Our Compliance with the Common Guidance

Annual Performance Report
2023/24

Contents

Our compliance with regulatory common guidance on our performance reporting

This document sets out our compliance and confidence gradings in accordance with the common regulatory guidance.

Compliance with our statutory obligations is very important to us. We are subject to a wide range of obligations, from the need to provide a safe and reliable supply of wholesome drinking water, to the provision of effective drainage, compliance with specific directions and directives, and compliance with site-specific environmental permits. We also take reporting our compliance very seriously, and we continue to take steps to increase transparency to our customers and stakeholders. This year, we have improved our compliance and our reporting transparency, and will continue to do so through our refocused turnaround plan.

Confidence Gradings

Alongside reporting non-compliance with common guidance, we also report the confidence gradings for some of our performance commitments ('PCs'). This is in accordance with the reporting guidance set out by Ofwat, and provides customers and stakeholders with the information required to assess the confidence levels of our data.

The compliance of elements within each PC are assessed against accuracy and materiality, to provide an overall confidence grade. We are improving our transparency with our customers and stakeholders this year by publishing these confidence gradings alongside our Annual Performance Report ('APR').

Throughout this document, we will provide extra information to help you understand our compliance.

Confidence Gradings

How are these assessed?

Confidence grades provide a reasonable basis for qualifying the reliability and accuracy of our data. The confidence grade combines elements of reliability and accuracy, and these reliability and accuracy bands are shown in the tables below:

Reliability Band	Description
A	Sound textual records, procedures, investigations or analysis properly documented, and recognised as the best method of assessment.
B	As A, but with minor shortcomings. Examples include old assessment, some missing documentation, some reliance on unconfirmed reports, some use of extrapolation.
C	Extrapolation from limited sample for which Grade A or B data is available.
D	Unconfirmed verbal reports, cursory inspections, or analysis.

Accuracy Band	Accuracy to or within + / -	But outside + / -
1	1 %	-
2	5 %	1 %
3	10 %	5 %
4	25 %	10 %
5	50 %	25 %
6	100 %	50 %
X	Accuracy outside + / - 100 %, small numbers or otherwise incompatible (see table below)	

Compliance Assessments

For each common PC, there is a compliance checklist assessed separately and for the overall performance measure, we report a confidence grade.

We have defined our materiality threshold following the methodology used by our Independent Assurers. This is a materiality threshold of +/- 5 % on the reported value, i.e., we have a 95 % or above confidence in the accuracy of our reporting.

Compliance for elements is reported against:

R	Not fully compliant with the guidance and having a material impact on reporting (i.e., greater than a +/- 5 % impact)
A	Not compliant with the guidance and having no material impact on reporting (i.e., within +/- 5 %).
G	Fully-compliant with the guidance

Compliance for overall components is reported against:

R	There are one or more red elements in the component or the combined effect of amber elements is considered to produce a material impact
A	Half or more of the elements in the component are amber and the combined effect of the amber elements is considered not to produce a material impact
G	More than half of the elements in the component are green

Certain reliability and accuracy band combinations are considered to be incompatible and these are blocked out in the table below:

Accuracy Band	Compatible confidence grades			
	A	B	C	D
1	A1			
2	A2	B2	C2	
3	A3	B3	C3	D3
4	A4	B4	C4	D4
5			C5	D5
6				D6
X	AX	BX	CX	DX

Confidence Gradings

RAG	G
Confidence Grade	A2

BW01 Mains Repairs

Our mains repairs reporting is fully compliant with the regulatory guidance. Our data follows a standard processing and analysis route from the source systems to final collation. Application of judgement is required, but this is standardised through thorough training and documented procedures.

We apply a confidence grade of A2 due to the large scope of jobs per annum that require manually checking, causing a small error rate. In addition, some data is currently in transition from SAP to Salesforce.

	Component	Compliant (R/A/G)	Reason for any non-compliance	Confidence grade
1	Mains burst repair work	G		A2
2	Mains length	G		A2
3	Records	G		A2
4	Methodology statement	G		A2

We've met our target this year for mains repairs, with both proactive and reactive repair volumes reducing from last year. See our APR page 26 'Mains Repairs' for more information.

Confidence Gradings

BW02 Unplanned Outages

RAG	A
Confidence Grade	B3

We have improved our unplanned outage compliance this year, improving the way we calculate our PWPC for historic or dis-used sites. In light of the PR24 guidelines, in which Water Quality exclusions have been removed in AMP8, we have not excluded these this reporting year. By not excluding water quality events this year, we are non-compliant with the Ofwat common guidance.

We have applied a confidence grade of B3 for unplanned outages, as the calculation requires a significant amount of manual judgement. Systematic processes are documented, but source data is of variable quality and analysis may be variable. Our methodology is well documented. See our APR document, page 27 'Unplanned Outages' for more details on performance.

	Component	Compliant (R/A/G)	Reason for any non-compliance	Confidence grade
1	PWPC	G		B2
A	Annual Review	A	The PWPC is reviewed annually to ensure that the data reflects the up-to-date capacity of each production site based on actual production over the last 5 years. The Ofwat guidance states companies must "support PWPC with evidence of actual output or of capacity tests undertaken on a rolling programme each five years". Our approach is to use telemetry data to provide actual output at each site. To date, we have not used capacity tests.	B2
C	PWPC by production site	G		A2
D	Water resource zone PWPC	G		A2
2	Asset failure / unplanned outage	G		B2
A	Source data	G		B2
3	Planned outages	G		B2
A	Source data—programme of works	G		B2
4	Duration	G		B2
A	Start time	G		B2
B	End time	G		B2
C	Rounding	G		A1
	Reduction in capacity	G		A2
A	Reduced capacity	G		A2
B	Total outage	G		A1
5	Exclusions	A	Although water quality checks were not completed this year as part of shadow reporting towards AMP8, suspected quality events based on operational logs were noted with a "check quality" note in a category column. These were not material.	DX
A	Normal water quality operation band	A	As we have met the PC target and in light of the PR24 guidelines, in which Water Quality exclusions have been removed in AMP8, we have not excluded these this reporting year. By not excluding water quality events this year, we are non-compliant.	DX
B	Evidence of WQ events	A	See 5A.	DX

Confidence Gradings

BW03 Water Supply Interruptions

RAG	G
Confidence Grade	B2

We have maintained our compliance this year for water supply interruptions, of which non-compliant components have been independently assessed and deemed immaterial to the PC.

We have applied a confidence grade of B2, as the PC comprises of manual data checking and verification, which can lead to some level of inaccuracy. However, we maintain good records of the PC calculation and governance.

	Component	Compliant (R/A/G)	Reason for any non-compliance	Confidence grade
1	Property Counts	A	We have subsidiary data to highlight the multiple properties bill under 1 account, however are still updating records.	B2
2	Start Time	G		B2
A	Evidence to support start time	G		B2
B	Treatment of 3m pressure definition	G		B2
C	Treatment of blocks of flats	A	We treat all properties within multi-storey buildings as if they were on the ground floor. As noted in the horizontal audit report by KPMG Jacobs most companies report this way & it has no material impact on the measure.	B2
3	Stop time	G		B2
A	Evidence to support start time	G		B2
B	Treatment of 3m pressure definition	G		B2
C	Treatment of blocks of flats	A	See 2C.	B2
4	Short Term Restoration of Supply	G		A2
5	Exclusions	G		AX
6	Calculation of Performance	G		A1
7	Application of Precautionary Principle	G		B2
8	Records	G		AX
9	Properties affected >1 interruption in a year	G		A2

More on our water supply interruptions performance can be found in our APR document, page 24 'Supply Interruptions'.

Confidence Gradings

RAG	A
Confidence Grade	B2

BW04 Leakage

We have improved our data quality and compliance on our leakage calculation and water balance, further improved by our back-casting process this year. The back-cast saw significant improvements in data analysis. To maintain consistency in reporting against our target, these improvements have been incorporated into previous years' reporting.

We apply a confidence grade of B2 as by nature, the calculation requires significant use of assumptions. There is some reliance on modelling/historic assumptions.

	Component / Element	Component (R/A/G)	Element (R/A/G)	Reason for any non-compliant components	Confidence grade
1	**Coverage**	G			A1
1a	95 % of all properties have continuous night flow monitoring through the year		G		
2	**Availability**	G			A1
2a	At least 90 % of all properties within continuous night flow monitoring networks available for reporting night flow data through the year		G		
3	**Properties**	G			A1
3a	All properties mapped to defined zones or DMAs using geo-location or similar methods		G		
3b	Consistency of property numbers contained within DMAs or zones with company billing system. Valid differences explained		G		
3c	Properties that are defined as void excluded from night use allowances unless evidence for use or losses from illegal occupation is available		G		
3d	Leakage allowance applied for properties not within DMAs or monitored zones consistent with other leakage estimates		G		
3e	Property data updated at least annually		G		
4	**Night flow period and analysis**	G			A2
4a	Night flow data frequency at least every 15 minutes		G		
4b	Leakage derived from a fixed period during the night of at least a one hour period and up to two hours		G		
4c	If the fixed period is varied during the year for some or all DMAs or zones to address significant changes to night use patterns such as during Ramadan evidence for this is provided.		G		
4d	Leakage allowance applied for properties not within DMAs or monitored zones consistent with other leakage estimates		G		

Confidence Gradings

BW04 Leakage (continued)

RAG	A
Confidence Grade	B2

	Component / Element	Component (R/A/G)	Element (R/A/G)	Reason for any non-compliant components	Confidence grade
4	**Night flow period and analysis**	G			A2
4f	Data infilling for a single DMA or zone does not use more than six months of historic data before moving to area average		G		
4g	When a DMA is restored to operability, the subsequent leakage data is used to retrospectively update the data infilling interpolating between pre- and post- data over at least one month		G		
4h	Where NHH properties are continuously monitored, the actual values of flow over the night flow period are used in place of estimates within the night flow analysis		G		
4i	Weekly leakage estimates are used for annual reporting with no exclusions for summer months		G		
4j	Negative leakage values are used in compiling values of annual average leakage		G		
4k	The reasons for any prolonged periods of negative leakage are investigated and explained.		G		
5	**Household night use**	A			A3
5a	The time period for HHNU is the same time period as used for night flow and NHHNU.		A	HHNU still uses 3:30-4:30 period for Detached, Semi Detached & Terrace houses. FLBs and uFSBs use 3:00-4:00.	
5b	Own data or shared data with proximate companies is used for HHNU.		G		
5c	Plumbing losses are included and based on own data		G		

Confidence Grades

Confidence Gradings

BW04 Leakage (continued)

RAG	A
Confidence Grade	B2

	Component / Element	Component (R/A/G)	Element (R/A/G)	Reason for any non-compliant components	Confidence grade
5	**Household night use**	A			A3
5d	Evidence that survey is representative (based on demography, property type or other factors) of the company as a whole		A	We use 2006/7 TestDWUS allowances for all except Flats. These are considered old & therefore do not represent the current mix of measure properties as these were mainly optants at the time of the study and now to include a large proportion of new build and PMP. This inconsistency is compensated for through the update in occupancy undertaken each year. We have carried out an investigation regarding the element impact, using our current estimation of wastage. At this moment in time, with our current data and understanding of unmeasured and measured night use in our property types, we estimate an impact of up to +/- 2.5 % on annual average leakage.	
5e	Sample size is sufficient to capture continuous and intermittent night use with reasonable confidence		A	See 5d	
5f	Continual monitoring and maintenance of IHM and SAMs monitors		G		
5g	HHNU is derived daily with regular, adjustment of values on a weekly or monthly frequency to reflect actual seasonal use. This may be done retrospectively		G		
6	**Non household night use**	G			B3
6a	The time period for NHHNU is the same time period as used for night flow and HHNU		G		
6b	Own data or shared data with proximate companies is used for NHHNU		G		

Confidence Gradings

BW04 Leakage (continued)

RAG	A
Confidence Grade	B2

	Component / Element	Component (R/A/G)	Element (R/A/G)	Reason for any non-compliant components	Confidence grade
6	Non household night use	G			B3
6c	1999 UKWIR methodology with the appropriate time window as used for the night flow and the published outcome of further methodology development is applied		G		
6d	Stratification of non-households to a number of groups and consumption bands is representative of the varying characteristics of commercial and industrial properties		G		
6e	Sample size is sufficient to capture night use by stratification with reasonable confidence		G		
6f	Reliable and representative average billed volume (ABV) model based on data logging of the representative sample sufficient to capture demand variations with further seasonal logging where relevant. Continuously logged properties not part of the sample.		G		
6g	ABV model linked to billing system or replacement database of billed volumes. Average billed volumes updated at least annually		G		
6h	Continuous monitoring of selected non- households is carried out where average demand of an individual non-household has a material impact on the ability for a DMA or zone to provide valid and consistent data within operability limits		G		

Confidence Gradings

BW04 Leakage (continued)

RAG	A
Confidence Grade	B2

	Component / Element	Component (R/A/G)	Element (R/A/G)	Reason for any non-compliant components	Confidence grade
7	**Hour to day conversion**	G			A2
7a	The hour-to-day factor is derived separately for each DMA or zone using pressure logging within each DMA or zone. The factors are updated at least annually or where there are any significant changes to pressure regimes		G		
7b	As an alternative, hydraulic models reflecting latest network configuration and pressure changes, are used if they dis- aggregate in sufficient detail at sub-zone level		G		
7c	Evidence based N1 value used. Expected range is 1.0 to 1.20		G		
8	**Annual distribution leakage**	G			A3
8a	Average weekly data is derived from valid daily values of leakage using data points which are representative of the week. Backfilling using the methods described in Section 5.4 – night flow analysis - is done when valid data is not available for three or more data points.		G		
8b	The annual value of leakage expressed as Ml/d is be derived from an average of the 52 week data.		G		
9	**Trunk main losses (only applicable if DMA level leakage assessment used)**	G			C5
9a	Company-specific data is used to assess the value of trunk main leakage		G		
9b	Proactive leakage monitoring approach applied where trunk main losses form a significant element of total leakage or the MLE water balance gap is greater than +/- 2 %.		G		
9c	If trunk main losses greater than 5 % of total leakage estimates reviewed annually		G		
10	**Service reservoir losses (only applicable if DMA level leakage assessment used)**	G			B4
10a	Company-specific data is used to assess the value of service reservoir losses;		G		
10b	Reservoirs with known high leakage, structural deficiencies or at risk of water quality failures are investigated on an individual basis		G		

Confidence Gradings

BW04 Leakage (continued)

RAG	A
Confidence Grade	B2

	Component / Element	Component (R/A/G)	Element (R/A/G)	Reason for any non-compliant components	Confidence grade
10	**Service reservoir losses (only applicable if DMA level leakage assessment used)**	G			B4
10c	Drop tests (12 hour duration depending on size) carried out every five or ten years. All valves checked for tight close; and losses through overflows investigated. Appropriate monitoring arrangements in place to control and minimise overflow events.		G		
11	**Distribution input**	G			A2
11a	Distribution input to the system is metered with at least daily readings at all defined locations		G		
11b	Meters are appropriate size for the flow to be measured and located at appropriate inputs to the network confirmed by record plans. Any treatment works take-off downstream of a meter are excluded from the DI calculations		G		
11c	Data validity checks are carried out at least monthly		G		
11d	Missing data is infilled using both pre- and post- data for the location over at least one month, extrapolated from pump hours or use of upstream or downstream meters		G		
11e	The data transfer systems from meter output to central database are checked and validated on a risk- based frequency from one up to two years		G		
11f	Flow checks are carried out on DI meters consistent with the principles of the document 'EA Abstraction Good Metering Guide' and in particular the frequency of flow checking defined in Table 6.2 of the EA guide		G		
12	**Measured consumption**	G			A3
12a	Metered data is derived from own billing system or from CMOS for non-households		G		
12b	Estimate of supply pipe losses is included for internally metered properties consistent with own current assumption of supply pipe losses		G		

Confidence Gradings

BW04 Leakage (continued)

RAG	A
Confidence Grade	B2

	Component / Element	Component (R/A/G)	Element (R/A/G)	Reason for any non-compliant components	Confidence grade
12	**Measured consumption**	G			A3
12c	Inclusion of any leakage allowance is included where a rebate has been applied to a customer's bill		A	We use an equivalent alternative method as our systems are not configured to allow us to calculate the leakage allowance using Ofwat's "best practice" approach. Even though a refund is given to HH customers, the "volume" of BMV still includes the SPL element.	
12d	Meter under- registration is applied consistent with own estimates. Evidence of MUR available especially for MUR above 3 %.		G		
12e	Meter replacement consistent with own replacement programme		G		
13	**Unmeasured consumption**	G			A3
13a	Monitors follow principles set out in the UKWIR Report 'Best Practice for unmeasured per- capita consumption monitors 1999' and the more recent report 'Future Estimation of Unmeasured Household Consumption', UKWIR 2017		A	Our current approach uses a 2006 study to calculate allowances for wastage in Detached, Semi-Detached, and Terrace houses.	
13b	Consumption is derived from own individual household monitor or small area surveys		G		
13c	Evidence that survey is representative (based on demography, property type or other factors) of the company as a whole; Valid data available from at least 80 % of monitors as an annual average measure.		G		
13d	For companies using SAMs - SAM comprises a representative sample of customer' characteristics. The sample size is sufficient to provide a statistically representative sample after allowing for outages. Where the proportion of metered properties in an area exceeds 50 % of total properties then further data validity tests are applied For companies using IHMs – IHM comprises representative sample of customer characteristics. The sample is at least 1000 properties.		G		
13e	Uncertainty allocated to unmeasured household consumption is estimated and justified		G		

Confidence Grades

Confidence Gradings

BW04 Leakage (continued)

RAG	A
Confidence Grade	B2

	Component / Element	Component (R/A/G)	Element (R/A/G)	Reason for any non-compliant components	Confidence grade
13	**Unmeasured consumption**	G			A3
13f	There is continual monitoring and maintenance of IHMs and SAM monitors		G		
13g	Meters are selected to provide sufficient granularity to detect low continuous flows indicative of plumbing losses or leakage short duration flow variations. The value of meter under registration is less than the company's average meter stock		G		
13h	Estimate of plumbing losses is based on own data		G		
13i	Where unmeasured non-household reported volume is less than 2 % of total non-household demand, data from a per property consumption study is refreshed every five years		G		
13j	Where unmeasured non-household reported volumes are greater than 2 % of non-household demand, data from a property study is refreshed every two years		A	Uplift refreshed for AR17 - current estimate is 7.86 Ml/d. Very small impact on reported leakage. If the value was reduced by 50 %, then leakage would only change by 0.1. %	
14	**Company own water use**	G			C5
14a	All sewage treatment sites and other sites and assets supplied downstream of the DI meters using greater than 10 m3/d (0.01 Ml/d) are metered		A	Some of the very smallest usage is unmetered, and it has not been possible to read all STWs meters.	
14b	An estimate of total company own use is included in the water balance, based on a clear methodology and actual data		G		
14c	Estimate of distribution operational use is evidence based and not greater than 0.6 % of distribution input.		G		

Confidence Gradings

BW04 Leakage (continued)

RAG	A
Confidence Grade	B2

	Component / Element	Component (R/A/G)	Element (R/A/G)	Reason for any non-compliant components	Confidence grade
15	**Other water use**	G			C5
15a	Other use components are based on own data		G		
15b	Estimate of water delivered unbilled (legally and illegally) is evidence based and not greater than 1.8 % of distribution input.		G		
15c	Estimates are updated when there is a material increase or decrease to volumes.		G		
16	**Water balance and MLE**	G			A2
16a	Fully measured components have a range from 2 % to 4 %		G		
16b	Mainly measured with some estimated adjustments have a range from 2.5 % to 5 %		A	8 % is used for Measured Non HH BMV.	
16c	Estimated using detailed and reliable methods have a range from 8 % to 12 %		G		
16d	Broad estimates not fully detailed or reliable have a range from 20 % to 50 %.		G		
16e	Water balance discrepancy <2 % = G >2 % and <3 % = A >3 % = R		G		

More information on our leakage performance is available in our APR, on page 21 & 22 'Leakage'.

Confidence Gradings

BW05 Per Capita Consumption

RAG	A
Confidence Grade	B2

Similarly to leakage, the PCC calculation relies heavily on the water balance model. As such, the same data quality improvements apply to this PC. To maintain consistency in reporting against our target, these improvements have been incorporated into previous years' reporting and the target has been reset.

We apply a confidence grade of B2 as by nature, the calculation requires significant use of assumptions. There is some reliance on modelling/historic assumptions.

	Component / Element	Component (R/A/G)	Element (R/A/G)	Reason for any non-compliant components	Confidence grade
1	**Household population estimates**	G			A2
1a	Household population derived using WRMP methodology		G		
1b	Evidence for adjustments for clandestine population if any		G		
1c	Household population updated annually		G		
1d	Exclusion of non household population in accordance with WRMP methods	G			A1
2	**Household property estimates**		G		
2a	Definition of household / non household consistent with eligibility under market separation		G		
2b	Evidence of void properties updated annually		G		
2c	Property figures annually updated		G		
3	**Measured household consumption (Based on leakage PC RAG elements)**	G			A2
3a	Metered data is derived from own billing system		G		
3b	If leakage allowances are applied the process and evidence for this is clearly set out.		G		
3c	Average SPL deductions for externally metered households using company own data updated annually		A	We use an equivalent alternative method as our systems are not configured to allow us to calculate the leakage allowance using Ofwat's "best practice" approach. Even though a refund is given to HH customers, the "volume" of BMV still includes the SPL element.	
3d	Company own estimate of MUR for revenue meters which is updated annually.		G		
3e	Meter replacement consistent with own replacement programme		G		

Confidence Grades

Confidence Gradings

BW05 Per Capita Consumption (continued)

RAG	A
Confidence Grade	B2

	Component / Element	Component (R/A/G)	Element (R/A/G)	Reason for any non-compliant components	Confidence grade
4	**Unmeasured household consumption (Based on leakage PC RAG elements)**	G			A3
4a	Monitors follow principles set out in the UKWIR Report 'Best Practice for unmeasured per capita consumption monitors 1999' and the more recent report 'Future Estimation of Unmeasured Household Consumption', UKWIR 2017		A	Our current approach uses a 2006 study to calculate allowances for wastage in Detached, Semi-detached, and Terrace properties.	
4b	Consumption is derived from own IHM or SAM or evidence to support other method appropriate for high meter penetration companies		G		
4c	Evidence that survey is representative (based on demography, property type or other factors) of the company as a whole; Valid data available from at least 80 % of monitors as an annual average measure.		G		
4d	For companies using SAMs - SAM comprises a representative sample of customer' characteristics. The sample size is sufficient to provide a statistically representative sample after allowing for outages. Where the proportion of metered properties in an area exceeds 50 % of total properties then further data validity tests are applied For companies using IHMs – IHM comprises representative sample of customer characteristics. The sample is at least 1000 properties.		G		
4e	Uncertainty allocated to unmeasured household consumption is estimated and justified		G		
4f	There is continual monitoring and maintenance of IHMs and SAM monitors		G		

Confidence Gradings

BW05 Per Capita Consumption (continued)

RAG	A
Confidence Grade	B2

	Component / Element	Component (R/A/G)	Element (R/A/G)	Reason for any non-compliant components	Confidence grade
4	**Unmeasured household consumption (Based on leakage PC RAG elements)**	G			A3
4g	Meters are selected to provide sufficient granularity to detect low continuous flows indicative of plumbing losses or leakage short duration flow variations. The value of meter under registration is less than the company's average meter stock		G		
4h	Estimate of plumbing losses is based on own data		G		
4i	Where unmeasured non-household reported volume is less than 2 % of total non-household demand, data from a per property consumption study is refreshed every five years		G		
4j	Where unmeasured non-household reported volumes are greater than 2 % of non-household demand, data from a property study is refreshed every two years		G		
4k	Company own estimate of MUR for monitor meters which is updated annually		G		
4l	Meter replacement consistent with own replacement programme		G		

More information on our per capita consumption performance is available in our APR, on page 28 'Per Capita Consumption'.

Confidence Gradings

RAG	G
Confidence Grade	B2

CS02 Sewer Collapses

Our sewer collapses reporting is fully complaint with the regulatory common guidance. Our data processes follow a robust system, with both internal and external reviews and assurance processes. The methodology is well documented, and reviewed annually.

We have applied a confidence grade of B2 to because the PC is calculated from activity records in the work management system requires all photos / documentation to make decisions during the manual collapse verification process, and the calculation involves some extrapolation.

	Component	Compliant (R/A/G)	Reason for any non-compliance	Confidence grade
1	Number of collapses	G		B2
2	Sewer Length	G		B2
A	Length excluding transferred sewers	G		B2
B	Length of sewers transferred under the Private Sewer Regs 2011	G		B2

We've met our target and the number of collapses reduced by 26% from 2022-23, building on our performance improvements each year of this AMP so far. For more detail, see our APR page 30 'Sewer Collapses'.

Confidence Gradings

CS03 Internal Sewer Flooding

RAG	G
Confidence Grade	B2

We have maintained our compliance for internal sewer flooding, with one component having an immaterial impact. Our processes are well documented and resourced but with minor gaps and high complexity supporting documentation.

We have applied a confidence grade of B2 due to seasonal variations in extrapolated data, and the manual judgement and grading required. In addition, the sample of audits completed for the year is weighted in favour of the first half of the year.

	Component	Compliant (R/A/G)	Reason for any non-compliance	Confidence grade
1	Asset Causing Flooding	G		A2
2	Severe Weather	G		A2
A	Individual rainfall events > 1 in 20 years	G		A1
B	Multiple rainfall events	A	We do not use this as an exception.	N/A
C	Surface water run-off not originated from public sewer	G		A1
D	River levels >1 in 100 year return period	G		A1
E	FEH13	G		A1
3	Internal or external sewer flooding	G		B2
A	Internal	G		B2
B	External	G		B3
4	Repeat incidents	G		B2
5	Neighbouring Properties	G		B2
6	Records	G		B2

More information on our Internal Sewer Flooding performance please refer to our APR, page 31 'Internal Sewer Flooding'.

Non-compliance with Regulatory Common Guidance on performance reporting

This section explains where we are not fully compliant with converged methods for reporting common performance commitments ('PCs').

Our non-compliance (red or amber status) does not have a material impact on our reported performance.

Summary

2023/24

PC Name	Leakage	PCC*	Supply Interrupt.	UO**	Internal Sewer Flooding
Red	0	0	0	0	0
Amber	8	2	3	4	1
Green	68	22	12	14	12
Total	76	24	15	18	13

2022/23

PC Name	Leakage	PCC*	Supply Interrupt.	UO**	Internal Sewer Flooding
Red	3	0	0	0	0
Amber	7	3	2	5	1
Green	66	21	13	13	12
Total	76	24	15	18	13

** PCC = Per Capita Consumption*
*** UO = Unplanned Outage*

Categorisation information

RAG criteria

Elements:

Red	Not compliant with the guidance and having a material impact on the reported value (i.e., greater than a +/- 5 % impact)
Amber	Not compliant with the guidance and having no material impact materiality (i.e., within +/- 5 %).
Green	Fully compliant with the guidance.

We have defined our materiality threshold following the methodology used by our Independent Assurers. This is a materiality threshold of +/- 5 % on the reported value, i.e., we have a 95 % or above confidence in the accuracy of our reporting.

On the following pages we explain the reasons for our non-compliance, the actions we are taking to become compliant and our current view on when we expect to be compliant with the reporting definitions. These pages only refer to elements that are not fully compliant (green).

Non-compliance

BW02 Unplanned Outage

RAG	A
Confidence Grade	B3

Our non-compliance for our Unplanned Outages metric has increased, as we move towards our PR24 and AMP8 reporting requirements.

Element	Reason for Non-compliance	Actions we are taking to become compliant
1a – Annual Review	We support PWPC with evidence of actual output using daily telemetry data. To date, capacity tests have not been undertaken on a rolling programme each five years.	We will consider introducing capacity tests to support PWPC.
5 - Exclusions	Although water quality checks were not completed this year as part of shadow reporting towards AMP8, suspected quality events based on operational logs were noted with a "check quality" note in a category column. These were not material.	We are not expecting to become compliant in according to AMP7 reporting methodologies. Our approach this year means that we will be compliant in 2025/26 when the reporting methodology changes for AMP8.
5a – Normal Water Quality Operation Band	As we have met the PC target and in light of the PR24 guidelines, in which Water Quality exclusions have been removed in AMP8, we have not excluded these this reporting year. By not excluding water quality events this year, we are non-compliant with the Ofwat common guidance.	
5b – Evidence of WQ events		

BW03 Water Supply Interruptions

RAG	G
Confidence Grade	B2

Our non-compliance for BW03 has remained relatively stable. However, this year we are awaiting the completion of data improvement to our billing systems, which is currently impacting our ability to remain compliant. We are using the best data available to use currently in order to calculate the PC.

Element	Reason for Non-compliance	Actions we are taking to become compliant
1 - Property Counts	Our records for multiple properties billed by one account are not up to date as our systems do not hold the data in this way. An extract of the data has been produced which is checked individually on medium to large events.	We are not proposing any changes to the way we approach this element until the property data is accurate.
2c – Treatment of blocks of flats	We treat all properties within multi-story buildings as if they were on the ground floor. As noted in the horizontal audit report by KPMG & Jacobs it was apparent that many companies report in this way, and it has no material impact on the measure	We are not proposing any changes to the way we approach this element.
3c – Treatment of blocks of flats		

Non-compliance

BW04 Leakage

RAG	A
Confidence Grade	B2

Our leakage non-compliance has improved due to backcasting data improvements and our materiality investigations.

Element	Reason for Noncompliance	Actions we are taking to become compliant
5a – The time period for Household night use (HHNU) is the same time period as used for night flow and Non-Household night use (NHHNU).	Approximately half our properties have night use based on the period 3:30-4:30am. Our night flow monitoring (NFM) period is 3:00am-4:00am.	Night use for flats in large blocks (both measured and unmeasured) and unmeasured flats in small blocks are now assessed using SAMs. These contain over 12,000 properties, use the 3:00-4:00am fixed hour, and are continuously monitored. We continue to use smart meter data for internal reporting of night use for other property types for our DMA leakage targeting and tracking leakage through the year. However, we are still completing work to allow us to best separate the continuous flows found on the smart meters between customer side leakage and wastage. We have also started capturing smart meter data for properties outside our London supply area. We have undertaken the analysis of continuous flows, and undertaken approximately 1000 field investigations to determine when the continuous flow is leakage and when it is usage. This work is near completion, although further field investigations will be completed over the coming year to increase the robustness of the assessment.
5d – Evidence that survey is representative (based on demography, property type or other factors) of the company as a whole.	A little over half our properties are flats. For most of these we have live panels (SAMs) used to update night use. For detached, semi-detached and terrace properties we are yet to complete the update of allowances. For our AR24 reporting we therefore continue to use night use derived from the TestDWUS study which was completed in 2006-2009. Due to the need to investigate continuous flows found on study properties to confirm if they were customer side leakage or wastage, the panel could not be continuously monitored as, by investigating and fixing the continuous flows, it became no longer representative of the wider company properties. The TestDWUS allowances are now considered old and therefore may not represent.	
5e – Sample size is sufficient to capture continuous and intermittent night use with reasonable confidence	TestDWUS sample was of the order of 5000 properties in total. However, our sample size, especially for metered properties, is now considered on the low side for night use which is more important now we have more metered properties.	

Non-compliance

BW04 Leakage (continued)

RAG	A
Confidence Grade	B2

Element	Reason for Noncompliance	Actions we are taking to become compliant
12c – Inclusion of any leakage allowance is included where a rebate has been applied to a customer's bill	Total leakage is updated each year and a fixed proportion is then subtracted from meter consumption for supply pipe leakage of externally metered properties. SPL rebates are financial in our HH billing system, and their associated consumption is not presently consistently available to use.	We have developed reporting of rebate volumes in our billing system. However, we have identified inconsistencies in how this is recorded, i.e., not all leakage rebates are recorded as such. We are continuing to assure this data & the associated processes prior to inclusion within the WB
13a – Monitors follow principles set out in the UKWIR Report 'Best Practice for unmeasured per- capita consumption monitors 1999' and the more recent report 'Future Estimation of Unmeasured Household Consumption', UKWIR 2017	We now use SAMs for flats in large blocks and IHMs for detached, semi-detached, terrace houses, and flats in small blocks (5 or less flats). However, for the IHMs we are using historic estimates of wastage.	39 % of our unmeasured properties are in flats in large blocks. Their consumption is continuously monitored using SAMs. We have maintained our traditional IHM in Thames Valley to monitor water use in detached, semi-detached, terrace houses, and flats in small blocks, and we use smart metered properties in London to derive consumption on these property types. During the year we have set up a panel of SAMs to monitor consumption in flats in small blocks. These make up 28 % of our unmeasured properties and tend to be difficult to individually meter due to plumbing arrangements within the building. This panel will have a full year's data for AR25. For the remaining 33 % of our unmeasured properties we will continue to use our IHMs. These are designed to provide continuous monitoring of water use, but exclude wastage inside the property. Our present wastage allowances were last updated in 2009 and we have been undertaking a new study, analysing continuous flows and following up with field investigations. We have completed about 1000 field investigations and this work will continue over the coming year.

Non-compliance

BW04 Leakage (continued)

RAG	A
Confidence Grade	B2

Element	Reason for Noncompliance	Actions we are taking to become compliant
13j – Where unmeasured non-household reported volumes are greater than 2 % of non-household demand, data from a property study is refreshed every two years.	Unmeasured and Assessed is 3.21 % of total Non HH water use. The assessment of water use is taken from CMOS as defined by the Retailer each year. The additional allowance (included in legally taken unbilled) to reflect the difference between that reported and actual usage from these properties was last refreshed for AR17.	This has a small impact on our reported leakage and therefore other work is being given higher priority.
14a – All sewage treatment sites, and other sites and assets supplied downstream of the DI meters using greater than 10m3/d (0.01 Ml/d) are metered.	Some of the smallest usage sites are unmetered or have meters unread.	We have been installing and replacing meters on STWs and improving our processes for reading meters. This coming year we are further improving the reporting of STWs on our corporate systems. We will then revisit the need to meter any outstanding unmetered sites which remain.
16b – Mainly measured with some estimated adjustments have a range from 2.5 % to 5 %	The confidence interval for measured non-household water delivered remains at 8 %.	We are working with the non-household retailers to reduce the magnitude of the estimation in the settlement files along with more accurate use of the vacant flag. To support this, we are fast tracking the upgrade of meters to make them smart. We have provided Retailers with meter reads and evidence of occupation, e.g., we find that approximately 60 % of “void” properties are occupied. However, work is still ongoing with the Retailers to enable accurate billing and consumption.

Non-compliance

BW05 Per Capita Consumption

RAG	A
Confidence Grade	B2

Our Per Capita Consumption non-compliance has again improved this year. We have worked hard this year to make improvements to our Water Balance model upon which the PCC calculation relies. The improvements to our data have had a positive impact on compliance with the common guidance.

Element	Reason for Noncompliance	Actions we are taking to become compliant
3c – Average SPL deductions for externally metered households using company own data updated annually.	Total leakage is updated each year and a fixed proportion is then subtracted from metered consumption for supply pipe leakage of externally metered properties. SPL rebates are financial in our HH billing system, and their associated consumption is not presently consistently available to use.	We have developed reporting of rebate volumes in our billing system. However, we have identified inconsistencies in how this is recorded, i.e., not all leakage rebates are recorded as such. We are continuing to assure this data and the associated processes prior to inclusion within the water balance.
4a – Monitors follow principles set out in the UKWIR Report 'Best Practice for unmeasured per- capita consumption monitors 1999' and the more recent report 'Future Estimation of Unmeasured Household Consumption', UKWIR 2017	We now use SAMs for flats in large blocks and IHMs for detached, semi-detached, terrace houses, and flats in small blocks (5 or less flats). However, for the IHMs we are using historic estimates of wastage.	39 % of our unmeasured properties are in flats in large blocks. Their consumption is continuously monitored using SAMs. We have maintained our traditional IHM in Thames Valley to monitor water use in detached, semi-detached, terrace houses, and flats in small blocks, and we use smart metered properties in London to derive consumption on these property types. During the year we have set up a panel of SAMs to monitor consumption in flats in small blocks. These make up 28 % of our unmeasured properties and tend to be difficult to individually meter due to plumbing arrangements within the building. This panel will have a full year's data for AR25. For the remaining 33 % of our unmeasured properties we will continue to use our IHMs. These are designed to provide continuous monitoring of water use, but exclude wastage inside the property. Our present wastage allowances were last updated in 2009 and we have been undertaking a new study, analysing continuous flows and following up with field investigations. We have completed about 1000 field investigations and this work will continue over the coming year.

Non-compliance

CS03 Internal Sewer Flooding

RAG	G
Confidence Grade	B2

Our non-compliance regarding Internal Sewer Flooding solely relates to multiple rainfall events, and does not have a material impact on the reported value. Instead we capture this data through our hydraulic flooding reporting and as part of other submissions.

Element	Reason for Noncompliance	Actions we are taking to become compliant
2b— Multiple Rainfall events	We do not use this measure to identify events that would be classed as severe weather and still reported under our capture of hydraulic flooding and part of our yearly submission.	As the guidance states, 'on an exceptional basis, this may be given consideration'. As we capture and breakdown both Sewer Flooding Other Causes (SFOC) and hydraulic flooding, as per our current process, there is no current plan to review all floods with a rainfall of less than 1:20 to identify any that could be classed in this category.

It's everyone's water