ATKINS

Member of the SNC-Lavalin Group

Bristol Water AMP6 Reporter

Annual Performance Report 2019/20 Assurance Report

Bristol Water

23 June 2020

Final Report

Notice

This document and its contents have been prepared and are intended solely as information for Bristol Water and use in relation to Annual Performance Report 2019/20 Assurance Report

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This document has 48 pages including the cover.

Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
Rev 1.0	Draft for client review	K Adams / J Archer / M Macpherson / J Sutherland / J Jacobs / D Hunt / H Gavin / S Ingall / H Samour	K Adams	B Arkell	J Archer	29 05 2020
Rev 2.0	Inclusion of C-MeX and D-MeX section. Final version of document.	K Adams / J Archer / M Macpherson / J Sutherland / J Jacobs / D Hunt / H Gavin / S Ingall / H Samour	K Adams	J Archer	J Archer	12 06 2020
Rev 3.0	Minor updates following review of documentation from auditees.	K Adams / J Jacobs	K Adams	J Archer	J Archer	23 06 2020

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Assurance Statement for Bristol Water's 2019/20 APR

This document is Atkins Limited's assurance statement that encapsulates observations we made during the technical audit of aspects of Bristol Water's Annual Performance Report for 2019/20. Our findings will be presented to Bristol Water's Executive Team on 25th June 2020.

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. From the Company Monitoring Framework: 2018 Assessment, we were pleased to note that Bristol Water had met the criteria for promotion to the "targeted" assurance category.

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. We also conclude that the Company has appropriate systems and processes in place to allow it to 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. It should be read in conjunction with Bristol Water's Assurance Plan 2019/20.

Bristol Water has 21 Performance Commitments (PCs), nine of which have associated financial penalties and rewards.

As part of our independent assurance of Bristol Water's Annual Performance Report 2019/20, we have been engaged to audit the following tables and submissions to be published in Bristol Water's 2019/20 Annual Performance Report and regulatory reporting:

- Data and commentary reported as part of the Annual Performance Report (APR) to Ofwat:
    - Table 3A – Outcome performance table, including underperformance penalties and outperformance payments.
    - Table 3B – Sub-measure performance table
    - Table 3D – SIM (Service Incentive Mechanism)
    - Tables 4A, 4B, 4C, 4D, 4F and 4G
    - Table 3S – shadow reporting of new definition data (included in separate report)
    - Tables 4J, 4L, 4P, 4Q and 4V (formerly Wholesale Cost Tables)
    - C-Mex and D-MeX
- WRMP Annual Review
- GSS payments

This year we have adjusted our auditing process to accommodate the travel restrictions due to COVID-19. In a series of approximately 38 remote audits in May and June 2020, 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.

We were provided with a copy of the commentary the Company proposed to publish to explain and clarify its reported performance information. We provided feedback on whether it was a reasonable interpretation of what we had seen during our audits.

Bristol Water has met 14 of its 21 committed performance levels for 2019/20 and will incur financial penalties on 1 (Meter Penetration) of the 7 PCs where it has underperformed. The Company will also receive an

outperformance payment in year (Leakage), a net penalty payment across AMP6 due to its AMP6 average performance. In particular this year, the Company has shown an improvement since 2018/19 in unplanned customer minutes lost, asset reliability (infrastructure), hosepipe ban frequency, negative water quality contacts, meter penetration, raw water quality of sources, biodiversity index, per capita consumption, value for money, ease of contact from surveys and negative billing contacts. Notable observations on Bristol Water's performance are set out below.

- The Company has again significantly improved its leakage performance from 2018/19 by 4.9 megalitres per day. The reported figures reflect the benefits of the Company leakage strategy implemented in 2017-18.
- Unplanned customer minutes lost again shows a reduction on 14.7 minutes per property per year reported in 2018/19 to 11.1. The Company has comfortably met its performance commitment for the final year of AMP6 of 12.2 minutes., having changed its contractors and improved operational approach and data since the halfway point through the reporting year, albeit during a period of clement weather, would indicate that the PC can be met or even bettered, in the absence of any major events.
- After reporting two consecutive years of 'marginal' performance for asset reliability (infrastructure) and seeing year on year improvements, the Company has been able to meet its commitment performance level for the final year of the AMP.
- The Company has successfully met its committed performance levels on non-infrastructure asset reliability, security of supply index and hosepipe ban frequency for the fifth year in a row and is meeting its targets for the final year of the AMP.
- The Company has failed to meet its metering penetration target in every year of the AMP, and as such will be accountable for an underperformance payment. The Company has met or significantly exceeded its committed performance levels for negative billing contacts, water poverty and value for money but failed to do so for general satisfaction, ease of contact or the SIM proxy.

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 APR and regulatory submissions 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 performance in 2019/20 and end of AMP6 position.

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

Executive summary

Introduction

This report summarises the external technical assurance (Reporter) services Atkins has provided in relation to aspects of Bristol Water's 2019/20 Annual Performance Report (APR) Sections 3 and 4, GSS Payments and Water Resources Management Plan (WRMP) Annual Review. This is our fifth year of providing these services to Bristol Water and the final year of AMP6 in which Bristol Water has reported against the measures defined in the 2014 Final Determination by Ofwat (as subsequently amended as a result of the deliberations of the CMA in October 2015 and Ofwat's Corrigenda to the Final Determination in April 2018) and this is the fourth year that we have provided assurance for the WRMP Annual Review. Our approach has been shaped by the expectations of the assurance to be provided for a "prescribed" water company. From the Company Monitoring Framework: 2018 Assessment, Bristol Water met the criteria for promotion to the "targeted" assurance category. Throughout, we have received the cooperation of the Company and have had the freedom to express our opinions. We have had access to and have fed back to the Senior Leadership Team.

Approach

We carried out a series of structured audits, which we tailored to the different data types being reported. As with the previous four years, for all audits this year we carried out a combined methodology and data audit; these were in line with Bristol Water's Assurance Plan.

Our focus on particular areas was risk-based as highlighted in Bristol Water's own analysis and supplemented by our experience in identifying and quantifying the elements of the journey from raw to published data that introduce material errors.

After detailed planning of an audit schedule to ensure the appropriate people (Company and technical auditors) are present, we formally notify all parties of the expectation of the audits. We provide immediate verbal feedback and document our audit findings in both a rapid feedback e-mail and a detailed audit summary. These provide the Company with the opportunity to correct errors of fact and respond with explanations or further information to our observations. The essence of the summaries is captured in an Issues Log which is used to manage the progress on matters arising. The supporting documentation is available for inspection.

Summary of Findings

Each data table reviewed at audit was allocated an overall rating of Red, Amber or Green to reflect their priority, with separate ratings for the methodology, data and commentary. Table 0-2 to Table 0-7 below provide a summary of our audit findings. Descriptions for each category are given in Table 0-1 below.

Table 0-1 Description for RAG categories

Category	Description
RED	High Priority: Failure to comply with reporting requirements, major failure of process or data errors that may lead to misreporting.
AMBER	Medium Priority: Shortfalls in methodology and/or methodology documentation. Methodology under development. Incomplete data set or minor errors identified that do not alter the performance reported relative to targets and threshold values.
GREEN	Low Priority: Minor revisions to methodology and/or methodology documentation needed. Issue(s) not judged to be material or no issues.
TBC	To be confirmed – missing data or information

Table 0-2 Performance Commitments (APR Table 3A-D) – Overall Assessment

Measure	Reported performance (19/20)	Target performance (19/20)	Methodology		Data	Commentary	Assurance summary
			Method	Documentation			
A1: Unplanned customer minutes lost	11.1 mins	12.20 mins	Green	Green	Green	Green	Methodology and data are robust.
A2: Asset reliability – infrastructure	Stable	Stable	Green	Green	Green	Green	Robustly reported.
Sub-indicator: Bursts	796	950	Green	Green	Green	Green	Robustly reported.
Sub-indicator: DG2 Low pressure	57	69	Green	Green	Green	Green	Robustly reported.
A3: Asset reliability - non-infrastructure	Stable	Stable	Green	Green	Green	Green	Methodology and data are robust.
Sub-indicator: Unplanned maintenance	3,327	3976	Green	Green	Green	Green	Methodology and data are robust.
Sub-indicator: Turbidity at treatment works	0	0	Green	Green	Green	Green	Methodology and data are robust.
B1: Population in centres >25,000 at risk from asset failure	9,063	9,063	Green	Green	Green	Green	The PC is reported robustly and consistently.
C1: Security of supply index (SOSI)	100	100	Green	Green	Green	Green	Some concerns on one aspect of the methodology (raw/treated losses), but these were appropriately managed in the report year.
C2: Hosepipe ban frequency	1.55	3.3	Green	Green	Green	Green	We note that the PC calculation does not include a climate change allowance. The target would still be met even if

Measure	Reported performance (19/20)	Target performance (19/20)	Methodology		Data	Commentary	Assurance summary
			Method	Documentation			
							this were changed.
D1: Mean zonal compliance (MZC)	99.97%	100%	Green	Green	Green	Green	Methodology and data are robust.
E1: Negative water quality contacts*	1,712	2,221	Green	Green	Green	Green	Robustly reported.
F1: Leakage	40.9 (ODI method)	43	Green	Green	Green	Green	Well established, correctly followed process.
G1: Meter penetration	59.0%	65.9%	Green	Green	Green	Green	Methodology and data are robust.
G2: Per capita consumption (PCC)	144.7 (ODI)	142	Green	Green	Green	Green	Well established process; possible issues with demographic coverage of the monitor, which are in hand.
H1: Total carbon emissions	19 kg CO2e / capita	20 kg CO2e / capita	Green	Green	Green	Green	Methodology and data are robust.
H2: Raw water quality of sources	Improving (-25%)	Stable (+/- </= 10%) For 2 or more years	Green	Green	Green	Green	Methodology and data are robust.
H3: Biodiversity index	17,670	17,653 Improving	Green	Green	Green	Green	Methodology and data are robust.
H4: Waste disposal compliance	98%	100%	Green	Green	Green	Green	Methodology and data are robust.
I1: Percentage of customers in water poverty	0%	1.8%	Green	Green	Green	Green	Methodology and data are robust.
J1: Service incentive mechanism proxy score (SIM)	82.54	87.57 (5th)	Green	Green	Green	Green	Methods are fit for purpose. An error was identified in the calculation of the score, which has now been corrected.

Measure	Reported performance (19/20)	Target performance (19/20)	Methodology		Data	Commentary	Assurance summary
			Method	Documentation			
J2: General satisfaction from surveys	87%	> 93%	Green	Green	Green	Green	Methodology and data are robust. Improvements to documentation suggested.
J3: Value for money	75%	72%	Green	Green	Green	Green	Methodology and data are robust. Improvements to documentation suggested.
K1: Ease of contact from surveys	91.8%	> 96.5%	Green	Green	Green	Green	Methodology and data are robust. Improvements to documentation suggested.
L1: Negative billing contacts	1,274	2,170	Green	Green	Green	Green	No issues identified.

* Audits undertaken in January 2020

Table 0-3 APR Section 3 Tables - Overall Assessment

Table	Methodology	Data	Commentary	Assurance summary
3A - Outcome performance table (including underperformance penalties and outperformance payments)	Green	Green	Green	Robustly reported.
3B - Sub-measure performance table	*See A2 and A3 summaries above*			
3D - SIM (Service Incentive Mechanism)				See Performance Commitment J1 SIM summary in Table 0-2.
3S - Shadow reporting of new definitions (leakage, supply interruptions, unplanned outage, PCC, mains bursts, risk of severe restrictions in a drought and customer vulnerability)	Covered in a separate report			

Table 0-4 APR Section 4 Tables (financial and non-financial information) – Overall Assessment

Table	Lines	Methodology	Data	Commentary	Assurance summary
4A – Number of household voids	1	Green	Green	Green	No material issues identified.
4A - PCC	2	Green	Green	Green	Well established process; possible issues with demographic coverage of the monitor, which are in hand.
4A – Bulk supply export / import	3 - 4	Green	Green	Green	No material issues identified.
4A – Distribution input	5	Green	Green	Green	All concerns over the validation system have now been addressed.
4B - Totex analysis	1 to 9	Green	Green	Green	Robustly reported.
4C - Impact of AMP performance to date on RCV	1 to 6	Green	Green	Green	Robustly reported.
4D - Wholesale totex analysis – wholesale water	1 to 11	Green	Green	Green	Robustly reported.
	12 to 19	Green	Green	Green	Robustly reported.
	20 to 21	Green	Green	Green	Robustly reported.
	22 to 24	Green	Green	Green	Robustly reported.
	25 to 28	Green	Green	Green	Robustly reported.
4F - Operating cost analysis - household retail	1 to 14	Green	Green	Green	Recommendation to consider improving approach to analysis of BWBSL costs next year and explanation of variances.
4G - Wholesale current cost financial performance	3	Green	Green	Green	Robustly reported.

Table 0-5 APR Section 4 Tables (4J to 4V - previously Wholesale Cost Tables) – Overall Assessment

Table	Lines	Line numbers	Methodology		Data	Commentary	Assurance summary
			Method	Documentation			
4J - Atypical expenditure by business unit	Operating Expenditure	1 to 11	*Please refer to 4D*				
	Capital Expenditure	12 to 21	*Please refer to 4D*				
	Cash Expenditure	22 to 24	*Please refer to 4D*				

Table	Lines	Line numbers	Methodology		Data	Commentary	Assurance summary
			Method	Documentation			
	Atypical Expenditure	25 to 30	Green	Green	Green	Green	No atypical expenditure reported.
	Total Expenditure	31	*Please refer to 4D*				
4L - Enhancement capital expenditure by purpose	Enhancement expenditure by purpose	1 to 38	Green	Green	Green	Green	All issues satisfactorily resolved.
4P - Non-financial data for WR, WT and WD: Resources	Proportion of distribution input by source type	1 to 8	Green	Green	Green	Green	No significant concerns over the reported figures.
	Number and capacity of sources	9 to 23	Green	Green	Green	Green	No significant concerns over the reported figures.
	Length of raw mains	24, 27	Green	Green	Green	Green	No significant concerns over the reported figures.
	Pumping head	25 to 26	Green	Green	Green	Green	The process of data management and extraction is well controlled and appropriate procedures are in place.
	Water resources capacity	28	Green	Green	Green	Green	No significant concerns over the reported figures.
4P - Non-financial data for WR, WT and WD: Treatment	Total water treated	29 to 43	Green	Green	Green	Green	We had no significant concerns over the figure being reported.
	Number of treatment works	44 to 58	Green	Green	Green	Green	No significant concerns over the reported figures.
	Zonal population receiving water treated with orthophosphate	59	Green	Green	Green	Green	No significant concerns over the reported figures.
	Average pumping head - treatment / Average pumping head - resources	60	Green	Green	Green	Green	The process of data management and extraction is well

Table	Lines	Line numbers	Methodology		Data	Commentary	Assurance summary
			Method	Documentation			
							controlled and appropriate procedures are in place.
4P - Non-financial data for WR, WT and WD: Distribution	Main lengths	61 to 68	Green	Green	Green	Green	No significant concerns over the reported figures.
	Capacity	69 to 71	Green	Green	Green	Green	No significant concerns over the reported figures.
	Distribution input	72	Green	Green	Green	Green	All concerns over the validation system have now been addressed.
	Water Delivered	73 to 76	Green	Green	Green	Green	No significant water balance issues.
	Leakage	77 to 79	Green	Green	Green	Green	No significant issues.
	Comms pipes	80 to 82	Green	Green	Green	Green	No significant concerns over the reported figures.
	Network	83 to 85	Green	Green	Green	Green	No significant concerns over the reported figures.
	Age of Network	86 to 93	Green	Green	Green	Green	No significant concerns over the reported figures.
	Pumping head	94	Green	Green	Green	Green	The process of data management and extraction is well controlled and appropriate procedures are in place.
	WTW in size bands	95 to 102	Green	Green	Green	Green	No significant concerns over the reported figures.
	Proportion of Total DI band	103 to 110	Green	Green	Green	Green	No significant concerns over the reported figures.

Table	Lines	Line numbers	Methodology		Data	Commentary	Assurance summary
			Method	Documentation			
4Q - Non-financial data - Properties, population and other	Properties, population and meters	1 to 14, 16 to 17	Amber	Green	Green	Green	Overall, no significant issues with reporting. The exception is that the report used for calculating internal meters is not fit for purpose, which also impacts on the external meter numbers. It is difficult to quantify impact but it is unlikely to be material.
	Total Population Served	15	Green	Green	Green	Green	No material issues identified.
	Company area	18	Green	Green	Green	Green	No significant concerns over the reported figures.
	Lead Comms pipes	19	Green	Green	Green	Green	No significant concerns over the reported figures.
	Supply / Demand	20 to 23	Green	Green	Green	Green	Reported robustly.
	Energy Consumption	24 to 26	Green	Green	Green	Green	We queried the use of diesel allocation conversion factors. These were amended post audit. No significant concerns over reported figures.
	Mean zonal compliance	27	*See D1 – Mean Zonal Compliance*				
	Compliance Risk Index	28	Green	Green	Green	Green	N/A
	Events Risk Index	29	Green	Green	Green	Green	N/A
	Volume of leakage	30	Green	Green	Green	Green	Well established, correctly

Table	Lines	Line numbers	Methodology		Data	Commentary	Assurance summary
			Method	Documentation			
							followed process.
4V - Operating cost analysis	Opex	1 to 22	Green	Green	Green	Green	All significant issues addressed. A number of minor areas for improvement identified for next year.

Table 0-6 GSS payments – Overall Assessment

Performance Measure	Overall rating - Methodology		Data	Commentary	Assurance summary
	Method	Documentation			
Guaranteed Standards Scheme (GSS) payments (Bristol Water)	Amber	Green	Green	N/A	Overall, the methodology and data are robust. The one area of the methodology where there is potential to revisit relates to low pressure. Bristol Water's approach is reactive to customer contacts but these should be automatic payments identified through pressure data where this is available.
Guaranteed Standards Scheme (GSS) payments (Pelican)	Green	Green	Green	N/A	No material issues identified.

Table 0-7 WRMP Annual Review – Overall Assessment

Performance report	Overall rating - Methodology		Data	Commentary	Assurance summary
	Method	Documentation			
WRMP Annual Review	Green	Green	Green	Green	No significant issues identified.

Table 0-8 C-MeX and D-MeX – Overall Assessment

Performance report	Overall rating - Methodology		Data	Commentary	Assurance summary
	Method	Documentation			
C-MeX (Bristol Water)	Green	Green	Green	Green	No material issues identified.
C-MeX Survey (Pelican)	N/A (reported by BRL)	Green	Green	N/A (reported by BRL)	No material issues identified.
D-MeX	Amber	Green	Amber	Green	Improvements in processes and to reporting have been identified. Documentation has been strengthened to better capture the end to end processes.

1. Introduction

1.1. Background

Atkins Limited has been appointed by Bristol Water to provide external assurance on the regulatory submissions presented by Bristol Water (the Company) to the Water Services Regulation Authority (commonly known as Ofwat) under the conditions set out in its Licence with the Secretary of State.

Bristol Water publish an Annual Performance Report (APR) on performance indicators common to all other water supply companies (in England and Wales) and some which are bespoke to the Company as defined in the PR14 Business Plan, Final Determination and Competition and Markets Authority (CMA) deliberations. We also include in this assurance report consideration of Bristol Water's Guaranteed Standards Scheme (GSS) payments and the annual update to Bristol Water's Water Resources Management Plan (WRMP).

We have tailored our assurance with the aim of ensuring that customers and stakeholders can trust the data and information that Bristol Water provides. We consider the processes by which data are produced, the material accuracy of the data and any conclusions drawn by Bristol Water. We take an evidential approach to confirm the application of, rather than just the adequacy and appropriateness of procedures.

We note that under Ofwat's Company Monitoring Framework, Bristol Water must share full reports with Ofwat on request, if they have not been published in full. There is no duty of care to Ofwat from the assurer and Ofwat would not publish or share material provided that the Company had not published without agreement. The supporting documentation for this report (audit reports and issue log) is available if required.

1.2. Scope

The scope of this audit included the following elements:

- Data and commentary (if applicable) reported as part of the Annual Performance Report (APR) to Ofwat:
  - Table 3A - Outcome performance table, including underperformance penalties and outperformance payments
  - Table 3B - Sub-measure performance table
  - Table 3D - SIM (Service Incentive Mechanism)
  - Tables 4A, 4B, 4C, 4D, 4F and 4G
  - Table 3S – shadow reporting of new definition data
- WRMP Annual Review
- GSS payments
- Tables 4J, 4L, 4P, 4Q and 4V (formerly Wholesale Cost Tables)

An audit of Bristol Water's social tariff also took place following a request from Ofwat before the APR submission. This has been provided as a separate addendum.

The following tables show the scope of the audit in more detail.

Table 1-1 Scope of assurance – Performance Commitments

Performance Measure	Methodology and Data Audit
A1: Unplanned customer minutes lost	✓
A2: Asset reliability – infrastructure	✓
A3: Asset reliability - non-infrastructure	✓
B1: Population in centres >25,000 at risk from asset failure	✓
C1: Security of supply index (SOSI)	✓
C2: Hosepipe ban frequency	✓
D1: Mean zonal compliance (MZC)	✓
E1: Negative water quality contacts	✓*
F1: Leakage	✓
G1: Meter penetration	✓
G2: Per capita consumption (PCC)	✓
H1: Total carbon emissions	✓
H2: Raw water quality of sources	✓
H3: Biodiversity index	✓
H4: Waste disposal compliance	✓
I1: Percentage of customers in water poverty	✓
J1: Service incentive mechanism (SIM): (BW)	✓
J1: Service incentive mechanism (SIM): (Pelican)	✓
J2: General satisfaction from surveys	✓
J3: Value for money	✓
K1: Ease of contact from surveys	✓
L1: Negative billing contacts (Pelican)	✓

*Completed January 2020

Table 1-2 Scope of assurance - APR Section 3 Tables

Table	Methodology and Data Audit
3A - Outcome performance table (including underperformance penalties and outperformance payments)	✓
3B - Sub-measure performance table	✓
3D - SIM (Service Incentive Mechanism)	✓
3S - Shadow reporting of new definitions (leakage, supply interruptions, unplanned outage, PCC, mains bursts, customer vulnerability and risk of severe restrictions in a drought)	✓

Table 1-3 Scope of assurance - APR Section 4 Tables (financial and non-financial information)

Performance Measure	Methodology and Data Audit
4A - Non-financial information	✓
4B - Totex analysis	✓
4C - Impact of AMP performance to date on RCV	✓
4D - Wholesale totex analysis – wholesale water	✓
4F - Operating cost analysis - household retail	✓
4G - Wholesale current cost financial performance	✓

Table 1-4 Scope of assurance – APR Section 4 Tables (4J to 4V - previously Wholesale Cost Tables)

Table	Lines	Line numbers	Methodology and Data Audit
4J - Atypical expenditure by business unit	Operating Expenditure	1 to 11	✓
	Capital Expenditure	12 to 21	✓
	Cash Expenditure	22 to 24	✓
	Atypical Expenditure	25 to 30	✓
	Total Expenditure	31	✓
4L - Enhancement capital expenditure by purpose	Enhancement expenditure by purpose	1 to 38	✓
4P - Non-financial data for WR, WT and WD: Resources	Proportion of distribution input by source type	1 to 8	✓
	Number and capacity of sources	9 to 23	✓
	Length of raw mains	24, 27	✓
	Pumping head	25 to 26	✓
	Water resources capacity	28	✓
4P - Non-financial data for WR, WT and WD: Treatment	Total water treated	29 to 43	✓
	Number of treatment works	44 to 58	✓
	Zonal population receiving water treated with orthophosphate	59	✓
	Average pumping head - treatment / Average pumping head - resources	60	✓
4P - Non-financial data for WR, WT and WD: Distribution	Main lengths	61 to 68	✓
	Capacity	69 to 71	✓
	Distribution input	72	✓
	Water Delivered	73 to 76	✓
	Leakage	77 to 79	✓
	Comms pipes	80 to 82	✓

Table	Lines	Line numbers	Methodology and Data Audit
	Network	83 to 85	✓
	Age of Network	86 to 93	✓
	Average pumping head – distribution	94	✓
	WTW in size bands	95 to 102	✓
	Proportion of Total DI band	103 to 110	✓
4Q - Non-financial data - Properties, population and other	Properties billed	1 to 5	✓
	Properties connected	6 to 8, 13 to 14	✓
	Meters	9 to 12, 16 to 17	✓
	Total Population Served	15	✓
	Company area	18	✓
	Lead Communication pipes	19	✓
	Supply / Demand	20 to 23	✓
	Energy Consumption	24 to 26	✓
	Mean zonal compliance	27	✓
	Compliance Risk Index	28	✓
	Events Risk Index	29	✓
	Volume of leakage	30	✓
4V - Operating cost analysis	Opex	1 to 22	✓

Table 1-5 Scope of assurance - GSS payments

Performance Measure	Methodology and Data Audit
Guaranteed Standards Scheme (GSS) payments (Bristol Water and Pelican)	✓

Table 1-6 Scope of assurance – WRMP Annual Review

Performance report	Methodology and Data Audit
WRMP Annual Review	✓

Table 1-7 Scope of assurance – Customer measures Review

Performance report	Methodology and Data Audit
C-MeX	✓
D-MeX	✓

1.3. Structure of Assurance Report

This report is structured as follows:

- Assurance Statement
- Executive Summary
- Section 1 – Introduction
- Section 2 – Approach
- Section 3 – Summary of Findings

2. Approach

Our overall approach to assurance is based around a two-stage audit - methodology and data. For all audits this year we carried out a combined methodology and data audit.

The purpose of each audit stage is as follows:

Methodology Audits: To assess whether the Company's methodology aligns with appropriate guidance, reporting requirements, licence conditions or industry practice and whether appropriate checks, controls and explanatory documents exist.

Data Audits: To assess whether methodologies/procedures are applied as indicated including data trailing to source documents to ensure alignment/consistency with the reported number, checks and controls and appropriateness of confidence grades assigned to reported information (where applicable).

This approach is consistent with Bristol Water's assurance plan, which identifies external methodology audit and external data audit as potential 'assurance responses', described as follows:

External Methodology Audit: Not responsible for ensuring that returns are complete and accurate but to provide an independent challenge to the methodology to produce the submission. Review of the adequacy and effectiveness of the internal control systems to ensure returns are timely, complete and accurate. Formal report produced. Control gaps/areas for improvement identified and issues logged.

External Data Audit: Responsible for providing evidence of verification of Data; Intends to determine the level of confidence that can be placed on the figures; Formal report produced.

The process flow followed for each audit is summarised as follows:

Figure 2-1 Audit meeting process

The deliverables for each stage of the process are summarised below in Table 2-1.

Table 2-1 Description of Deliverables

Deliverable	Description
Notification of Audit Form (NAF)	Issued in advance of audit. Details audit arrangements, scope and agenda
Email summary	Initial feedback including detail of any material issues.
Summary of Audit Form (SAF)	Issued following the audit. Details findings and any actions for inclusion in the issues log.
Issues Log	Spreadsheet to track and report on responses to issues identified at audit. Includes Reference; Date Raised; Raised by; Line; Observation; Recommendation; Priority; Agreed (Y/N); Company response; Owner; By when; Status

Our assessment of the Company's reporting against each table/table section has been assigned an overall rating of Red, Amber or Green to reflect their priority. Separate ratings have been given to the methodology applied, methodology documentation, commentary and to the data.

Table 2-2 sets out the definitions for the different categories.

Table 2-2 Descriptions for RAG categories

Category	Description
RED	High Priority: Failure to comply with reporting requirements, major failure of process or data errors that may lead to misreporting.
AMBER	Medium Priority: Shortfalls in methodology and/or methodology documentation. Methodology under development. Incomplete data set or minor errors identified that do not alter the performance reported relative to targets and threshold values.
GREEN	Low Priority: Minor revisions to methodology and/or methodology documentation needed. Issue(s) not judged to be material or no issues.
TBC	To be confirmed – missing data or information.

Our focus on particular areas was risk-based as highlighted in Bristol Water's own analysis and supplemented by our experience in identifying and quantifying the elements of the journey from raw to published data that introduce material errors.

3. Summary of Findings

3.1. Performance Commitments (APR Table 3A-D)

The table below summarises the assurance category assigned to each performance commitment reported in the Annual Performance Report (APR Table 3A and 3B) with further detail below. The findings for Table 3S are provided in a separate report. The assessment of commentaries is based on those provided in the sign-off forms at audit.

Table 3-1 Performance Commitments (APR Table 3A-D) – Overall Assessment

Measure	Reported performance (19/20)	Target performance (19/20)	Methodology		Data	Commentary	Assurance summary
			Method	Documentation			
A1: Unplanned customer minutes lost	11.1 mins	12.20 mins	Green	Green	Green	Green	Methodology and data are robust.
A2: Asset reliability – infrastructure	Stable	Stable	Green	Green	Green	Green	Robustly reported.
Sub-indicator: Bursts	796	950	Green	Green	Green	Green	Robustly reported.
Sub-indicator: DG2 Low pressure	57	69	Green	Green	Green	Green	Robustly reported.
A3: Asset reliability - non-infrastructure	Stable	Stable	Green	Green	Green	Green	Methodology and data are robust.
Sub-indicator: Unplanned maintenance	3,327	3976	Green	Green	Green	Green	Methodology and data are robust.
Sub-indicator: Turbidity at treatment works	0	0	Green	Green	Green	Green	Methodology and data are robust.
B1: Population in centres >25,000 at risk from asset failure	9,063	9,063	Green	Green	Green	Green	The PC is reported robustly and consistently.
C1: Security of supply index (SOSI)	100	100	Green	Green	Green	Green	Some concerns on one aspect of the methodology (raw/treated losses), but these were appropriately

Measure	Reported performance (19/20)	Target performance (19/20)	Methodology		Data	Commentary	Assurance summary
			Method	Documentation			
							managed in the report year.
C2: Hosepipe ban frequency	1.55	3.3	Green	Green	Green	Green	We note that the PC calculation does not include a climate change allowance. The target would still be met even if this were changed.
D1: Mean zonal compliance (MZC)	99.97%	100%	Green	Green	Green	Green	Methodology and data are robust.
E1: Negative water quality contacts*	1,712	2,221	Green	Green	Green	Green	Robustly reported.
F1: Leakage	40.9 (ODI method)	43	Green	Green	Green	Green	Well established, correctly followed process.
G1: Meter penetration	59.0%	65.9%	Green	Green	Green	Green	Methodology and data are robust.
G2: Per capita consumption (PCC)	144.7 (ODI)	142	Green	Green	Green	Green	Well established process; possible issues with demographic coverage of the monitor, which are in hand.
H1: Total carbon emissions	19 kg CO2e / capita	20 kg CO2e / capita	Green	Green	Green	Green	Methodology and data are robust.
H2: Raw water quality of sources	Improving (-25%)	Stable (+/- </= 10%) For 2 or more years	Green	Green	Green	Green	Methodology and data are robust
H3: Biodiversity index	17,670	17,653.00 Improving	Green	Green	Green	Green	Methodology and data are robust.
H4: Waste disposal compliance	98%	100%	Green	Green	Green	Green	Methodology and data are robust.
I1: Percentage of customers in water poverty	0%	1.8%	Green	Green	Green	Green	Methodology and data are robust.
J1: Service incentive mechanism proxy score (SIM)	82.54	87.57 (5th)	Green	Green	Green	Green	Methods are fit for purpose. An error was identified in the calculation of the score, which

Measure	Reported performance (19/20)	Target performance (19/20)	Methodology		Data	Commentary	Assurance summary
			Method	Documentation			
							has now been corrected.
J2: General satisfaction from surveys	87%	> 93%	Green	Green	Green	Green	Methodology and data are robust. Improvements to documentation suggested.
J3: Value for money	75%	72%	Green	Green	Green	Green	Methodology and data are robust. Improvements to documentation suggested.
K1: Ease of contact from surveys	91.8%	> 96.5%	Green	Green	Green	Green	Methodology and data are robust. Improvements to documentation suggested.
L1: Negative billing contacts	1,274	2,170	Green	Green	Green	Green	No issues identified.

*Audit completed in January 2020

3.1.1. A1: Unplanned customer minutes lost (UCML)

Performance of UCML has been robustly reported, with in-built checks that are an example of good practice and efforts for continuing improvement are apparent. The Company has comfortably met its performance commitment for the final year of AMP6 of 12.2 minutes, having changed its contractors and improved operational approach and data since the halfway point through the reporting year. The methodology document is fit for purpose and has had useful additions made to reflect the roll-out of comprehensive pressure logging.

The mid-year reported UCML of 7.61 minutes included a contribution of 1.61 minutes for a single incident on the Royate Hill Trunk Main on 25th July 2019. There were no similar events during the remainder of the year and there was a significant improvement in steady state performance.

3.1.2. A2: Asset reliability – infrastructure and sub indicators

Overall Assessment of Asset Reliability (infra)

The overall assessment under the terms of the Final Determination 2014 is that the Asset Reliability (infra) is Stable. The method of reporting is well understood and clearly documented.

Sub-indicator: Bursts

The Company's reporting methodology for calculating the number of bursts is fit for purpose. The reported figure was stated as 796 against a reference level of 950. We viewed a spreadsheet listing each of the bursts and the associated dates and job numbers. The source of the data in the spreadsheet was the GIS system. The reporting codes for the Business Objects report used to produce the data are unchanged and appropriate reporting fields were used. The reported number of bursts is well below the target performance for 2019-20 of 950. The reporting year performance can readily be explained by the clement weather conditions experienced.

Sub-indicator: DG2

We believe that the Company's reporting methodology for the reporting of DG2 is consistent with how it was done previously and how the target was set at PR14. The reported figure for DG2 was 57 against a committed performance level of 69. The reduction from the reported figure of 61 properties reported last year is due to the

net effect of identifying and removing from the low pressure register 7 properties by separating shared supplies at Radstock and adding 3 properties identified after investigations following poor pressure complaints during the year.

3.1.3. A3: Asset reliability - non-infrastructure and sub indicators

Overall Assessment of Asset Reliability (non-infra)

The methodology is well described and there is a robust check and review process in place for the unplanned maintenance inputs. The Company is performing well against the overall measure and the sub-indicators and is not forecasting any change from its current position.

Sub-indicator: Turbidity Performance at WTW

We can confirm the calculation and the reported figure of 0 (zero).

Sub-indicator: Unplanned maintenance events

We have undertaken sampling of events and found no issues, and the Company has established a robust and continuous check and review process which provides confidence in the data being provided. The Company is reporting 3,327 and we have no issues with this. While this is an increase over the last reporting period, the figure is still below the PC reference level of 3,976.

3.1.4. B1: Population in centres >25,000 at risk from asset failure

The evidence previously provided confirmed that the Southern Resilience Scheme was operational before 31st March 2018. Further evidence has been provided to confirm that the assets have remained operational. The methodology for reporting against Performance Commitment B1: Population Centres >25,000 at risk from asset failure stipulates that the step change in target level at 2017/18 is a function of the population served, at the time of PR14, that would go without water in the event of the Gloucester Sharpness Canal sources (Littleton TW and Purton TW) being lost. The fulfilment of the commitment is confirmed.

3.1.5. C1: Security of supply index (SOSI)

Both this, and the Hosepipe Ban indicator met the performance commitment, despite outage levels being higher than predicted in the WRMP. This is primarily due to the relatively low level of demand during the report year and the fact that Bristol Water is currently running a significant surplus against Target Headroom. As described within the annual report on the WRMP, this means that Bristol Water has been able to plan outage for maintenance purposes and allow outage events to continue for the sake of efficiency of repair schedules. In other words, outage has been high because Bristol knows it is acceptable in water resources terms and allows them to maintain the treatment works more efficiently. All methodologies were appropriately followed. We have some concerns that the methods used for reporting raw water and treatment losses are prone to manual transcription, but confirmed that this risk was suitably addressed through detailed analysis and QA checking in this report year.

3.1.6. C2: Hosepipe ban frequency

General comments are the same as for SOSI above, as the two PCs mainly use a common reporting process. We note that there is no allowance for climate change in the HPB risk assessment, but this is consistent with the way that the ODI was set.

3.1.7. D1: Mean zonal compliance (MZC)

The methodology and data gathering process is well established. The Company is reporting a compliance figure of 99.97% against a PC target of 100%. While a marginal reduction on last reporting year, the results do indicate the provision of high-quality drinking water to customers.

3.1.8. E1: Negative water quality contacts

The reported total we were presented with at audit for negative water quality contacts[1] was 1,712 (18/19: 1,934, 17/18: 1,711) and for all water quality contacts was 2,500. The Company has significantly outperformed its 2019/20 target of no more than 2,221 customer contacts. However, it is not below the reward cap of 1,439 contacts so there will be no reward associated with the ODI this year.

[1] The ODI consists only of contacts for taste, odour and appearance.

3.1.9. F1: Leakage

The process for ODI consistent reporting of leakage is well established and clear. Our audit checks confirmed that all processes are being followed appropriately, with the required audit trails and checks. All sample analyses of Netbase were satisfactory. The water balance closure is very good, with ODI consistent reporting at 0.01%. The only minor issue that we encountered related to the assessed uncertainty of the Distribution Input within the MLE calculation, where the DI team had only assessed the uncertainty caused by validation differences, and not underlying meter accuracy. Given the very tight closure on the water balance this was not significant for the report year and will be addressed for future returns.

3.1.10. G1: Meter penetration

The Company is reporting 59.0% meter penetration (an increase of 3% from 2018/19). The Company has not met its end of AMP6 target of 65.9%. There were no material issues identified with the methodology or reporting.

3.1.11. G2: Per capita consumption (PCC)

The process for ODI consistent reporting of PCC remains the same as reviewed last year and had been consistently followed. Although Bristol Water has started to review the issues of demographic representativeness of the unmeasured PCC monitor that we have raised in previous audits, the COVID 19 lockdown means that work has not yet started to reform the monitor. Analysis of the underlying regression data indicates that the outturn unmeasured PCC is likely to be sensitive to relatively small changes in demographic makeup, so it is important that this is amended in time for the implementation of the AMP7 methodology.

3.1.12. H1: Total carbon emissions

The Company is reporting 18.98 kg CO2e / capita compared to a target performance of 20 kg CO2e / capita. The Company has slightly exceeded the target i.e. its emissions are better (lower) than the target. This is largely a result of the grid emission factor changing in its favour. The Company's investment in optimiser software and its wider roll out will enable reductions in electricity use and reduce carbon emissions. However, this may be offset from the Company's increased use of gas in the future.

We reviewed the datasets required for the calculation of carbon emissions and the required processing. Data was traced from source right through into the Carbon Accounting Workbook. Some required changes were made to data or calculations within the audit. This caused a change in the reported carbon emissions for the reporting year. Suggested changes to the text of the Performance Commitment form were also made. These changes mean that the sign-off of the Performance Commitment Approval Form now must be repeated within the Company.

The Company is challenged to set out how it will achieve its voluntary target of achieving a "carbon neutral water industry by 2030" in the face of its decision not to proceed with a direct purchase of additional PV panels equating to 100 kWp, and its commitment to invest in two gas generators at Purton in order to generate electricity.

3.1.13. H2: Raw water quality of sources

The Company's performance has shown a continued improving trend; however, it is difficult to link this directly to catchment management activities. Methodology is well described, and data easily traced. No material issues identified.

3.1.14. H3: Biodiversity index

The Company is reporting 17,653 (Improving) on their Biodiversity Index. The Company has continued to make progress on developing its approach and increasing the biodiversity of its sites.

The audit reviewed the key activities of the Company, in increasing the biodiversity of its sites and landholdings in the reporting year, and the valuation of the performance commitment score. The approach for AMP7 was also discussed, as it involves some changes. The methodology and Performance Commitment commentary was reviewed. There were no outstanding actions to check from previous audits, and no significant actions arising from this one.

3.1.15. H4: Waste disposal compliance

The Company is reporting an underperformance for this Performance Commitment reporting 98% compared to an AMP6 target of 100%, the impact of which is reputational. We were satisfied that the reported number has been calculated accurately and that there are sufficient checks and controls in place.

3.1.16. I1: Percentage of customers in water poverty

The Company is reporting 0% customers in water poverty compared to a target performance of 1.8%. We made some minor suggestions to improve the methodology. We were provided with the audit trail for the reported number of customers on Assist, the social tariff, which is supplied by Pelican. Two errors were identified although neither impacted on the ODI reporting: the first related to the number of customers on Assist (originally 8,133, corrected to 8,202) and also the figure of total connected properties in the Bristol Water Tariff Simulator which did not reconcile with reporting in Table 4Q, and which we were subsequently informed was due to an error in using the previous year's figure.

3.1.17. J1: Service incentive mechanism (SIM) Proxy

Bristol Water:

Overall, the methodologies are fit for purpose and the reporting is robust. An error was identified in the calculation of the score, which has now been corrected.

Pelican:

Overall, the methods are fit for purpose and the reporting is robust. Suggestions have been made to how the documentation could be further improved as well as strengthening the effectiveness of the internal checks and controls from a compliance perspective.

3.1.18. J2: General satisfaction from surveys

We reviewed the raw data and checked the calculations. Our findings were satisfactory in all cases.

3.1.19. J3: Value for money

We reviewed the raw data and checked the calculations. Our findings were satisfactory in all cases.

3.1.20. K1: Ease of contact

We reviewed the raw data and checked the calculations. Our findings were satisfactory in all cases.

3.1.21. L1: Negative billing contacts

There were no issues identified, the methods are fit for purpose and the reporting is robust.

3.2. Section 3 Tables

Table 3-2 below provides a summary of our assurance findings for Tables 3A, 3B and 3D.

Table 3-2 APR Section 3 Tables - Overall Assessment

Table	Methodology	Data	Commentary	Assurance summary
3A - Outcome performance table (including underperformance penalties and outperformance payments)	Green	Green	Green	Robustly reported.
3B - Sub-measure performance table	*See A2 and A3 summaries above*			
3D - SIM (Service Incentive Mechanism)				See Performance Commitment J1 SIM summary in Table 3-1.
3S - Shadow reporting of new definitions (leakage, supply interruptions, unplanned outage, PCC, mains bursts and risk of severe restrictions in a drought, customer vulnerability)	Covered in a separate report			

3.2.1. 3A - Outcome performance table (including underperformance penalties and outperformance payments)

The Company's methodology is clear and robustly applied. We have reviewed Tables 3A and 3B and confirmed that the appropriate penalty collars, penalty dead bands and incentive rates had been applied in the calculation of the financial penalties where applicable. The figures in the table matched the audited figures and the interpretation of the application of the ODIs and calculations were correct.

3.2.2. 3B - Sub-measure performance table

Please refer to Performance Commitment A2 and A3 summaries above.

3.2.3. 3D - SIM (Service Incentive Mechanism)

Please refer to Performance Commitment J1 SIM summary.

3.3. Section 4 Tables – financial and non-financial information

The table below summarises the assurance category assigned to each table, with further detail below.

Table 3-3 APR Section 4 Tables (financial and non-financial information) – Overall Assessment

Table	Lines	Methodology	Data	Commentary	Assurance summary
4A – Number of household voids	1	Green	Green	Green	No material issues identified.
4A - PCC	2	Green	Green	Green	Well established process; possible issues with demographic coverage of the monitor, which are in hand.
4A – Bulk supply export / import	3 - 4	Green	Green	Green	No material issues identified.
4A – Distribution input	5	Green	Green	Green	All concerns over the validation system have now been addressed.
4B - Totex analysis	1 to 9	Green	Green	Green	Robustly reported.
4C - Impact of AMP performance to date on RCV	1 to 6	Green	Green	Green	Robustly reported.
4D - Wholesale totex analysis – wholesale water	1 to 11	Green	Green	Green	Robustly reported.
	12 to 19	Green	Green	Green	Robustly reported.
	20 to 21	Green	Green	Green	Robustly reported.
	22 to 24	Green	Green	Green	Robustly reported.
	25 to 28	Green	Green	Green	Robustly reported.
4F - Operating cost analysis - household retail	1 to 14	Green	Green	Green	Recommendation to consider improving approach to analysis of BWBSL costs next year and explanation of variances.
4G - Wholesale current cost financial performance	3	Green	Green	Green	Robustly reported.

3.3.1. Table 4A - Non-financial information

Line 1 - Number of household voids

Overall, the methodology is fit for purpose and there were no issues identified with the use of the property data provided by Pelican or the calculations made. We do not assure the property numbers from Pelican, but we can see that Bristol Water carries out an income reconciliation exercise which acts as a proxy check on the reliability of reporting and no issues have been identified.

Line 2 - PCC

The process for ODI consistent reporting of PCC remains the same as reviewed last year and had been consistently followed. Although Bristol Water has started to review the issues of demographic representativeness of the unmeasured PCC monitor that we have raised in previous audits, the COVID 19 lockdown means that work has not yet started to reform the monitor. Analysis of the underlying regression data indicates that the outturn unmeasured PCC is likely to be sensitive to relatively small changes in demographic makeup, so it is important that this is amended in time for the implementation of the AMP7 methodology.

Line 3 - 4 Bulk supply export / import

The methodology for Table 4A lines 3-4 is difficult to follow and we have made recommendations where this could be made clearer in the text. We also identified a number of minor errors within the data which were rectified

post audit. The commentary on the sign off sheet did not make reference to the bulk supply export / import values which was included post audit.

Line 5 - Distribution input

See Table 4P line 72 summary.

3.3.2. Table 4B – Wholesale Totex analysis, Table 4C – Impact of AMP performance to date on RCV, Table 4F – Operating cost analysis - household retail, Table 4G – Wholesale current cost financial performance

In general, we found the Company's approach to the elements of Tables 4B, 4C, 4F and 4G reviewed here to be appropriate and in line with its Methodology Statement. It has amended the approach taken to line 3 of Table 4G, basing it on actuals and Final Determination numbers. We consider this to be a reasonable approach.

As in previous years, we consider that the Company should consider using the disaggregated BWBSL data available to it to improve the robustness of the numbers reported in Table 4F.

We consider it would be useful to provide a clearer explanation of year-on-year variances in Table 4F.

3.3.3. Table 4D – Wholesale totex analysis – wholesale water

Lines 1-11 and 22-28 Operating expenditure

In general, we found the Company's approach to Table 4D to be appropriate and in line with its Methodology Statement.

Last year, we recommended that the Company amend the approach to allow identification of any opex related to raw water storage. The Company's investigations found that there had been no relevant opex in FY20 but that some expenditure is expected in FY21. The current process relies on a member of the Finance team manually asking individuals if any relevant activities have taken place. We consider this is too reliant on individual(s) knowing to ask for this information and recommend that the Company considers putting in place a specific General Ledger code, or similar, to allow these costs to be identified in future years.

We found that the Company could not provide a trail for source of the split of power costs for sites which are not submetered to the (sub)business unit level required for Tables 4D and 4J, especially for borehole sites. It could also not provide evidence that the cost allocations had been reviewed recently to ensure they are still appropriate. This affects allocation of approximately £2.2M of power cost. We recommend that these allocations be reviewed and documented for next year's submission.

Lines 12-21 – Capital expenditure, grants and contributions

All challenged elements were explained and all samples trailed correctly.

3.3.4. Section 4 Tables 4J to 4V (previously Wholesale Cost Tables)

The table below summarises the assurance category assigned to each table, with further detail below. The assessment of commentaries is based on those provided in the sign-off forms at audit.

Table 3-4 APR Section 4 Tables (4J to 4V - previously Wholesale Cost Tables) – Overall Assessment

Table	Lines	Line numbers	Methodology		Data	Commentary	Assurance summary
			Method	Documentation			
4J - Atypical expenditure by business unit	Operating Expenditure	1 to 11	Green	Green	Green	Green	Adjustment for atypical expenditure appears reasonable.
	Capital Expenditure	12 to 21	*Please refer to 4D*				

Table	Lines	Line numbers	Methodology		Data	Commentary	Assurance summary
			Method	Documentation			
	Cash Expenditure	22 to 24	*Please refer to 4D*				
	Atypical Expenditure	25 to 35	Green	Green	Green	Green	Adjustment for atypical expenditure appears reasonable.
	Total Expenditure	36	*Please refer to 4D*				
4L - Enhancement capital expenditure by purpose	Enhancement expenditure by purpose	1 to 33	Green	Green	Green	Green	All issues satisfactorily resolved.
4P - Non-financial data for WR, WT and WD: Resources	Proportion of distribution input by source type	1 to 8	Green	Green	Green	Green	No significant concerns over the reported figures.
	Number and capacity of sources	9 to 23	Green	Green	Green	Green	No significant concerns over the reported figures.
	Length of raw mains	24, 27	Green	Green	Green	Green	No significant concerns over the reported figures.
	Pumping head	25 to 26	Green	Green	Green	Green	The process of data management and extraction is well controlled and appropriate procedures are in place.
	Water resources capacity	28	Green	Green	Green	Green	No significant concerns over the reported figures.
4P - Non-financial data for WR, WT and WD: Treatment	Total water treated	29 to 43	Green	Green	Green	Green	We had no significant concerns over the figure being reported.
	Number of treatment works	44 to 58	Green	Green	Green	Green	No significant concerns over the reported figures.
	Zonal population receiving water treated with orthophosphate	59	Green	Green	Green	Green	No significant concerns over the reported figures.
	Average pumping head - treatment /	60	Green	Green	Green	Green	The process of data management and extraction is

Table	Lines	Line numbers	Methodology		Data	Commentary	Assurance summary
			Method	Documentation			
	Average pumping head - resources						well controlled and appropriate procedures are in place.
4P - Non-financial data for WR, WT and WD: Distribution	Main lengths	61 to 68	Green	Green	Green	Green	No significant concerns over the reported figures.
	Capacity	69 to 71	Green	Green	Green	Green	No significant concerns over the reported figures.
	Distribution input	72	Green	Green	Green	Green	All concerns over the validation system have now been addressed
	Water Delivered	73 to 76	Green	Green	Green	Green	No significant water balance issues
	Leakage	77 to 79	Green	Green	Green	Green	No significant issues
	Comms pipes	80 to 82	Green	Green	Green	Green	No significant concerns over the reported figures.
	Network	83 to 85	Green	Green	Green	Green	No significant concerns over the reported figures.
	Age of Network	86 to 93	Green	Green	Green	Green	No significant concerns over the reported figures.
	Pumping head	94	Green	Green	Green	Green	The process of data management and extraction is well controlled and appropriate procedures are in place.
	WTW in size bands	95 to 102	Green	Green	Green	Green	No significant concerns over the reported figures.
	Proportion of Total DI band	103 to 110	Green	Green	Green	Green	No significant concerns over the reported figures.
4Q - Non-financial data - Properties, population and other	Properties, population and meters	1 to 14, 16 to 17	Amber	Green	Green	Green	Overall, no significant issues with reporting. The exception is that the report used for calculating internal meters is not fit for purpose which also impacts on the external meter numbers. It is difficult to quantify impact but it is

Table	Lines	Line numbers	Methodology		Data	Commentary	Assurance summary
			Method	Documentation			
							unlikely to be material.
	Total Population Served	15	Green	Green	Green	Green	No material issues identified.
	Company area	18	Green	Green	Green	Green	No significant concerns over the reported figures.
	Lead Comms pipes	19	Green	Green	Green	Green	No significant concerns over the reported figures
	Supply / Demand	20 to 23	Green	Green	Green	Green	Reported robustly.
	Energy Consumption	24 to 26	Green	Green	Green	Green	We queried the use of diesel allocation conversion factors. These were amended post audit. No significant concerns over reported figures.
	Mean zonal compliance	27	*See D1 – Mean Zonal Compliance*				
	Compliance Risk Index	28	Green	Green	Green	Green	N/A
	Events Risk Index	29	Green	Green	Green	Green	N/A
	Volume of leakage	30	Green	Green	Green	Green	Well established, correctly followed process.
4V - Operating cost analysis	Opex	1 to 22	Green	Green	Green	Green	All significant issues addressed. A number of minor areas for improvement identified for next year.

3.3.5. Table 4J - Atypical expenditure by business unit

This year, the Company has identified atypical operating expenditure lines which means that the expenditure in Table 4J is different to Table 4D.

The atypicals expenditure items relate to the cost of managing the referral to the CMA and arbitration related to Canal and River Trust charges. These atypical operating expenditure lines have been treated as exceptional items in the statutory accounts. We understand that, at the time of the meeting, the exceptional items in the statutory accounts have been audited by the Financial Auditors but the audit report has not yet finalised.

CMA Atypical

The cost of CMA referral is estimated to be £4.83M, including legal and advisory costs, CMA and Ofwat costs and internal costs related to project management and the finance team. These costs are all accruals, with all cash expenditure expected to take place in FY21.

We challenged the treatment of all of the expenditure as atypical given the expenditure on PR19 business planning and the previous CMA referral. The Company defended its position stating that it considers this to be a one-off expenditure unlike business-as-usual business planning. We consider this to be reasonable.

Canal and River Trust Arbitration

The Company is in dispute with the Canal and River Trust over abstraction charges. It has identified £2.47M of atypical expenditure for legal fees, advisors and an arbitrator. Approximately £0.9M of this has been spent within FY20 with the remainder being accrual expected to be spent in FY21.

All of the expenditure is categorised as 'Other operating expenditure excluding renewals' and it has all been allocated to the 'water resources- abstraction licences' business unit. We consider this to be reasonable.

3.3.6. Table 4L – Enhancement expenditure by purpose

All challenged elements were explained and all samples trailed correctly.

3.3.7. Table 4P – Non-financial data for Water Resources, Water Treatment and Water Distribution

Line 1-8 Proportion of distribution input by source type

There were no material issues identified during the audit of these figures. The Company is now extracting their data predominately from Netbase. The Company confirmed that they were seeking to improve the reliability of their data by completing further works to improve the verification of their meters.

Line 9-23 Number and capacity of sources

There were no differences between the data reported in 2018-19 and 2019-20. The Company has decided to formally recognise the improvements which they have made to their reporting processed this year by upgrading the data confidence rating from a B2 to A2 for 2019-20. The reported numbers are robust.

Line 24, 27 Length of Raw Water Mains, Line 61-68 Main lengths, Line 86-93 Age of Network

There were no material issues identified and the methodology for calculating the reported lengths of mains and age of network is robust. The Company has this year introduced a reconciliation check for the length of mains renewed between the GIS system and the job management system, which the Company has found to be effective at confirming the accuracy of reporting for this line.

Line 25-26 Pumping head – Raw water extraction

The process of data management and extraction is well controlled and appropriate procedures are in place. We have noted some areas for continuous improvement, but not material for reporting.

Line 28 Water resources capacity

The method of reporting the Company water resources capacity has not changed since last year, but the data inputs have. The information is now taken from the WRMP19 which has led to the decrease in reported capacity. The Company cited the reasons for this being that the WRMP19 submission is based on a more severe drought, and the climate change assessment for WRMP19 is based on climate change in the 2080's compared to the 2030's in the WRMP14. The methodology and data for this reporting line is robust.

Line 29-43 Total water treated, Line 95-102 WTW in size bands, Line 103-110 Proportion of Total DI band

There have been minor changes to the methodologies since our previous review. The Company is now extracting their data predominately from Netbase. The Company confirmed that they were seeking to improve the reliability of their data by completing works further to verify their meters. We reviewed the spreadsheets used to process the data for the lines and could follow the audit trail. There were no material issues identified during the audit of these figures.

During the audit an error was identified in the reported number for lines 36, 95 and 96 in the Approval Form. These were a result of the transcription of the numbers from the calculation sheet to the Approval Form. These have been rectified by the auditee.

Line 44-58 Total number of Treatment Works

There have been no significant changes to the methodologies for Total Number of Treatment works Line 44-57 since our previous review. All data for these lines is derived from SAP and extracted using Business Objects and there are sufficient checks and controls in place. There have been no changes to the reported figures as a result of treatment works processes changes since last year.

We identified no significant issues in the reporting of Line 58 Number of treatment works requiring remedial action because of raw water deterioration.

Line 59 Zonal population receiving water treated with orthophosphate

There has been no change to the Company methodology from the previous year. We followed the audit trails of the Company's spreadsheets for calculating the reported figure for the 'Zonal population receiving water treated with orthophosphate' and this did not raise any issues.

Line 60 Average pumping head – treatment

The process of data management and extraction is well controlled and appropriate procedures are in place. We have noted some areas for continuous improvement but not material for reporting.

Line 69-71 Capacity, Line 83-85 Network - number

There were minor reporting differences for lines 69 and 84 between 2018-19 and 2019-20. The capacity of booster pumping stations has increased due to ongoing investigations into the efficiency of pumps which has been fed back into SAP. This year the Company has also identified that it had historically reported Line 84 incorrectly. This error has been updated for 2019-20 only and the Company will not be restating their historical reporting. We are satisfied with the reported numbers.

Line 72 Distribution input

The issues that we identified last year in relation to the DI validation process have now been addressed, and we consider that Bristol Water now has a robust process in place for checking and reviewing its calculation of DI from the bulk meters. We note that the percentage uncertainty that was calculated for use in the water balance needs only included validation error (i.e. telemetry versus manual read discrepancies) and did not account for meter calibration error. Initial desk and field studies have been carried out to develop a meter calibration programme, but this has been delayed due to COVID-19. This omission is not material given the small size of the water balance error in the report year.

Line 73-79 Water Delivered and Total Leakage

Water delivered and total leakage are calculated from the same water balance used to generate the 'actual' leakage and PCC figures (i.e. not the ODI). It should be noted that there is a minor inconsistency between the Distribution Input figure in Line 72, which is the pre-MLE figure, and the figures in these lines, which are post MLE figures. This discrepancy is less than 0.5Ml/d due to the very tight closure on the water balance and has no material effect on the reported figures.

Line 80-82 Communication pipes

There were no changes to the method this year in which these values are reported. The information is derived from the GIS. This year the Company has introduced a new check where the number of Communication Pipe jobs in the Company job management system are reconciled with the GIS records. We found some discrepancies between the number of records on the job management system and the reported value which is derived from GIS, but this was reported to be caused by the method of coding some activities in the job management system where replacement of the communication pipe was not the primary activity on site.

Line 94 Pumping head – distribution

The process of data management and extraction is well controlled and appropriate procedures are in place. We have noted some areas for continuous improvement but not material for reporting.

3.3.8. Table 4Q – Non-financial data – Properties, population and other

Line 1-14, Line 16-17 Properties and meters

Overall the audit findings were satisfactory with the exception of an issue identified with the reliability of the internal and external meters reporting. There were no issues identified with the use of the property data provided by Pelican. We do not assure the property numbers from Pelican, but we can see that Bristol Water carries out an income reconciliation exercise which acts as a proxy check on the reliability of reporting and no issues have been identified.

We also discussed the potential change in methodology for reporting new connections and we concurred that we believe it is a more robust approach, but for consistency over AMP6 the status quo will be maintained for 2019/20 with the change from next year.

Line 15 Total population served

The reported number for 2019/20 is 1,227,036 (2018/19: 1,216,321, 2017/18: 1,207,583), an increase of 0.9%. We followed the audit trails of the Company's spreadsheets for calculating the reported figure and our findings were satisfactory.

Line 18 Company area

There has been no change to the Company methodology, and we were able to follow the audit trails of the Company's spreadsheets for calculating the reported figure with no concerns raised. The reported figure (2,366.57 km^2) has been static for many years as there has been no physical change in the Company's supply area.

Line 19 Lead Communication pipes

The Company is reporting a total of 40 lead communication pipe replacements for 2019/20. The Company has a number of suitable checks and controls in place for reporting the number of lead communication pipes replaced for water quality purposes. We are satisfied with the reported figures.

Line 20-23 Supply/demand side enhancements

We reviewed the calculations for the both supply and demand side enhancements and found no issues and overall the methodology is fit for purpose. We suggested some minor updates required to the methodology to reference latest versions of RAG guidance.

Line 24-26 Energy consumption

We were able to follow the audit trail for the reporting of network+ and water resources energy consumption and their combined total. We identified potential errors in the reported data, for example we identified that the conversation factors used to calculate the reported values use a combination of three fuel types, in comparison to the two fuel types in the Diesel allocation spreadsheet Red Diesel and White Diesel. This was updated post audit.

Line 27 Mean Zonal Compliance

Please refer to performance commitment D1: Mean Zonal Compliance.

Line 28 Compliance Risk Index, Line 29 Events Risk Index

The methodologies for both lines are aligned to the DWI requirements and are well described. The reported figures are indicated as having been signed off (date provided) but evidence (e.g. emails, telephone calls) not provided. We have reviewed the data provided for both measures and no material issues have been identified.

Line 30 Volume of Leakage above or below the sustainable economic level

The reported data are consistent with the WRMP19 assessment of the economic level of leakage.

3.3.9. Table 4V – Operating cost analysis

There have been no major changes to the Table or the Company's methodology since our last review.

Since last year, the Company has reviewed the costs falling into the 'other' water sources category and allocated to more appropriate water sources. We consider this to be reasonable.

We challenged the approaches taken this year to allocating costs in Line 4 (bulk supply) and renewals expensed in year (infrastructure). The Company amended the approach during the audit meeting. We consider the amended approach to be reasonable and more cost reflective.

We confirmed that the opex totals reconcile with Table 4D.

We queried why the Company is reporting "river abstraction" costs given that there was no opex against this source in FY19 and no DI classified as coming from river abstractions according to Table 4P. This is a small level of expenditure but we recommend the Company seek to ensure that any apparent inconsistencies between this table and Table 4P are either corrected or explained next year.

3.4. GSS Payments

The table below summarises the assurance categories assigned, with further detail in the assurance summary column.

Table 3-5 GSS payments – Overall Assessment

Performance Measure	Overall rating - Methodology		Data	Commentary	Assurance summary
	Method	Documentation			
Guaranteed Standards Scheme (GSS) payments (Bristol Water)	Amber	Green	Green	N/A	Overall, the methodology and data are robust. The one area of the methodology where there is potential to revisit relates to low pressure. Bristol Water's approach is reactive to customer contacts but these should be automatic payments identified through pressure data where this is available.
Guaranteed Standards Scheme (GSS) payments (Pelican)	Green	Green	Green	N/A	No material issues identified.

Bristol Water: Overall, the Company's methodology for managing and applying GSS is robust and fit for purpose. We validated the GSS reported number as well as following audit trails to confirm payments were made where applicable both where cheques were identified as being issued and where credits were applied to customer accounts. Our findings were satisfactory in all cases. The one area where there is potential to revisit the methodology relates to low pressure. Bristol Water's approach is reactive to customer contacts, but these should be automatic payments identified through pressure data where this is available.

Pelican: We did not identify any material issues from our review of GSS at Pelican. Overall, the Company's methodology for managing and applying GSS is robust and fit for purpose. We validated the GSS reported number as well as following audit trails to confirm payments were made where applicable both where cheques were identified as being issued and where credits were applied to customer accounts. Our findings were satisfactory in all cases.

3.5. WRMP Annual Review

The table below summarises the assurance category assigned to each table, with further detail below.

Table 3-6 WRMP Annual Review – Overall Assessment

Performance report	Overall rating – Methodology		Data	Commentary	Assurance summary
	Method	Documentation			
WRMP Annual Review	Green	Green	Green	Green	No significant issues identified.

We checked the figures presented within the WRMP Annual Return and confirmed that these reconciled with the figures used in the Ofwat Annual Return. This included the quoted meter penetration figures and explanation. We reviewed and corrected a number of minor errors during our audit, but did not have significant concerns over quality assurance.

We have concerns over the process used for reporting raw and treated water losses, as detailed under the SOSI PC, but consider that these were adequately managed during the report year. We note that the figures used for raw water losses at Purton are very uncertain and further investigation is required.

We reviewed and confirmed the outturn outage figure. Although some explanation is provided in the WRMP Annual Return, the net outturn is still close to double the WRMP19 predicted figure once the exceptional items are removed, so challenge from the EA on the reasons why outage is so high is likely.

Although we consider that the raw and treated water losses calculation process should be improved to reduce the risk of manual error, we do not consider that this issue is significant enough to warrant an 'amber' classification.

3.6. C-MeX and D-MeX Review

The table below summarises the assurance category assigned to each table, with further detail below.

Table 3-7 C-MeX and D-MeX - Overall Assessment

Performance report	Overall rating - Methodology		Data	Commentary	Assurance summary
	Method	Documentation			
C-MeX (Bristol Water)	Green	Green	Green	Green	No material issues identified.
C-MeX Survey (Pelican)	N/A (reported by BRL)	Green	Green	N/A (reported by BRL)	No material issues identified.
D-MeX	Amber	Green	Amber	Green	Improvements in processes and to reporting have been identified. Documentation has been strengthened to better capture the end to end processes.

C-MeX

Bristol Water's C-MeX score for the shadow year is 78.13 placing it in 8th position out of the 17 water companies. Overall, the methods at Bristol Water and Pelican are fit for purpose for providing complete datasets to the market research company. The main reporting risk relates to customer contacts not being logged, but there are effective quality assurance checks and controls in place to monitor compliance.

D-MeX

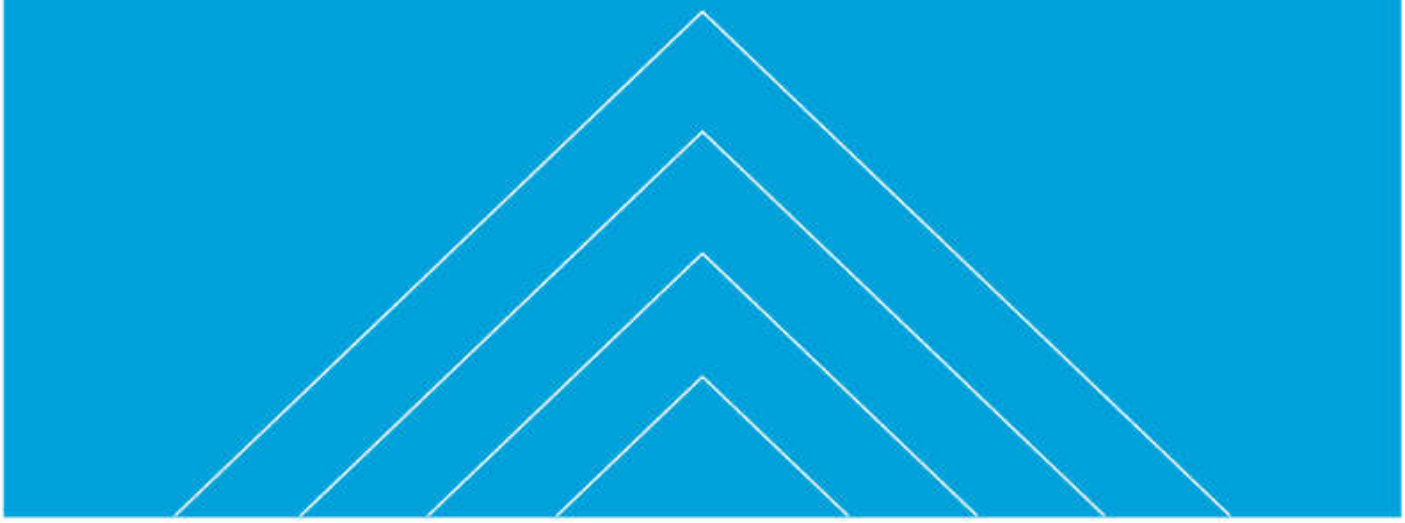
There were a significant number of areas identified where the documentation of processes required strengthening, in particular in relation to the WaterUK metrics which make up the quantitative component of the D-MeX score. The Company has subsequently made changes to address the issues that were raised.

Some issues with processes and the robustness of the reporting have been identified although they are unlikely to materially impact on the reported score.

While in the short-term this will not impact on processes, the Company is looking to implement a digital solution which will streamline both day-to-day management and reporting and should be ready for implementation for the 2021/22 report year.

We had queried the Company's approach to calculating the score as we believe rounding was introducing minor errors. This was subsequently addressed.

Appendices



Appendix A. Meeting Record

Table A-1 Performance Commitments Methodology and Data Audits Meeting Record

Performance Measure	Owner/Auditee	Auditor	Methodology and Data Audit Date
A1: Unplanned customer minutes lost	Glenn Hiscock	Jonathan Archer	06/05/2020
A2: Asset reliability - infrastructure	Frank van der Kleij (overall) / Glenn Hiscock	Jonathan Archer	11/05/2020
Asset reliability sub indicator: Bursts	Glenn Hiscock		11/05/2020
Asset reliability sub indicator: DG2 Low Pressure	Mathias Pacalin		11/05/2020
A3: Asset reliability - non-infrastructure	Paul Cook	John Sutherland	13/05/2020
Asset reliability sub indicator: Turbidity Performance at WTW	Jon Scott		13/05/2020
Asset reliability sub indicator: Unplanned maintenance events	Maciej Zgola		13/05/2020
B1: Population in centres >25,000 at risk from asset failure	Kevin Henderson	Jonathan Archer	Scheme delivered
C1: Security of supply index (SOSI)	Liz Cornwell	Doug Hunt	28/05/2020
C2: Hosepipe ban frequency	Liz Cornwell	Doug Hunt	28/05/2020
D1: Mean zonal compliance (MZC)	Glenn Hiscock	John Sutherland	13/05/2020
E1: Negative water quality contacts	Jon Scott	Julian Jacobs	Complete Jan 2020
F1: Leakage	Mathias Pacalin	Doug Hunt	18/05/2020
G1: Meter penetration	Andrew Jones	Julian Jacobs	04/05/2020
G2: Per capita consumption (PCC)	Mathias Pacalin	Doug Hunt	19/05/2020
H1: Total carbon emissions	Owen Smith	Helen Gavin	11/05/2020
H2: Raw water quality of sources	Matt Pitts	John Sutherland	05/05/2020
H3: Biodiversity index	Natasha Clarke	Helen Gavin	11/05/2020
H4: Waste disposal compliance	Robert Luckwell	Katherine Adams	13/05/2020
I1: Percentage of customers in water poverty	Michael Payne	Julian Jacobs	05/05/2020 06/05/2020
J1: Service incentive mechanism (SIM)	Michael Payne	Julian Jacobs	05/05/2020 06/05/2020
J2: General satisfaction from surveys	Michael Payne	Julian Jacobs	05/05/2020 06/05/2020
J3: Value for money	Michael Payne	Julian Jacobs	05/05/2020 06/05/2020
K1: Ease of contact from surveys	Michael Payne	Julian Jacobs	05/05/2020 06/05/2020
L1: Negative billing contacts	Michael Payne	Julian Jacobs	05/05/2020 06/05/2020

Table A-2 GSS Payment Audit Meeting Record

Area	Owner/Auditee	Auditor	Audit Date
GSS Payments Bristol Water	Kerry Ross, Caroline Glanville, Georgia Cook, Mandy Holt, Lynn Hawkins, Sally Milkins	Julian Jacobs	15/05/2020
GSS Payments Pelican	Oliver Jerrome	Julian Jacobs	22/05/2020

Table A-3 APR Section 3 Tables Meeting Record

Table	Owner/Auditee	Auditor	Audit Date
3A - Outcome performance table (including underperformance penalties and outperformance payments)	Alex Smethurst	Jonathan Archer	27/05/2020
3B - Sub-measure performance table	*Covered under performance commitments A2 and A3 above*		
3D - SIM (Service Incentive Mechanism)	Michael Payne	Julian Jacobs	05/05/2020 06/05/2020
3S - Shadow reporting of leakage	Mathias Pacalin	Doug Hunt	19/05/2020
3S - Shadow reporting of PCC	Mathias Pacalin	Doug Hunt	19/05/2020
3S - Shadow reporting of supply interruptions	Glenn Hiscock	Jonathan Archer	06/05/2020
3S - Shadow reporting of unplanned outage	Liz Cornwell	Jo Parker	14/05/2020
3S - Shadow reporting of mains bursts	Glenn Hiscock	Jonathan Archer	11/05/2020
3S - Shadow reporting of risk of severe restrictions in a drought	Liz Cornwell	Mark Deakin	13/05/2020
3S – Shadow reporting of customer vulnerability	Michael Payne	Julian Jacobs	04/05/2020

Table A-4 APR Section 4 Tables (financial and non-financial information) Meeting Record

Table	Owner/Auditee	Auditor	Audit Date
4A.1 – Number of household voids	Andrew Jones	Julian Jacobs	11/05/2020
4A.2 - PCC	Mathias Pacalin	Doug Hunt	19/05/2020
4A.3 – Bulk supply export	James Marsh	Katherine Adams	15/05/2020
4A.4 – Bulk supply import	James Marsh	Katherine Adams	15/05/2020
4A.5 – Distribution input	James Marsh	Doug Hunt	19/05/2020
4B - Totex analysis	Matt Woolley	Graydon Jeal	10/06/2020
4C - Impact of AMP performance to date on RCV	Kevin Hayter	Graydon Jeal	10/06/2020
4D - Wholesale totex analysis – wholesale water	Matt Woolley; Geraldine Redman	Graydon Jeal	09/06/2020
4F - Operating cost analysis - household retail	Matt Woolley	Graydon Jeal	10/06/2020
4G - Wholesale current cost financial performance	Geraldine Redman	Graydon Jeal	10/06/2020

Table A-5 APR Section 4 Tables (4J to 4V - previously Wholesale Cost Tables) Meeting Record

Table	Lines	Line numbers	Owner/Auditee	Auditor	Audit Date
4J - Atypical expenditure by business unit	Operating Expenditure	1 to 11	Matt Woolley	Graydon Jeal	09/06/2020
	Capital Expenditure	12 to 21	Geraldine Redman	Jonathan Archer	09/06/2020
	Cash Expenditure	22 to 24	Matt Woolley	Graydon Jeal	09/06/2020
	Atypical Expenditure	25 to 30	Geraldine Redman	Jonathan Archer	09/06/2020
	Total Expenditure	31	Matt Woolley	Graydon Jeal	09/06/2020
4L - Enhancement capital expenditure by purpose	Enhancement expenditure by purpose	1 to 38	Frank van der Kleij, Robin Poole	Jonathan Archer	11/06/2020
4P - Non-financial data for WR, WT and WD: Resources	Proportion of distribution input by source type	1 to 8	James Marsh	Katherine Adams	15/05/2020
	Number and capacity of sources	9 to 23	Sarah McHugh, Neil Murphy	Katherine Adams	06/05/2020
	Length of raw mains	24, 27	Henry Ditoos	Katherine Adams	15/05/2020
	Pumping head	25 to 26	Owen Smith	Simon Ingall	20/05/2020
	Water resources capacity	28	Liz Cornwell	Katherine Adams	20/05/2020
4P - Non-financial data for WR, WT	Total water treated	29 to 43	James Marsh	Hala Samour	14/05/2020
	Number of treatment works	44 to 58	Sarah McHugh, Neil Murphy	Hala Samour	14/05/2020

Table	Lines	Line numbers	Owner/Auditee	Auditor	Audit Date
and WD: Treatment	Zonal population receiving water treated with orthophosphate	59	Henry Ditoos	Hala Samour	22/05/2020
	Average pumping head - treatment / Average pumping head - resources	60	Owen Smith	Simon Ingall	20/05/2020
4P - Non-financial data for WR, WT and WD: Distribution	Main lengths	61 to 68	Henry Ditoos	Katherine Adams	15/05/2020
	Capacity	69 to 71	Sarah McHugh, Neil Murphy	Katherine Adams	06/05/2020
	Distribution input	72	James Marsh	Doug Hunt	19/05/2020
	Water Delivered	73 to 76	Mathias Pacalin	Doug Hunt	18/05/2020
	Leakage	77 to 79	Mathias Pacalin	Doug Hunt	18/05/2020
	Comms pipes	80 to 82	Henry Ditoos	Katherine Adams	07/05/2020
	Network	83 to 85	Sarah McHugh	Katherine Adams	06/05/2020
	Age of Network	86 to 93	Henry Ditoos	Katherine Adams	07/05/2020
	Pumping head	94	Owen Smith	Simon Ingall	20/05/2020
	WTW in size bands	95 to 102	James Marsh	Hala Samour	14/05/2020
	Proportion of Total DI band	103 to 110	James Marsh	Hala Samour	14/05/2020
4Q - Non-financial data - Properties, population and other	Properties billed	1 to 5	Andrew Jones	Julian Jacobs	11/05/2020
	Properties connected	6 to 8, 13 to 14	Andrew Jones, Lynn Hawkins, Tim St John	Julian Jacobs	11/05/2020
	Meters	9 to 12, 16 to 17	Andrew Jones	Julian Jacobs	11/05/2020
	Total Population Served	15	Mathias Pacalin	Julian Jacobs	11/05/2020
	Company area	18	Henry Ditoos	Hala Samour	22/05/2020
	Lead Communication pipes	19	Lynn Hawkins	Katherine Adams	14/05/2020
	Supply / Demand	20 to 23	Liz Cornwell	Katherine Adams	20/05/2020
	Energy Consumption	24 to 26	Owen Smith	Katherine Adams	14/05/2020
	Mean zonal compliance	27	Jon Scott	John Sutherland	13/05/2020
	Compliance Risk Index	28	Jon Scott	John Sutherland	21/05/2020
	Events Risk Index	29	Jon Scott	John Sutherland	21/05/2020
	Volume of leakage	29	Mathias Pacalin	Doug Hunt	19/05/2020
4V - Operating cost analysis	Opex	1 to 22	Matt Woolley / Geraldine Redman	Graydon Jeal	11/06/2020

Table A-6 WRMP Update Audit

Area	Owner/Auditee	Auditor	Date

WRMP Annual Return	Liz Cornwell	Doug Hunt	28/05/2020

Table A-7 WRMP Update Audit

Area	Owner/Auditee	Auditor	Date
WRMP Annual Return	Liz Cornwell	Doug Hunt	28/05/2020

Table A-8 C-MeX and D-MeX Audit

Table	Owner/Auditee	Auditor	Audit Date
Customer Measure of Experience (C-MeX) Bristol Water	Michael Payne	Julian Jacobs	05/05/2020 06/05/2020
Customer Measure of Experience (C-MeX) Pelican	Oliver Jerrome	Julian Jacobs	21/05/2020 / 22/05/2020
Developer Measure of Experience (D-MeX)	Sharon Ranahan	Julian Jacobs	07/05/2020

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