the customer population at risk of experiencing water severe restrictions in a 1-in-200 year drought, on average, over 25 years.

The PC was shadow reported by Bristol Water in 2019/20. The incentive is reputational.

56.9% of the company's population was calculated as being at risk in 2020/21 of severe restrictions in a drought. This is above the target of 38%. The figure for 2019/20 was 85.1%.

The Challenge Panel notes that Bristol Water's single water resource zone significantly impacts performance against this PC. Most other companies operate multiple resource zones. The company has explained to the Challenge Panel that its single zone enables it to move water effectively around its area. Resilience of the network is high because of this. The Challenge Panel understands this. It also notes that if Bristol Water continues to outperform its leakage targets, the risk of severe water restrictions will continue to reduce.

Bristol Water is a member of the West Country Water Resources Group (WCWRG), along with South West Water and Wessex Water. The WCWRG is tasked with assessing and planning future water resources in the west country region and investigating the feasibility of transferring surplus resources to areas of the country that are water stressed. The Challenge Panel has expressed concern to the company that the governance structure of the WCWRG does not include customer representation. It has asked the Bristol Water and its Board to lobby the WCWRG to address this.

Turner & Townsend confirmed the company's methodology for reporting this PC is robust and the resulting data are accurate.

Water quality contacts - appearance

Unit	Target 2020	Actual 2020	Target 2021	Target 2022	Target 2023	Target 2024
Nr per 1,000 population	0.83	1.07	0.73	0.63	0.53	0.43

This PC is bespoke to Bristol Water and is measured on a calendar year basis. It is reported as the number of times the company is contacted by consumers due to the drinking water not being clear, reported per 1,000 population.

The PC was shadow reported by Bristol Water in 2019. The incentive is financial with both outperformance and underperformance payments. A performance cap and collar are in place for this PC, beyond which the incentive payment is fixed. Payments are made in period.

The number of water quality customer contacts concerning appearance received by Bristol Water in 2020 was 1.07 per thousand population. This was above the target of 0.83. The number reported in 2019 was 1.03. The company incurred an underperformance payment of £42,000 as a result of its performance in 2020.

The Challenge Panel was disappointed to see that the company failed to meet its target in 2020 and that performance had worsened slightly from the previous year. It has challenged the company over its plans and timescale to reduce the number of such water quality contacts.

The company has explained that there isn't a single cause of contacts about the appearance of water. Discolouration complaints make up most of the total. Third party actions (eg hydrant use) and bursts both have an impact, rather than lack of asset investment. Different causes are recorded each month and there is no useful trend data at present. Improvements may take a long time. The company has agreed to inform the Challenge Panel if it discovers a single cause of such complaints that can be rectified.

The Challenge Panel notes that Bristol Water has agreed an undertaking with the Drinking Water Inspectorate (DWI) to reduce discoloured water in specific supply zones. The Challenge Panel will review progress against this undertaking during the coming year.

Turner & Townsend confirmed that the company's procedures for reporting water quality contacts are sound and produce accurate data.

Water quality contacts – taste and odour

Unit	Target 2020	Actual 2020	Target 2021	Target 2022	Target 2023	Target 2024
Nr per 1,000 population	0.40	0.35	0.36	0.32	0.28	0.25

This PC is bespoke to Bristol Water and is measured on a calendar year basis. It is reported as the number of times the company is contacted by consumers due to the taste and odour of drinking water, reported per 1,000 population.

The PC was shadow reported by Bristol Water in 2019. The incentive is financial with both outperformance and underperformance payments. A performance cap and collar are in place for this PC, beyond which the incentive payments are fixed. Payments are made in period.

The number of water quality contacts concerning taste and odour received by the company in 2020 was 0.35 per thousand population This was below the target of 0.40. The number reported in 2019 was 0.39. The company earned an outperformance payment of £11,000 as a result of its performance in 2020.

The Challenge Panel welcomes the reducing trend with taste and odour complaints. It notes the company's assertion that many such complaints stem from internal plumbing systems and is pleased to see that Bristol Water continues to improve the information available to customers to help prevent such problems.

Turner & Townsend confirmed the company's methodology for reporting water quality contacts is robust and the resulting data are accurate.

Properties at risk of receiving low pressure

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
Nr properties below low pressure ref level	65	57	61	57	53	49

This PC is bespoke to Bristol Water. It is defined as the number of properties receiving or at risk of receiving water pressure below the low pressure reference level. This measure is calculated as the total number of properties receiving water pressure below standard, minus the number of those properties that are covered by predetermined allowable exclusion categories as detailed in Ofwat's reporting guidance.

The PC was shadow reported by Bristol Water in 2019/20. The incentive is financial with outperformance and underperformance payments. A performance cap and collar are in place for this PC, beyond which the incentive payments are fixed. Payments are made in period.

57 properties were reported as being at risk of receiving low water pressure in 2020/21 compared to the target of 65. The corresponding number in 2019/20 was also 57. Bristol Water earned an outperformance payment of £37,000 as a result of its performance in 2020/21.

The Challenge Panel welcomed the company's performance against this measure and encourages it to improve the position of such properties as soon as it can.

Turner & Townsend confirmed that the company's procedures for reporting properties at risk of low water pressure are sound and produce accurate data.

Turbidity at water treatment works (WTWs)

Unit	Target 2020	Actual 2020	Target 2021	Target 2022	Target 2023	Target 2024
Nr WTWs turbidity 95 th percentile equals or exceeds 0.5 NTU threshold	0	0	0	0	0	0

This PC is bespoke to Bristol Water and is measured on a calendar year basis. It is defined as the number of operational potable water treatment works whose turbidity 95th percentile equals or exceeds a 0.5 NTU (Nephelometric Turbidity Units) threshold. Turbidity in raw water (the clarity of the water) affects the appearance of drinking water and the effectiveness of disinfection processes.

The PC was shadow reported by Bristol Water in 2019. The incentive is financial with underperformance payments only. No performance deadband, cap or collar are in place for this PC. Payments are made in period.

Turbidity at WTWs in 2020 was zero, in line with the target. The Challenge Panel welcomed this. The performance in 2019 was also zero.

Turner & Townsend confirmed the company's methodology for reporting turbidity at WTWs is robust and the resulting data are accurate.

Unplanned non-infrastructure maintenance

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
Nr jobs	3,272	3,134	3,272	3,272	3,272	3,272

This PC is bespoke to Bristol Water. It is defined as the total number of unplanned non-infrastructure maintenance jobs, required as a result of equipment failure or reduced asset performance. Non-infrastructure typically means underground assets, for example water mains.

The PC was shadow reported by Bristol Water in 2019/20. The incentive is financial with underperformance payments (penalties) only. A performance collar is in place for this PC, beyond which the incentive payment is fixed. Payments are made in period.

The total number of unplanned non-infrastructure maintenance jobs reported by Bristol Water in 2020/21 was 3,134. This was less better than the target of 3,272. The performance in 2019/20 was 3,327.

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The Challenge Panel welcomed the company's performance in 2020/21 against this metric and the improvement over the previous year.

Turner & Townsend confirmed that the company's procedures for reporting unplanned non-infrastructure maintenance jobs are sound and produce accurate data.

Glastonbury Street network resilience

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
Expected nr months delay to deliver schemes	0	0	0	0	0	0

This PC is bespoke to Bristol Water. It is defined as the expected number of months delay to deliver a permanent secondary source of supply to the Glastonbury Street area, covering a population of approximately 28,000, by 31 March 2025.

The PC is new for AMP7. The incentive is financial with underperformance payments (penalties) only. No performance deadband, cap or collar are in place for this PC. Any penalties incurred during the AMP are applied in 2024/25.

No delay to the delivery of the Glastonbury Street network resilience schemes has been reported in 2020/21.

Bristol Water confirmed to the Challenge Panel that the scheme is on track to be delivered within the five-year period as required by the FD.

Turner & Townsend confirmed the company's methodology for reporting progress against this scheme is robust and the reported value of zero for 2020/21 is accurate.

Outcome: Local Community and Environmental Resilience

Leakage

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
Three-year average (%)	6.1	6.9	11.4	15.8	19.0	21.2
Three-year average (M/d)	38.2	37.9	N/A	N/A	N/A	N/A
Annual (M/d)	36.4	35.5	N/A	N/A	N/A	N/A

This PC is common to all companies. It is defined as the percentage reduction of three-year average leakage from the 2019-20 baseline (40.7 Ml/d). The targets are set against this definition. Companies are also required to report leakage as a three-year average in Ml/d to one decimal place, corresponding to the percentage reduction reported.

Bristol Water has also reported its annual leakage for 2020/21 in Ml/d.

The PC was also used in AMP6. The incentive is financial with both outperformance and underperformance payments. A performance cap and collar are in place for this PC, beyond which the incentive payments are fixed. Incentives are paid in period.

Bristol Water reduced its three-year average leakage by 6.9% in 2020/21, outperforming the target of 6.1%. Its three-year average leakage level in 2020/21 was 37.9 M/d and the actual leakage volume in 2020/21 was 35.5 Ml/d. The company's leakage level reported in 2019/20 was 37.0 Ml/d.

The company's leakage reduction performance in 2020/21 earned it an outperformance payment of £49,000.

The Challenge Panel congratulates Bristol Water on its leakage performance in 2020/21. This continues the strong downward trend in recent years. The company is one of the industry leaders in leakage reduction with its current leakage levels now some 25% below 2015/16.

Turner & Townsend confirmed that the company's procedures for reporting unplanned non-infrastructure maintenance jobs are sound and produce accurate data.

Per capita consumption

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
Three-year average (%)	1.3	-2.7	2.6	3.9	5.1	6.3
Three-year average (l/h/d)	147.0	152.9	N/A	N/A	N/A	N/A
Annual (l/h/d)	143.3	161.1	N/A	N/A	N/A	N/A

This PC is common to all companies and is new for AMP7. Per capita consumption is defined as the sum of measured household consumption and unmeasured household consumption divided by the total household population. The targets are set against this definition.

The PC is the percentage change in the company's three-year average per capita consumption (PCC).

Companies are also required to report per capita consumption as a three-year average in litres per head per day to one decimal place, corresponding to the percentage reduction in PCC reported.

Bristol Water has also reported its annual per capita consumption for 2020/21 in litres per head per day.

The PC was also used in AMP6. The incentive is financial with both outperformance and underperformance payments. A performance cap and collar are in place for this PC, beyond which the incentive payments are fixed. Incentives are paid in period.

The company informed the Challenge Panel that, due to the pandemic, Ofwat has proposed a change to the timing of the PCC ODI for performance in 2020/21. For 2020/21 Ofwat has proposed that the PCC ODI be determined at the end of the price control period. However, it has also asked companies to still report on their notional ODI for the year. The company assures the Challenge Panel that the consequence is that the ODI for PCC will not impact customer bills at the next available reporting year (2020/21 ODIs that are in-period would impact customer bills in 2022/23). However, the company's Annual Performance Report shows the indicative monetary amount. The full financial impact on customers' bills (which would then impact bills over the AMP8 period, rather than affecting customer bills in 2025/26) will be determined when the company's PCC performance for all five years of AMP7 has been reported.

The Challenge Panel understands that Ofwat is now [formally consulting](#) with companies to permanently revise the PCC ODI from in-period to end of period.

Bristol Water's reported three-year average household PCC increased by 2.7% in 2020/21, against a target reduction of 1.3%. Its three-year average PCC in 2020/21 was 152.9 l/h/d and the actual PCC in 2020/21 was 161.1 l/h/d. The company's PCC reported in 2019/20 was 146.4 l/h/d.

An underperformance payment of £177,000 would have been incurred as a result of the company's performance in 2020/21. However, the Challenge Panel notes that, due to the pandemic, Ofwat has proposed a change to the timing of the PCC ODI for performance in 2020/21. For all years in this reporting period (2020/21 to 2024/25) Ofwat has proposed that the PCC ODI be determined at the end of the price control period rather than 'in period' as defined in the FD.

The company explains that PCC went up in 2020/21 due to increased home working resulting from the pandemic. The Challenge Panel accepts this and notes that there was a corresponding fall in non-household consumption to prove this. The company informed the Challenge Panel that overall water into supply in 2020/21 was similar to the previous year.

In its Annual Report 2020, the Challenge Panel noted that consumption had been rising generally across the industry. Influencing customer behaviour in the future, including water consumption, forms part of the company's customer and community focussed Social Contract. The Challenge Panel had welcomed this innovative approach and was involved in its planning and the monitoring of performance.

Unfortunately, the pandemic stifled some of the company's Social Contract initiatives in 2020/21.

The Challenge Panel remains focused on challenging Bristol Water's approach to educating people to use less water and to increase meter penetration. The company reports that a number of water usage education campaigns are ongoing, including its new Foundation website which covers the value of water and ways of reducing usage. These initiatives will take time to bed in, however.

The Challenge Panel believes that in order to create step change in customer behaviour, there have to be greater partnerships at national level with more energy than at present. Bristol Water is using its involvement with the Resource West as its main vehicle for change. Resource West is a partnership of local stakeholders (including councils, water companies, energy companies, waste companies) which aims to facilitate transformational shifts in consumer behaviour to reduce consumer consumption and waste. The Challenge Panel welcomes Bristol Water's involvement with Resource West.

The company says it will focus locally on what it can control but it needs national action on private renters, for example.

The Challenge Panel will monitor closely the company's initiatives to reduce PCC in the coming year.

Turner & Townsend confirmed the company's methodology for reporting PCC is robust and the reported values for 2020/21 are accurate.

Meter penetration

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
% household properties	67.70	60.26	69.50	71.30	73.10	75.00

This PC is bespoke to Bristol Water. It is defined as the percentage of billed residential customers that are charged for water based on metered consumption.

The PC also applied during AMP6. The incentive is financial with both outperformance and underperformance payments. No performance deadband or a cap and collar are in place for this PC. Incentive payments are made at the end of the AMP period, that is in 2024/25.

Bristol Water's reported meter penetration in 2020/21 was 60.26% against a target of 67.70%. The meter penetration in 2019/20 was 58.98%.

No underperformance payment was incurred in 2020/21 as any overall incentive payments are made in 2024/25.

In its Annual Report 2020, the Challenge Panel noted that company's new meter marketing initiatives were intended to provide a much stronger opportunity to meet its meter installation target.

The company reports that the restrictions imposed by the pandemic during 2020/21 were the main reason that fewer meters than target were installed in properties. The Challenge Panel accepts this and will encourage the company to get back on track with its meter installation programme as soon as possible.

Turner & Townsend confirmed that the company's procedures for meter penetration are sound and produce accurate data.

Raw water quality of sources

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
Kg phosphorous loss reduction	109	155	216	322	427	531

This PC is bespoke to Bristol Water. It is defined as the estimated kilograms of phosphorus saved from being lost to the environment. The metric is an assessment of the company's progress in implementing catchment management of nutrients across its catchments.

The PC also applied during AMP6. The incentive is financial with both overperformance and underperformance payments. A performance collar is in place for this PC, beyond which the incentive payments are fixed. Payments are made in period.

The amount of phosphorous the company saved from being lost to the environment in 2020/21 was 155kg, against the target of 109kg. The amount in 2019/20 was reported as zero. The performance reported in 2020/21 earned Bristol Water an overperformance payment of £8,000.

The Challenge Panel welcomes the company’s performance against this PC.

In its Annual Report 2020, the Challenge Panel said it would seek clarity on the company’s use of hard interventions and the promotion of behavioural change by stakeholders (eg farmers) and would like to review source data and raw water quality sample analysis to see evidence of their impact. It would also explore the relationship between the company’s statutory environmental obligations and any additional environmental improvement work associated with its Social Contract.

The opportunity to do this didn’t arise in 2020/21. The Challenge Panel will be engaging with the company on these points, and on the details of the methodology used to calculate the amount of phosphorous saved from being lost to the environment, at a meeting later this year. It will report its findings in its Annual Report 2022.

Turner & Townsend confirmed the company’s methodology for reporting against this PC is robust and the reported value of zero for 2020/21 is accurate.

Biodiversity Index

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
Index	17,668	17,668	17,678	17,689	17,700	17,711

This PC is bespoke to Bristol Water. It is a score based on the cumulative hectares and metres of habitat (for example, grassland or hedges) and the quality of this habitat across company sites.

The Biodiversity Index metric is defined by:

[Hectares of priority habitat] x [grade of this habitat] x [distinctiveness score of this habitat]

Plus:

[Metres of linear priority habitat] x [grade of this habitat] x [distinctiveness score of this habitat]

The PC also applied during AMP6. The incentive is financial with both overperformance and underperformance payments. A performance cap and collar are in place for this PC, beyond which the incentive payments are fixed. Payments are made in period.

Bristol Water’s Biodiversity Index score in 2020/21 was 17,668 and so met the target for the year. No incentive payments result from this performance. The Index score in 2019/20 was 17,670.

The Challenge Panel is pleased that the target was met.

In its Annual Report 2020, the Challenge Panel said it wished to better understand the how performance against the Biodiversity Index is measured and assured and how it translates into environmental improvements. It also wished to review source data and to understand the relationship between the company’s statutory environmental obligations and any additional environmental improvement work associated with its Social Contract.

The opportunity to do this didn’t arise in 2020/21. The Challenge Panel will be engaging with the company on these points at a meeting later this year. It will report its findings in its Annual Report 2022.

Turner & Townsend confirmed that the company's procedures for reporting unplanned non-infrastructure maintenance jobs are sound and produce accurate data.

Waste disposal compliance

Unit	Target 2020	Actual 2020	Target 2021	Target 2022	Target 2023	Target 2024
% compliant samples	100	98	100	100	100	100

This PC is bespoke to Bristol Water and is measured on a calendar year basis. It is defined as the percentage of total trade effluent discharge samples that meet the consent requirements in the Environment Agency permits.

The PC also applied during AMP7. The incentive is financial with underperformance payments only. A performance deadband (within which no incentive payments apply), plus a performance collar (beyond which payments are fixed), are in place for this PC. Payments are made in period.

Bristol Water achieved a 98% compliance against this waste disposal PC in 2020 and so did not meet the target of 100%. The compliance level in 2019 was also 98%. The level of performance in 2020 was within the incentive deadband so no payment was incurred.

The company has explained the reasons for the compliance failures at the three sites during 2020. Blagdon had the most failures as in previous years. In its Annual Report 2020, the Challenge Panel said it was very keen to understand the compliance issues at Blagdon, the company's statutory obligations at the site and the opportunities for improvements, their timing and linkage to wider customer preferences for the environment. The company has agreed to engage with the Panel on these issues at a meeting arranged for later this year.

Turner & Townsend confirmed the company's methodology for reporting waste disposal compliance is robust and the reported value of zero for 2020 is accurate.

WINEP compliance

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
% schemes completed	100	100	100	100	100	100

This PC is bespoke to Bristol Water and is new for AMP7. It is defined as the percentage of Water Industry National Environment Programme (WINEP) schemes completed each year measured against the programme agreed with the Environment Agency on 1 April 2019.

The PC was shadow reported by Bristol Water in 2019/20. The incentive is financial with underperformance payments only. No performance deadband, cap or collar apply to this PC. Payments are made in period.

Bristol Water has reported that all its WINEP schemes due for completion in 2020/21 were finished. The EA has confirmed this to the Challenge Panel. No outperformance payments have been incurred because of the nature of the incentive regime for this PC. All the company's WINEP schemes that fell due during 2019/20 were also completed in that year.

The Challenge Panel is pleased that the company is meeting its WINEP commitments. During the coming year, the Challenge Panel will continue to confirm the relationship between the company's statutory environmental obligations and the environmental improvement work associated with its Social Contract.

Turner & Townsend confirmed that the company's procedures for reporting its WINEP progress are sound and produce accurate data.

Delivery of WINEP requirements

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
Met or Not Met	Met	Met	Met	Met	Met	Met

This PC is bespoke to Bristol Water. It records whether the company has "met" or "not met" all of its requirements for the WINEP, in the reporting year.

This measure tracks the completion of required schemes in each year, as per the latest WINEP programme published by DEFRA. If any scheme is not delivered by the time specified in the WINEP, the company will report "not met".

The incentive associated with this PC is reputational.

Bristol Water has reported that it met all its WINEP requirements in 2020/21. The EA has confirmed this to the Challenge Panel. The company's WINEP requirements were also met during the previous year.

The Challenge Panel is pleased that the company is meeting its WINEP commitments. During the coming year, the Challenge Panel will continue to confirm the relationship between the company's statutory environmental obligations and the environmental improvement work associated with its Social Contract.

Turner & Townsend confirmed the company's methodology for reporting progress against the WINEP is robust and the reported value of zero for 2020/21 is accurate.

Local community satisfaction

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
% stakeholders surveyed	85.0	88.2	85.0	85.0	85.0	85.0

This PC is bespoke to Bristol Water. It is defined as the percentage of customers who answer "very satisfied" or "fairly satisfied" to the following question: "How far do you agree that Bristol Water makes a positive contribution to the communities it serves?" Possible answers are:

- Very satisfied
- Fairly satisfied
- Neither satisfied nor unsatisfied
- Fairly Unsatisfied
- Very unsatisfied

The PC is new for AMP7. The incentive is financial with both outperformance and underperformance payments. A performance cap and collar are in place for this PC, beyond which incentive payments are fixed. Payments are made in period.

Bristol Water achieved a local community satisfaction score of 88.2% in 2020/21 against a target of 85.0%. The company earned an outperformance payment of £67,000 as a result.

While the Challenge Panel welcomed the company's achievement against this PC, it noted that only 52 stakeholders had been surveyed and only 17 had replied. The Challenge Panel has requested more detail on this and will be discussing with the company how it aims to increase participation in the survey in 2021/22.

Turner & Townsend confirmed that the company's procedures for reporting local community satisfaction are sound and produce accurate data.

Abstraction Incentive Mechanism (AIM)

Unit	Target 20/21	Actual 20/21	Target 21/22	Target 22/23	Target 23/24	Target 24/25
Megalitres from baseline if AIM triggered	-186.1 from baseline (if AIM triggered)	N/A (AIM not triggered)	-186.1	-186.1	-186.1	-186.1

This PC is bespoke to Bristol Water. The abstraction incentive mechanism (AIM) reduces abstraction of water at environmentally sensitive sites when flow or levels are below an agreed point otherwise known as a trigger. The trigger point is based on a level or flow, below which the AIM is considered to be 'switched on'. This trigger is usually related to the point at which damage is caused. It is intended to prevent the damage or ameliorate the negative impacts.

The company has included one site (Shipton Moyne) for AIM for the period 2020-25.

The PC was also used in AMP6. The AIM trigger point is 3,029.5 MI (the score from 2019/20).

The incentive is financial with both outperformance and underperformance payments. A performance cap is in place for this PC, beyond which incentive payments are fixed. Payments are made in period.

The Challenge Panel notes that the AIM was not triggered in 2020/21.

Turner & Townsend confirmed the company's methodology for reporting against the AIM is robust and the reported value of zero for 2020/21 is accurate.