

AMP7 Reporter

2020/21 Annual Performance Assurance Report

Affinity Water

8th July 2021



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This document has 22 pages including the cover.

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Assurance Statement for Affinity Water's 2020-21 Annual Performance Report

Atkins is engaged by Affinity Water to provide independent assurance on non-financial aspects of the annual reporting activities that Affinity carries out. This assurance statement encapsulates observations we made during the technical audit of Affinity Water's Annual Performance Report for 2020/21. We presented our findings to Affinity Water's Regulation Team on 3rd June 2021 and the Affinity Water Audit Committee on 17th June 2021. This statement is part of a continuous improvement process that has involved detailed consideration of the methodologies and their applications by which Affinity Water reports on its performance at financial year end.

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 and a formal feedback summary including requests for further information or clarification with a table of issues raised. The issues from all of the audits and subsequent interactions are compiled 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.

Affinity Water has 28 Performance Commitments (PCs), 17 of which have associated financial incentives. As part of our independent assurance of Affinity Water's annual reporting, we have been engaged to audit the tables and submissions to be published in Affinity Water's 2020/21 Annual Performance Report and regulatory reporting to other bodies.

The areas in scope for this assurance are:

- Data and commentary (where applicable) reported as part of the Annual Performance Report (APR) to Ofwat:
 - Table 3A & 3E - Outcome performance tables (common and bespoke measures)
 - Table 3C – C-MeX
 - Table 3D – D-MeX
 - Table 3F; 3I; 4A; 4D; 4F; 4J; 4Q; 4R; 5A; 6A; 6B; 6C; 6D – Asset and financial data.
- Environment Agency – Annual average out-turns
- Report to CCWater
- UK Government Environmental Reporting of Green House Gases

In a series of approximately 40 video enabled meetings from April to June 2021, we carried out combined methodology and data audits designed to confirm whether:

- Affinity Water has appropriate systems, procedures and reporting mechanisms in place to control and meet its reporting obligations.
- Affinity Water understands the accuracy of the data that it is providing and is able to identify where specific reported data may not be appropriate to meet regulatory expectations. Many of the items that we audit inherently contain an element of uncertainty, so it is not possible to assure their absolute accuracy.
- The key assumptions and processes that are used to report against Affinity Water's Performance Commitments are consistent with the way that the target was set for the PR19 Final Determination.
- The methodologies that have been used for reporting of the common metrics are consistent with the technical guidance that has been published by Ofwat, and where there are shortfalls these have been identified appropriately using the Red, Amber, Green classifications provided by Ofwat.

We traced reported data back to data sources and information systems. There were 39 changes to reported data or methodology where we identified some errors in calculations and/or areas of misunderstanding in relation to the reporting guidelines or methodology.

Areas of note which we identified with the reporting of the Company's AMP7 performance commitments are:

- For performance commitment 3A.8 - Reducing the total number of void properties by identifying false voids, we did not feel that the Company had fully exposed and explained its exclusions for being

uneconomical to bill in its reporting documentation. These exclusions have a significant bearing on the reported number for this performance commitment.

- For performance commitment 3A.7 Environmental innovation - delivery of community projects, the Company is reporting zero units complete this year. There are 4 units currently undertaken in the year that require sign-off. These have been reviewed by the CCG, but it is unclear the process by which the required '3 gate' sign-off process is to be completed and how the CCG are required to provide assurance for each gate. The regulation team have made contact with Ofwat to query this.
- For performance commitment 3A.5 - Mains Repairs, there remains an outstanding clarification with Ofwat on the methodology for reporting. It is not clear if rework activities should be included in the measure and the Company is seeking formal clarification. The outcome will have a material impact on the ODI penalty incurred for this measure.
- For performance commitment 3E.1 - Risk of severe restrictions in a drought, the approach being used by the Company to set and report against the PC targets was not fully aligned with the guidance for the metric. The Company has recalculated both the figure for the reporting year and what the targets would have been had they been set using the approach set out in the metric. Based on both the original and re-calculated targets, the PC has not been met as a result of high DI during the reporting year. The Company have produced a commentary which exposes the assumptions which have been made in lieu of explicit guidance in the FD.

Across the assurance programme auditors highlighted that the recording checks and controls and documentation of process could be improved. We did see examples of good practice, but the level of checks and controls were variable depending on the area.

We consider that the published metrics provide a fair and reasonable account of Affinity Water's performance in 2020/21 relative to its AMP7 targets. While we observed a number of issues for which we provide comment within our main report, we believe these do not impact materially upon the potential to sign-off the Company submission.

We confirm that Affinity Water has continued to provide us with full and transparent access to its systems and processes, including unrestricted access to all systems, files and documents that we requested from the Company. During the assurance activities, we had free access to the Director of Regulation and their team and the full cooperation of the people responsible for preparing and reporting the 2020/21 APR and regulatory submissions and the supporting information.



Jonathan Archer
Regulation Director
Reporter providing Technical Assurance Services to Affinity Water

1. Scope of Work

Atkins Limited has been appointed to provide external assurance on the regulatory submissions presented by Affinity to Ofwat under the conditions set out in its Licence with the Secretary of State. There is also associated regulatory reporting to the EA, Water UK and CC Water which falls within the scope of our assurance.

The areas in scope for assurance are:

- Data and commentary (where applicable) reported as part of the Annual Performance Report (APR) to Ofwat:
 - Table 3A & 3E - Outcome performance tables (common and bespoke measures)
 - Table 3C – C-MeX
 - Table 3D – D-MeX
 - Table 3F; 3I; 4A; 4D; 4F; 4J; 4Q; 4R; 5A; 6A; 6B; 6C; 6D – Asset and financial data.
- Environment Agency – Annual average out-turns
- Report to CCWater
- UK Government Environmental Reporting of Greenhouse Gases

A more granular scope of works is provided in Appendix A.

2. Key Findings

As with previous years we classify our findings into ‘red’, ‘amber’ and ‘green’ categories. The definition for each category as follows:

- ‘Red’. These are material reporting risks to the Company relating to either the application of the methodology, the accuracy of the reported data and/or the meeting of a performance commitment
- ‘Amber’. These are significant issues that may need to be addressed to mitigate the risk to the business. They may relate to the methodology and/or data and/or performance.
- ‘Green’ signifies either no issues or relatively minor issues that are designed to provide continuous improvement to the reporting process and are highlighted within the individual audit summaries that we provide for the Company.

2.1. AMP7 Performance Commitments

Table 2-1 Summary of key findings

Performance Commitment	Findings	Methodology	Data
Water Quality Compliance (CRI)	The Company’s methodology for identifying and reporting water quality failures is robust. The DWI is responsible for reporting, although we can sense check it against the Company’s internal reporting. From an assurance perspective, our findings were that reporting is satisfactory.	Green	Green
Water Supply Interruptions	Overall we are satisfied that the Company is taking a precautionary approach to its reporting of events and property numbers. Due to the reporting configurations and process for individual events the Company may be over-reporting on the number of properties affected	Green	Green

Performance Commitment	Findings	Methodology	Data
	due to the GIS approach reporting on individual properties and not billed properties. In some instances the Company are investigating these in more detail to exclude 'attached' properties i.e. non billed properties off a bulk meter. The total denominator of properties is reporting billed properties via the Hi-Affinity billing system.		
Leakage	<p>The Company has made good progress in implementing improved approaches to determining the components of the water balance, but some have been delayed due to the Covid pandemic. Plans are in place and activities ongoing to improve the understanding of the company's leakage at a component and a geographically granular level.</p> <p>The water balance error at a water resource zone level continues to be larger than would be wished ranging from -1.77% to +10.01%. At a company level the water balance error of 2.35% is acceptable and can be accommodated by the MLE approach which has been altered slightly to accommodate the uncertainties arising out of the Covid pandemic.</p> <p>With a 2.7% reduction in leakage from the baseline figure, the leakage PC has not been met with the outturn being 1.7% below baseline.</p>	Green	Green
Per capita consumption	<p>The Company has made good progress in implementing improved approaches to determining the components of the water balance, but some have been delayed due to the Covid pandemic. Plans are in place and activities ongoing to improve the understanding of the company's per capita consumption at a component and a geographically granular level. There is an underlying issue with the representativeness of the Watcom study and alternatives are being considered by the company.</p> <p>Per Capita Consumption outturned at 169.3l/p/d three year rolling average compared to the target 155.3l/h/d. This is also a problem for other companies as the impacts of the Covid pandemic are being felt industrywide.</p>	Green	Green
Mains repairs	The Company have submitted a clarification to Ofwat to better understand whether or not rework on for example tightening of bolts on a clamp are to be included or excluded from the Mains Repair number. The outcome of this may have a material impact on the level of ODI penalty the Company incur. The default position will be to include these within the reported number and explain explicitly within the	Amber	Amber

Performance Commitment	Findings	Methodology	Data
	commentary how many are included on this basis.		
Unplanned outage	The outage reporting process is robust with strong checks and controls built into the business as usual process.	Green	Green
Risk of severe restrictions in a drought	This is a challenging metric to report as the Ofwat guidance is both complex and ambiguous. The original approach being used by the company to set and report against the PC targets was not fully aligned with the guidance for the metric. The company has recalculated both the figure for the reporting year and what the targets would have been had they been set using the same approach. Based on both the original and re-calculated targets, the PC has not been met as a result of high DI during the reporting year.	Green	Green
Priority services for customers in vulnerable circumstances - PSR reach; Attempted contacts; Actual contacts	The methodology is comprehensive and the reporting appears to be robust. Checks and controls are built into the Company's processes. There is an issue with Ofwat's reporting tables. This has been flagged as part of the Ofwat query process. This has meant that the Company is at the moment not reporting the values seen at audit. The Company will be providing a commentary around this if the Ofwat tables are not re-issued prior to submission.	Green	Green
C-MeX survey and Complaints	The methodology is robust, the Company has in place appropriate checks and controls and the reporting of complaints appears to be robust. A compliant survey sample is also sent to the market research company (there were some non-material issues earlier in the year associated with some contacts but these have been addressed).	Green	Green
D-MeX	Significant strides have been made with Developer Services systems, processes, documentation and training. All previous risks and issues highlighted have now been addressed and the methodology is fit for purpose. The Company has been supplying a compliant survey sample to the market research company and the reporting of the Levels of Service metrics appears to be robust.	Green	Green
Average time properties experience low pressure	Our audit findings were satisfactory. There continues to be a reliance on offline investigations and reporting by very few individuals rather than systems, although we found no issues.	Green	Green
Customers in vulnerable circumstances satisfied with our service (receiving financial	The methodology is comprehensive and the reporting appears to be robust. Checks and controls are built into the Company's processes.	Green	Green

Performance Commitment	Findings	Methodology	Data
help & not receiving financial help)			
Customers in vulnerable circumstances who found us easy to deal with (receiving financial help & not receiving financial help)	The methodology is comprehensive and the reporting appears to be robust. Checks and controls are built into the Company's processes.	Green	Green
Environmental innovation - delivery of community projects	Work has been undertaken against four project units this year. The Company has not signed-off the projects in line with the governance processes set out in the FD as it is unclear. The reported number for this year is therefore zero units completed. The Company have made contact with Ofwat to understand the sign-off process fully. The full FD requirements and the evidence needed should be reflected in methodology once clarified.	Amber	Green
Reducing the total number of void properties by identifying false voids	We reviewed the Company's approach for applying exclusions in particular challenging an area which was not consistent with how the Performance Commitment had originally been set. We also highlighted that the denominator being used was not consistent with the Final Determination. The Company subsequently adjusted its reporting and method of calculation to address these issues. We are satisfied that the percentage reported is calculated accurately. Further explanation and justification is needed in the methodology documentation to explain the process for exclusion of voids on the basis of being uneconomical to bill.	Amber	Green
River restoration	The methodology is comprehensive and the reporting appears to be robust. Project updates and checks are built into the Company's processes.	Green	Green
Abstraction reduction	Company is reporting a figure of zero reductions, in line with the target for year 1. Minor updates required to the methodology.	Green	Green
Number of sources operating under the Abstraction Incentive Mechanism	Some improvements suggested to the methodology document to improve line of sight with the FD. No concerns identified over the reported figure, although improvements to the analysis spreadsheets were recommended to improve auditability and document checks undertaken.	Green	Green
Properties at risk of receiving low pressure	Our audit findings were satisfactory. There continues to be a reliance on offline investigations and reporting by very few individuals rather than systems, although we found no issues. The Company's significant increase in logger numbers continues to mask underlying trends and links to actual customer experience are not evident. We suggest	Green	Green

Performance Commitment	Findings	Methodology	Data
	improving links to customer contacts to better direct and optimise capital investment rather than chasing down numbers on this one measure.		
Number of occupied properties not billed (Gap sites)	The Company's approach to identifying Gap Sites is comprehensive, effective and well developed. There is an excellent audit trail to support the reported number.	Green	Green
Unplanned interruptions to supply over 12 hours	All of our audit checks were satisfactory and align with data reviewed for the common supply interruptions performance commitment	Green	Green
Customer contacts per 1,000 population for Water Quality (taste, odour & appearance)	The Company's methodology for reporting is robust, checks and controls are built into the processes and no issues were identified with the reporting.	Green	Green
BSI accreditation	The Company's BSI accreditation is valid until 2022.	Green	Green
IT resilience	The methodology is comprehensive and the reporting appears to be robust. Checks and controls are built into the Company's processes.	Green	Green
Value for Money Survey	The methodology is robust and satisfactorily documented, the survey is carried out by a third party supplier who provide the scores which have then been accurately transcribed for reporting purposes.	Green	Green
Delivery of water industry national environment programme requirements	The methodology is comprehensive and the reporting appears to be robust. Project updates and checks are built into the Company's processes.	Green	Green

2.2. Reporting of Additional Regulatory Information

We have reviewed other data reported and highlight on an exception basis any areas of note. This includes regulatory reporting to Ofwat, the EA and CC Water.

Table 2-2 Areas of note encountered during audit of additional regulatory information tables

Table Ref	Submission	Methodology	Data	Findings
5A.23	Average Pumping Head Distribution	Amber	Green	The Company use Abstraction volumes as the denominator for the Distribution price control as it is the same weighted basis as for abstraction, transport and treatment. This does not appear to be consistent with the guidance given the Company's net imports which go into Distribution. We have reviewed the likely potential impact at a high level and note that the relative impact is in the order of 2% of APH. Although we understand that this will be a more significant exercise in using actual DI volumes on a site basis we suggest that this is updated as soon as possible for next year's APH numbers.

Table Ref	Submission	Methodology	Data	Findings
4R.11 4R.20	Residential Voids	Amber	Green	Further explanation and justification is needed in the methodology documentation to explain the process for exclusion of voids on the basis of being uneconomical to bill.
4R.26	Population	Green	Green	Population is used as a denominator across various reporting areas, including the water balance. In AMP6 we had identified population reporting as a weakness, but the Company did not believe it was appropriate to change the methodology during the AMP. The approach has been completely overhauled for AMP7 and we were satisfied that the new methodology is robust, appropriate and is a significant improvement on the AMP6 approach.
6C.9-11	Number of lead communication pipes; Number of galvanised iron communication pipes; Number of other communication pipes	Green	Green	There remains a reliance of infilling of data from Maximo where unknown material types have been prorated against a historical split. We identified this as an emerging issue at APR19 and then we raised this as an amber issue at APR20. There has been no change in the year and remains an issue the asset level. This is an IT system issue rather than an asset strategy issue.
6C.21	Lead CPs replaced for water quality - lead replacement programme	Green	Amber	The Company have not formally agreed or commenced its AMP7 program. The numbers it is reporting this year are based on the carry-over from the AMP6 program. This is not consistent with the RAG guidance and needs to be exposed in its commentary.
6C.21	Total lead CPs replaced for water quality - Lead CPs replaced for water quality - other	Green	Green	There is a step change in reporting this component this year which also includes lead replacements at the customer request which have not been picked up in the reported numbers since APR18. This has impacted on the historical and current reporting for lines 6C.9,10,11. This links back to the inability of Maximo to capture the CP material type at the asset level.
6C.23	Demand-side improvements delivering benefits in 2020-25	Green	Green	The Company have been advised to provide a clear explanation of the different calculation methods for demand savings of the Save 10 a Day campaign. They were also advised to expose whether the activities they're reporting benefits for are proposed as demand-side improvements in their WRMP, or whether they are 'baseline' demand management activities.
6D.7	New selective meters installed Residential Meters	Green	Green	In the course of our audit we queried whether the Company's universal metering program (UPM) captured all selective meters. We identified that there are other meters that are new selective put in at the behest of the Company e.g. in the replacement of stop valves that are actually outside of the UPM. In our audit we identified 620 of these to be included.
6D.11-14	New residential meters installation	Green	Green	The Company were unsure whether they should only be reporting in year metering benefits or reporting cumulative benefits over the AMP. We advised that only in year benefits should be reported, and that the current methodology was reasonable.

Table Ref	Submission	Methodology	Data	Findings
CC Water	Watersure Medical Reasons / Family Criteria.	Green	Green	The Company is reporting an additional 21 customers in their total number of Watersure customers compared to the medical and family split. Whilst we understand that the company is completing further investigations to allocate these customers this will not be resolved for the final report. We recommended that this is captured in a commentary.
	UK Government Environmental Reporting of Greenhouse Gases and energy consumption	Green	Green	The Company has invested time in previous years to significantly improve and streamline its methodology. The benefits of this have been shown in this audit in which the methodology document provides an excellent overview of the approach and step by step treatment of different data sources, and the data trailing discovered very few and minor issues.

2.3. Summary of Changes in Company Submission

We have listed below a summary of the changes made as a result of the technical assurance of the Company's submission. These changes relate to either or both changes to the Company methodology and the reported data.

Their RAG status was at one time either likely to be "Amber" or "Red" but these areas generally have a "Green" status now because the issue(s) identified have been addressed and therefore are no longer likely to represent notable issues or risks.

In total, there have been 39 changes to reported data and methodology compared with what was originally presented for audit (compared to 30 in 2019/20). If a reporting area is not listed herein, there were no issues identified with the reported data and if any changes to the methodology were suggested, they were only minor improvements to the documentation of the end-to-end processes.

Table 2-3 Summary of Changes to Company Methodology and/or Reported Data

Table, Line and Subject	Changes to Methodology	Changes to Reported Data	Reported Data	
			Audit	Final
3A Line 1 Compliance Risk Index (CRI)		The Company had incorrectly stated that it had met the Performance Commitment.	Yes	No
3A.8 Reducing the total number of void properties by identifying false voids	The Company has adjusted their reporting of these lines to be consistent with the with the Final Determination.		2.33%	2.37%
4R.11 Residential void properties			32.605	34.528
4R.20 Residential void properties at year end			31.173	34.115
3A.6, 3F.8, 3i.1: Outage	The Unplanned and Planned Outage process map aims to explain the flow of data from raw to reported with validation stages. However, it did not appear to have an end to the process.		Process map errors	Process map adjusted

Table, Line and Subject	Changes to Methodology	Changes to Reported Data	Reported Data	
			Audit	Final
3A.6, 3F.8, 3i.1: Outage	Supporting commentary included some minor errors		Commentary errors	Commentary amended
3A.3-4, 3F.4-6, 6B.4-11, 6C.24, 6D.17-18 Leakage and PCC	Presented a "waterfall" chart to explain the differences between the reported leakage figures using the AMP6 and AMP7 methodologies for calculation. The chart needed to be corrected to explain the steps in the difference.		Faulty chart	Changed chart
3A.3-4, 3F.4-6, 6B.4-11, 6C.24, 6D.17-18 Leakage and PCC	It was not clear in the methodology that the daily Hour to Day Factor (HTDF) calculation done in Waternet is based on pressure values from Critical Point (CP) loggers.		Unclear on HTDF methodology	Explanation of the critical point logger information is now updated in the Leakage methodology
3A.3-4, 3F.4-6, 6B.4-11, 6C.24, 6D.17-18 Leakage and PCC	While we believed that checks and controls are in place, there should be a repository of formalised checks to not checks made and resulting amendments made.		To documenting of checks and controls	Plans to document checks and controls for mid-year audits
3A.3-4, 3F.4-6, 6B.4-11, 6C.24, 6D.17-18 Leakage and PCC	The DI for Affinity SE and Affinity E were provided by the operations centre at Clay Lane and taken at face value in the overall DI calculation. We suggested that some form of internal assurance should take place.		The DI for Affinity SE and Affinity E provided by the operations centre at Clay Lane and taken at face value	Plans to introduce internal assurance measures for reporting DI for the South East and East regions. for mid-year audits.
3A.3-4, 3F.4-6, 6B.4-11, 6C.24, 6D.17-18 Leakage and PCC	On review of the water balance calculations sheets, it was noted that the link to the WRZ1 legally billed figure was in error		Link to the WRZ1 legally billed figure in error	Corrected
3A.3-4, 3F.4-6, 6B.4-11, 6C.24, 6D.17-18 Leakage and PCC	Billed volumes are being allocated pro rata by finance at regional level, not community level. Qlik will do the separation by WRZ, but it is not yet in place.		Billed volumes allocated at a regional level	This will form as part of the 6 month forward plan and should transition to the QlikSense volumes report as long as the Company can demonstrate the confidence levels of reporting, if not it will continue to report Central community
3A.3-4, 3F.4-6, 6B.4-11, 6C.24, 6D.17-18 Leakage and PCC	In the NHH volumes methodology there is a process by which negative values are taken as zeros. This must be introducing a		Potential minor systemic error	As part of next year's audit the Company will look into this issue more but

Table, Line and Subject	Changes to Methodology	Changes to Reported Data	Reported Data	
			Audit	Final
	systemic bias and undermining a best central estimate.			it feels that based on the current data there is little evidence for this being a systemic issue
3E 1 and 3I 2 Risk of severe restrictions in a drought	Methodology being used for reporting, and the target against which the reported figure is to be measured, were not aligned with the Ofwat methodology	Significant number of updates required to align with the Ofwat methodology.	34.2%	18.2%
4F.1-7: Major project capital expenditure by purpose		We discussed the interpretation of how the table should be filled in. It was agreed that the major projects should be entered separately line by line.	Major projects undecided format	Major projects reported separately.
4L.20: SDB Supply Side		We challenged why DG2 was allocated to this line. It was investigated and confirmed as incorrect and transferred to base.	Incorrect allocation	Changed allocation
4L.23: Demand Side Improvements		We challenged and it was agreed that the SROs should be on the supply side	Incorrect allocation	Changed allocation
4L.42: New meters		We queried whether meter replacement is a new meter and therefore is not enhancement. Agreed and moved to base.	Incorrect allocation	Changed allocation
4L.49: Improvements to taste, odour and colour		It was agreed that BHs should be water resources not treatment	Incorrect allocation	Changed allocation
4Q.4 New connections – SLPs		A different value has been added in error to the spreadsheet.	1844	2247
4Q.6 New Properties (Business – excluding NAVs)		The Company advised there is no dataset to distinguish between a new replacement supply and a new property. The Company has calculated an assumed number of replacement supplies. This had not been removed from the business reported total.	285	259
4R.21 Total connected properties at year end.		The calculation was double counting the uneconomic to bill.	1496.821	1466.821
4R.12 Total connected	These lines did not include uneconomical to bill which we highlighted appeared to be an	A value of 27.746 has subsequently been added to the Total connected	1431.058 541.961	1458.804 544.903

Table, Line and Subject	Changes to Methodology	Changes to Reported Data	Reported Data	
			Audit	Final
residential properties and 4R.21 Total connected residential properties at year end	error. The Company clarified this with Ofwat and they have confirmed it should be accounted for.	properties alongside some commentary. A value of 2.942 is added to the Total connected properties at year end		
5A 29 Water resources capacity	Methodology document updated to clarify that an annual review would be undertaken on the assumptions behind the reported figures.	The wrong version of the climate change forecast inputs sheet had been used initially, identified through audit trailing post-audit.	1068.41 MI/d	1031.94 MI/d
6A 12 - Total length of raw and pre-treated (non-potable) water transport mains for supplying customers 6A.5 - Total length of raw water transport mains and other conveyors	Methodology has been updated to ensure rounding error does not occur.	Data contained in an email trail from the water quality team which identified the blended mains which needed to be included in 6A.12 and removed from 6A.5, had been rounded up to 1 decimal place in the methodology document where the calculation was completed. This is a reporting line reported to two decimal places so this introduced a rounding error. The numbers were recalculated using the unrounded values.	36.5km 205.1km	36.53km 205.03km
6C 9,10,11 Communication Pipe numbers	Capturing material type of CP in Maximo remains an issue the asset level. We understand this is an IT systems issue.	The Company identified that it was not capturing all lead CPs replaced for quality and also needed to include those replaced where quality was not the root cause. Due to the incremental approach the Company takes to calculate this reported number we suggested that the Company update its baseline numbers since 2018/19.	Lead - 314,974 GI - 246,584 Other - 509,031	Lead - 313,751 GI - 246,584 Other - 510,254
6C.23	We advised that the company expose whether the demand-side improvements they're reporting benefits for were proposed as part of WRMP19 to reduce their supply demand balance deficit or whether they are baseline activities that take place annually.		Alignment with WRMP unclear	Explanation has been updated in methodology
6D.6,7,9 Residential Meters	The Company did not have a controlled methodology document but have since developed one which covers all residential meters including		Optants 2346	Optants 2635

Table, Line and Subject	Changes to Methodology	Changes to Reported Data	Reported Data	
			Audit	Final
	the UPM, and ad-hoc replacements. The Company we not interpreting the Ofwat guidance on Basic and Smart meters correctly but have subsequently included all AMR meters as smart.		Replaced 10,313 Selective 16,571	Replaced 10,313 Selective 16,571
6D10 Business Meters Renewed	The Company updated its methodology to include the exchange of meters and a customer moving from having two meters to one meter.	We identified 4 meters which were duplicates caused by the exchange of meters and the customer moving from having two meters to one meter.	Basic - 0.002 Smart - 0.526	Basic - 0.002 Smart - 0.522
6D.15 Residential properties – meter penetration	The data was being calculated using the annual average, but it should be the year end average.		Smart 20.6% Basic 41.3%	Smart 20.9% Basic 41.9%

Appendices



Appendix A. Detailed Scope of Works

Table 2-4 Scope of assurance – AMP7 Performance Commitments

Performance Measure	Methodology and Data Audit
3A.1 Water Quality (CRI)	✓
3A.2 Water Supply Interruptions	✓
3A.3 Leakage	✓
3A.4 Per capita consumption	✓
3A.5 Mains repairs	✓
3A.6 Unplanned outage	✓
3E.1 Risk of severe restrictions in a drought	✓
3E.2-4 Priority services for customers in vulnerable circumstances - PSR reach; Attempted contacts; Actual contacts	✓
Table 3C C-MeX	✓
Table 3D D-MeX	✓
3E.6 Average time properties experience low pressure	✓
3E.11 & 3E.7 Customers in vulnerable circumstances satisfied with our service (receiving financial help & not receiving financial help)	✓
3E.12 & 3E.8 Customers in vulnerable circumstances who found us easy to deal with (receiving financial help & not receiving financial help)	✓
3A.7 Environmental innovation - delivery of community projects	✓
3A.8 Reducing the total number of void properties by identifying false voids	✓
3A.9 River restoration	✓
3A.10 Abstraction reduction	✓
3A.11 Number of sources operating under the Abstraction Incentive Mechanism	✓
3A.12 Properties at risk of receiving low pressure	✓
3A.13 Number of occupied properties not billed (Gap sites)	✓
3A.14 Unplanned interruptions to supply over 12 hours	✓
3A.15 Customer contacts per 1000 population for Water Quality (taste, odour & appearance)	✓
3E.9 BSI accreditation	✓
3E.10 IT resilience	✓
3E.13 Value for Money Survey	✓

3E.14 Delivery of water industry national environment programme requirements	✓
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Table 2-5 Scope of assurance – APR Asset and Financial Data

Table	Lines	Line numbers	Methodology and Data Audit
3F - Underlying calculations for common performance commitments - water and retail	Mains repairs	1-3	✓
	Per capita consumption	4;6	✓
	Leakage	5	✓
	Water Supply Interruptions	7	✓
	Unplanned outage	8	✓
	PSR	9	✓
3H - Summary information on outcome delivery incentive payments	Calculations of revenue adjustment	1-21	X
3I - Supplementary outcomes information	Planned outage	3I.1	✓
	Risk of severe restrictions in drought	3I.2	✓
4A - Water bulk supply information	Bulk Supply	1-6, 11, 12-22	✓
4D - Totex analysis	Operating expenditure	1-7	X
	Capital expenditure	8-14	✓
	Cash expenditure	16-18	X
	Atypical expenditure	19-24	X
4F – Major project expenditure	Capex	1-11	✓
	Opex	12-22	X
4J – Base expenditure analysis	Opex / service charge / traffic management	1-14;18	X
	Capital expenditure	15-17	✓
4L – Enhancement expenditure	Capex lines from enhancement programme	1, 4, 7, 10, 13, 16, 20, 23, 26, 29, 32, 35, 39, 42, 45, 49, 52, 55, 58, 61, 64, 67	✓
	Opex/Totex lines from enhancement programme	2, 3, 5, 6, 8, 9, 11, 12, 14, 15, 17, 18, 19, 21, 22, 24, 25, 27, 28, 30, 31, 33, 34, 36, 37, 38, 40, 41, 43, 44, 46, 47, 48, 50, 51, 53, 54, 56, 57, 59, 60, 62, 63, 65, 66, 68-83	X
4Q – Developer Services	New connections	1-4	✓
	Properties volume data	5-12	✓

	New Water mains	13-14	✓
4R – Connected properties, customers and population	Customer numbers - average during the year	1-9	✓
	Property numbers - average during the year	10-16	✓
	Property and meter numbers - at end of year (31st March)	17-25	✓
	Population	26-27	✓
5A – Water resources asset and volumes data	Water resources	1-29	✓
6A – Raw water transport	Raw water transport and storage	1-12	✓
	Water treatment - treatment type analysis	13-19	✓
	WwTW size band	20-27	✓
	Water treatment - other information	28-36	✓
6B – Treated water distribution	Assets and operations	1-32	✓
6C – Mains, communication pipes and other data	Treated water distribution - mains analysis	1-8	✓
	Communication pipes	9-11	✓
	Treated water distribution - mains age profile	12-19	✓
	Other	20-26	✓
6D – Demand Management	Totex expenditure	1-5	X
	Metering activities	6-15	✓
	Totex Leakage	16	X
	Per capita consumption	17-18	✓

Table 2-6 Scope of assurance - GSS payments

Performance Measure	Methodology and Data Audit
Guaranteed Standards Scheme (GSS)	X

Table 2-7 Scope of assurance – Environment Agency – Annual average out-turns (WRMP Annual Review)

Performance report	Methodology and Data Audit
Supply	✓
Demand	✓
Customers	✓

Table 2-8 Scope of assurance – Report to CCWater

Performance report	Methodology and Data Audit
Connected and Billed Properties	✓
Complaints – Household only	✓
Vulnerable customers	✓
Leakage	✓

Supply Interruptions	✓
Metering	✓
Water demand	✓

Table 2-9 Scope of assurance – UK Government Environmental Reporting

Performance report	Methodology and Data Audit
Scope 1, 2 and 3 emissions	✓

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