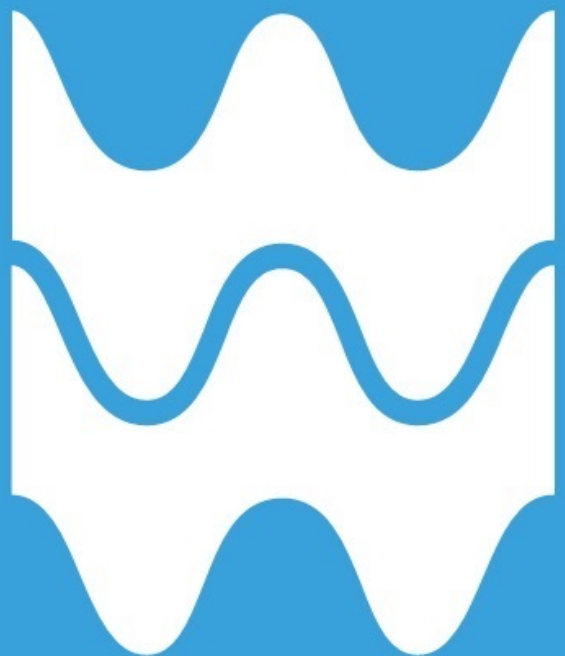


# Part 3

# Commentary

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APR 2023/24



Dŵr Cymru  
Welsh Water

July 2024

# 1. Introduction

Our vision is "to earn the trust of our customers every day".

Welsh Water's purpose is to provide high quality and better value drinking water and environmental services, so as to enhance the wellbeing of our customers and the communities we serve, both now and for generations to come.

Throughout the year, we monitor our performance against a wide range of indicators, including 56 performance commitments (PCs) as contained within Ofwat's 2019 Final Determination (FD).

In this part of the Annual Performance Report, we set out how we have performed against our PCs, of which 15 are common measures across all companies and the remainder are bespoke measures for Welsh Water.

The 56 PCs comprise of:

- 25 financial (i.e. the PCs have either rewards/penalties applying in the year depending on our performance to meet the Ofwat FD target for the year or the end of the AMP);
- 25 reputational (i.e. no reward/penalty is applicable, but we strive to meet the target set for the year); and
- 6 expenditure delivery (i.e. there are penalties both for late delivery during the AMP and non-delivery at the end of the AMP).

A summary of overall performance for all PCs is contained within section 2.

Performance against each individual PC is set out in section 3. We have included brief commentary on our performance and detailed associated rewards or penalties for over or under performance.

In section 4, we have set out the assurance processes followed in preparing this document and, in particular, ensuring that the information we have provided is accurate and complete.

An Assurance Statement provided by our Reporter, who audited aspects of this Annual Performance Report, is included in Appendix 2.

## 2. Performance Commitments

For the AMP7 period (2020-2025) we are reporting against a suite of 56 performance commitments.

### Summary of overall performance

In our APR Overview, we provide an update on our performance as whole. This document provide more detail commentary on each of the 56 Performance Commitments including drivers of performance and how we're looking to improve performance going forward.

Table 1 in section 2.1 lists 15 of our performance commitments which are common across the industry, with the remaining 41 performance commitments listed within Table 2 which are bespoke and not largely comparable across the industry. The tables summarise our performance on each of the 56 measures and compares against the 2023/24 Ofwat Final Determination target. To provide further transparency in relation to the Outcome Delivery Incentive (ODI) penalty and reward payments that are applicable on our 2023/24 performance we have included this within the summary table on page 5 and also our forecast for ODI incentives to the end of this 5 year AMP period i.e. 2024/25.

Finally, reference is made to the section number where further detail on performance, industry comparison, measure definition and some high-level commentary on the current year's performance is included.

### Service Commitment Plan

For seven of Ofwat's 12 common financial measures, we have been identified by Ofwat as having lagging performance compared with the rest of the industry. These are:

- Leakage
- Per Capita Consumption
- Water Supply Interruptions
- Compliance Risk Index
- Treatment Works Compliance
- Pollutions
- Mains Repairs

As a result, we have prepared a service commitment plan that specifies the actions we will take to get our performance back on track. Our service commitment plan can be found [here](#).

## Restatement of AMP7 data

We have provided a summary below of where we are restating figures from our Annual Performance Report Part 3.

Performance Commitment	2020/21		2021/22		2022/23		Reason for change
	Original	Restated	Original	Restated	Original	Restated	
3I.2 - Total population supplied	n/a	n/a	n/a	n/a	3,101.55	3,102.99	Updated data provided for last year. No change to performance commitment level for Ft1 - risk of severe restrictions in a drought (section 3.9).
3I.2 - Customers at risk	5	136	4	141	127	136	Updated data provided for last year. No change to performance commitment level for Ft1 - risk of severe restrictions in a drought (section 3.9).
Rt3 - Sewer Collapses	7.69	7.68	6.71	6.70	6.68	6.67	Updated following changes to the underlying sewer length data (see 3.12)
Sv5 - Priority services for customers in vulnerable circumstances - PSR reach	n/a	n/a	n/a	n/a	10.4%	10.0%	Due to an error in calculation. See section 3.15 for further detail.
3F.9 - Total residential properties	1,426,190	1,434,422	1,438,041	1,441,629	1,393,000	1,450,059	Due to an error in calculation. See section 3.15 for further detail.
Wt6 - Event Risk Index	n/a	n/a	n/a	n/a	1,313.064	1,102.316	Updated value following completion of investigation by DWI (see 3.17).
Ft8 - Asset Resilience (waste network+ above ground)	79.0%	73.5%	79.4%	73.6%	79.0%	73.2%	This year we completed a deep dive review of the Critical Assets leading to the inclusion of additional Sewer Pumping Stations (see 3.30).
BI10 - Delivery of our South Wales Grid water supply resilience scheme	n/a	n/a	n/a	n/a	2%	1%	The expenditure figure that we used to report our performance last year was not adjusted to 2017/18 prices (see 3.48).
Co2 - Employee Training and Expertise.	79.00%	79.70%	n/a	n/a	78.70%	80.50%	Due to an error in calculation. See section 3.50 for further detail.
Wt5 - Unplanned Outage	n/a	n/a	0.55%	0.17%	1.05%	0.67%	Following data improvements in the underlying Peak Week Production Capacity data. See section 3.4 for further detail.

## 2.1 Performance Summary

Table 1 - Performance Commitment – Common Measures

Part 3 Commentary Section	PC Code	Measure	2023/24 Outturn	2022/23 Outturn	2023/24 FD Target	2023/24 Vs FD Target	Penalty or Reward 2023/24 (£m)	Total ODI Incentive (2020/21 to 2024/25) (£m)
3.1	Wt1	Water Quality Compliance (CRI) (%)	7.74	5.40	0	X	-2.801	-10.399
3.2	Wt2	Water supply interruptions (mm:secs)	23:16	44:31	05:23	X	-10.594	-33.031
3.3	Wt4	Mains repairs	146.2	156.2	133.1	X	-1.336	-3.621
3.4	Wt5	Unplanned outage %	0.35	0.67	2.34	✓	0	0
3.5	En1	Treatment works compliance %	98.01	98.50	100	X	-0.693	-1.519
3.6	En3	Pollution incidents (per 10,000km of Sewer)	29.52	24.55	22.40	X	-1.531	-1.591
3.7	En4	Leakage (% reduction) – 3 year average	-15.9	-11.5	10.3	X	-5.578	-22.075
3.8	En5	Per capita consumption (% reduction) – 3 year average	-3.4	-6.2	4.6	X	0	-7.520
3.9	Ft1	Risk of severe restrictions in a drought %	4.4	4.4	4.5	✓	Reputational	Reputational
3.10	Ft2	Risk of sewer flooding in a storm %	23.94	24.28	29.76	✓	Reputational	Reputational
3.11	Rt1	Internal sewer flooding (per 10,000km sewer connections)	1.35	1.14	1.44	✓	0.385	1.837
3.12	Rt3	Sewer collapses (per 1,000km sewer)	5.96	6.67	7.20	✓	0	-0.067
3.13	Sv1	C-MeX – Company Measure	79.63	82.92	n/a	n/a	1.169	6.867
3.14	Sv2	D-MeX	87.76	84.68	n/a	n/a	-0.393	-2.003
3.15	Sv5	PSR reach %	11.5	10.0	6.3	✓	Reputational	Reputational
3.15	Sv5	PSR actual contact %	42.1	43.4	35.0	✓	Reputational	Reputational
3.15	Sv5	PSR attempted contact %	93.4	96.2	90.0	✓	Reputational	Reputational

Table 2 - Performance Commitment – Bespoke Measures

Part 3 Commentary Section	PC Code	Measure	2023/24 Outturn	2022/23 Outturn	2023/24 FD Target	2023/24 Vs FD Target	Penalty or Reward 2023/24 (£m)	Total ODI Incentive (2020/21 to 2024/25) (£m)
3.16	Wt3	Acceptability of drinking water (contacts per 1,000 population)	2.48	2.35	1.75	X	-1.757	-6.547
3.17	Wt6	Tap water quality event risk index (ERI)	26.904	1,102.316	10	X	Reputational	Reputational
3.18	Wt7	Water catchments improved	23	23	23	✓	Reputational	Reputational
3.19	Wt8	Lead pipes replaced	2,981	1,731	5,600	X	0	-3.150
3.20	En2	Wastewater treatment works 'look-up table' compliance %	99.47	99.82	100	X	Reputational	Reputational
3.21	En6	Km of river improved	345	122	25	✓	0	6.627
3.22	En7	Bioresources product quality %	99.9	98.3	97.3	✓	0.454	1.776
3.23	En8	Bioresources disposal compliance %	100	99.87	100	✓	0	-0.013
3.24	En9	Combined sewer overflow storage systems	0	0	13,500	X	0	0
3.25	Ft3	Energy self-sufficiency %	24	22	34	X	Reputational	Reputational
3.26	Ft4	Surface water removed from sewers (m3)	0	10,752	862,150	X	-0.304	-0.455
3.27	Ft5	Asset resilience (reservoirs) %	96.2	95.3	94.4	✓	Reputational	Reputational
3.28	Ft6	Asset resilience (water network+ above ground) %	88.4	87.2	85.6	✓	Reputational	Reputational
3.29	Ft7	Asset resilience (water network+ below ground) %	68.9	68.9	71.0	X	Reputational	Reputational
3.30	Ft8	Asset resilience (wastewater network+ above ground) %	72.2	73.2	79.3	X	Reputational	Reputational
3.31	Ft9	Asset resilience (wastewater network+ below ground) %	41.5	36.9	39.5	✓	Reputational	Reputational
3.32	Ft10	Community education	87,685	80,194	74,000	✓	0.027	-0.154
3.33	Ft11	Visitors to recreational facilities	1,034,101	739,294	775,000	✓	0.259	0.086
3.34	Rt2	External sewer flooding on customer property (per 10,000km sewer connections)	23.70	24.42	22.48	X	-1.097	-3.314
3.35	Rt4	Total complaints (per 10,000 connections)	62.1	49.9	UQ	X	-0.048	-0.132
3.36	Rt5	Worst served customers for water service	6,416	5,029	1,778	X	Reputational	Reputational
3.37	Rt6	Worst served customers for wastewater service	514	508	357	X	Reputational	Reputational

Table 2 - Performance Commitment – Bespoke Measures (continued)

Part 3 Commentary Section	PC Code	Measure	2023/24 Outturn	2022/23 Outturn	2023/24 FD Target	2023/24 Vs FD Target	Penalty or Reward 2023/24 (£m)	Total ODI Incentive (2020/21 to 2024/25) (£m)
3.38	Sv3	Customer trust	7.74	7.75	8.15	X	Reputational	Reputational
3.39	Sv4	Business customer satisfaction	4.3	4.4	4.5	X	-0.250	-0.750
3.40	Sv6	Customers on Welsh language register	6,751	6,649	22,000	X	Reputational	Reputational
3.41	BI1	Change in average household bill %	-4.0	-2.4	<CPIH	✓	Reputational	Reputational
3.42	BI2	Vulnerable customers on social tariffs	130,226	128,531	133,000	X	Reputational	Reputational
3.43	BI3	Company level of bad debt %	3.0	2.9	2.0	X	Reputational	Reputational
3.44	BI4	Unbilled properties (Voids) %	3.59	3.93	3.60	✓	0.026	-0.863
3.45	BI5	Financial resilience	High	High	High	✓	Reputational	Reputational
3.46	BI6	Delivery of our reservoirs enhancement programme	21	14	17	✓	0	0
3.47	BI8	Delivery of our water network improvement programme	4	2	0	✓	0	0
3.48	BI10	Delivery of our South Wales Grid water supply resilience scheme	15	1	95	X	0	-0.952
3.49	Co1	Reportable injuries	5	5	6	✓	Reputational	Reputational
3.50	Co2	Employee training and expertise %	66.3	80.5	95	X	Reputational	Reputational
3.51	Co3	Employee engagement %	75	75	80	X	Reputational	Reputational
3.52	DPC01	Direct procurement for customers: Cwm Taf Water supply strategy scheme (Underperformance)	0	0	TBA	✓	0	0
3.53	DPC02	Direct procurement for customers: Cwm Taf Water supply strategy scheme (Outperformance)	TBC	TBC	TBA	✓	0	0
3.54	VIS01	Delivery of a new visitor centre	Delivered	N/A	N/A	✓	0	0
3.55	DMMs	Drainage and wastewater management plans	100	0	100	✓	Reputational	Reputational
3.56	NEP01	Delivery of Environment programme requirements	Met	Met	Met	✓	Reputational	Reputational
	Total						-24.061	-72.382

## 3. Performance against individual measures

### 3.1 Wt1 – Water Quality Compliance

#### Definition

A Compliance Risk Index (CRI) score is calculated for every individual compliance failure at water supply zones, supply points and treatment works, and service reservoirs. The annual CRI for a company, for any given calendar year, is the sum of the individual CRI scores for every compliance failure reported during the year.

This measure is reported on a calendar year basis.

#### Performance summary

	2019	2020	2021	2022	2023	2024
Actual	3.97	4.17	9.77	5.40	7.74	n/a
Final Determination		0	0	0	0	0
FD Target Met		X	X	X	X	n/a
ODI (£m)		-£1.059	-£3.660	-£1.659	-£2.801	n/a

#### How We Performed

Our performance for the year was 7.74 which is worse than the Ofwat Final Determination target of 0.00. The value for CRI remains provisional until we receive confirmation from the Drinking Water Inspectorate (DWI) in July.

Performance is slightly worse compared to 2022 (CRI = 5.40), which can primarily be attributed to a coliform incident at Felindre Water Treatment Works in August 2023 that contributed a CRI score of 3.07. This failure (out of 65 failures from 236,470 samples) contributed a score which is 40% of the total for the year.

A key contributory factor was the initiation of enforcement action by DWI which imposed a x4 multiplier on all bacteriological failures at assets until March 2025.

We are driving improvements in CRI for 2024 and a number of these schemes are detailed within our [Service Commitment Plan](#).

There is a Drinking Water Recovery (DWR) Plan in place to deliver improvements in water quality to drive improvements to CRI. In addition, there are a number of Legal Instruments issued by DWI to improve water quality, which will positively impact CRI.

This measure is included within our Service Commitment Plan (SCP) which was published in November 2023 following us being classified by Ofwat as 'lagging' in its Water Company Performance Report for 2022/23. The SCP details the initiatives we have planned to improve performance on each of the seven measures affected and can be viewed [here](#).



## 3.2 Wt2 Water Supply Interruptions

### Definition

The average number of minutes that customers are without water within our supply area (includes both planned and unplanned interruptions). It is calculated as the average number of minutes lost per customer for the whole customer base for interruptions that lasted three hours or more.

### Performance Summary

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	17:46	11:07	16:17	44:31	23:16	n/a
Final Determination		06:30	06:08	05:45	05:23	05:00
FD Target Met		X	X	X	X	n/a
ODI Reward/Penalty (£m)		-£2.826	-£6.192	-£10.370	-£10.594	n/a

### How We Performed

Our performance for the year was 23 minutes and 16 seconds, which is worse than the Ofwat Final Determination target of 5 minutes and 23 seconds.

Our performance has been impacted by some significant mains bursts affecting large volumes of customers where restoration within 3 hours was unachievable. The top 3 incidents, which are listed below, contributed 34% (7 minutes and 53 seconds) of our performance. These include:

- A burst on a 15 inch main in Cardiff impacted 7,518 properties in February 2024. Tankering, rezoning and valve operations were undertaken to mitigate the impact on customers resulting in 70% of customers having their supply restored before the repair was complete. Some areas had completely depressurised before tankers arrived which caused issues in restoring the supply. This event contributed 4 minutes and 4 seconds to our overall performance.
- A 300mm main was damaged in Tonypandy which impacted 4,475 properties in February 2024. Rezoning was not an option due to water quality risks, so tankers were deployed. There was an issue around safe locations for the tankers which caused a delay in restoration of supply. This event contributed 2 minutes and 7 seconds to our overall performance.
- A burst on a 20 inch main in Cardiff impacted 5,519 properties in May 2023. Tankering and rezoning operations were undertaken. Rezoning activities restored supply to 50% of the properties impacted. This event contributed 1 minute and 43 seconds to our overall performance.

We continue to operate one of the highest-pressure trunk mains systems in the UK and safety remains our number one priority. Our asset base is ageing meaning that bursts and power outages will continue to occur.

We are making every effort to prevent and predict incidents, through pressure management and planned maintenance, and we must ensure that our response is adequate to prevent significant impact.

Project Novello was formed to determine what we need to do to make a step change in our performance. Over the last nine months this project has moved through Discover, Define and Design phases and is now in the Deployment phase.

The Discovery phase of the project involved a thorough "as is" assessment of historic internal performance, reviews of our organisational design, in depth data analysis to understand opportunities/pain points around all aspects of our response. We also undertook external benchmarking of industry wide Water Company performance.

As part of this project a detailed review of our operational structure and response to supply interruptions has been completed. As a result, we are restructuring our operations with the introduction of a centralised Operational Response Hub and area Response Pods. We are currently undertaking a trial in West Wales to prove the concept. Following this we plan on introducing additional response pods across the wider operational areas.

Please see Appendix 1, in this document, for details of the compliance checklist for this common performance measure. We are reporting all components as Green except for two Amber assessments as listed.

This measure is included within our Service Commitment Plan (SCP) which was published in November 2023 following us being classified by Ofwat as 'lagging' in its Water Company Performance Report for 2022/23. The SCP details the initiatives we have planned to improve performance on each of the seven measures affected and can be viewed [here](#).

### 3.3 Wt4 - Mains Repairs

#### Definition

This includes all physical repair work to mains from which water is lost. It is reported as the number of mains repairs per thousand kilometres of the entire water main network (excluding communication and supply pipes).

#### Performance Summary

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	138.8	140.2	136.6	156.2	146.2	n/a
Final Determination		138.9	137.0	135.1	133.1	131.2
FD Target Met		X	✓	X	X	n/a
ODI (£m)		-£0.133	£0.000	-£2.152	-£1.336	n/a

#### How We Performed

Our performance for the year was 146.2 which is worse than the Ofwat Final Determination target of 133.1.

During the year 4,080 mains repairs were carried out compared to 4,354 during 2022/23.

The leakage recovery plan has resulted in additional leak detection and repair efforts over the year and will continue into 2024/25. There were two notable weather-related leakage events in the year, occurring in December 2023 and January 2024 which also contributed to additional repairs in the last quarter of the year.

One Water Quality Zone, Llechryd experienced the highest number of mains repairs, with 404 Mains Repairs, 10% of the total repairs. Of the 404 repairs undertaken 209 were repaired as emergency work, and of these 356 were undertaken on asbestos cement mains.

We have a number of initiatives in place to reduce the occurrence of mains repairs which include competency, predictive network analysis and control, asset maintenance and incident review with non-destructive testing. Going into AMP8, we have also sought £66 million in our PR24 submission to replace 174km of ageing asbestos cement mains pipe.

Please see Appendix 1, in this document, for details of the compliance checklist for this common performance measure. We are reporting all components as Green.

This measure is included within our Service Commitment Plan (SCP) which was published in November 2023 following us being classified by Ofwat as 'lagging' in its Water Company Report for 2022/23. The SCP details the initiatives we have planned to improve performance on each of the seven measures affected and can be viewed [here](#).

## 3.4 Wt5 - Unplanned Outage

### Definition

This measure is a means of assessing asset health (primarily for above ground assets), for water abstraction and water treatment activities. It is defined as the annualised unavailable flow, based on the peak week production capacity. This measure is proportionate to both the frequency of asset failure as well as the criticality and scale of the assets that are causing an outage.

### Performance Summary

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	0.13	0.73	0.17	0.67	0.35	n/a
Final Determination		2.34	2.34	2.34	2.34	2.34
FD Target Met		✓	✓	✓	✓	n/a
ODI (£m)		£0.000	£0.000	£0.000	£0.000	n/a

### How We Performed

Our performance of 0.35% is better than the Ofwat Financial Determination target of 2.34%.

This is an improvement on last year's reported value of 1.05%. The main contribution to this improvement was following successful maximum flow evidence testing at Llwyn Onn Water Treatment Work (WTW), which was the largest single contributor to the Unplanned Outage measure. The test showed that the WTW was capable of achieving the target flow of 60MI/d with two Immedium filters out of service. The filters have been mothballed for a number of years and are considered surplus to requirement since the works was originally constructed to achieve 85MI/d. However, without evidence to demonstrate that there was no flow restriction, a Peak Week Production Capacity (PWPC) impact of 5MI/d had previously been recorded. This reduction was included in 2021/22 and 2022/23 unplanned outage, so restated values are shown in the table below.

We have also continued to focus on the rapid resolution of unplanned outages that result in unavailable flow. We continue to focus on maximising works resilience by minimising downtimes of unavailable assets to ensure that customer demand is met.

During the year we have undertaken maximum flow tests for all WTW. This has been successfully completed at all WTW, with the exception of five (Maerdy WTW, Garreglwyd WTW, Bretton WTW, Carno WTW and Trecastell WTW) where maximum flow is currently unachievable due to ongoing long-term planned or unplanned outages. Maximum flow tests at these five works will be evidenced as soon as the outages are resolved, and full flow is available.

This has enabled a full, evidence-based review to validate WTW Peak Week Production Capacity (PWPC) values. Following this, two WTW have had their PWPC values reduced. These are Llyn Conwy WTW and Ffynnon Gaer WTW, where asset investment has resulted in a slight reduction in maximum throughput, the overall reduction is 0.54MI/d.

As the PWPC values are evidence-based corrections rather than a result of asset changes made this year, the PWPC value for previous years are restated from 1,313.01 to 1,312.47 as shown in the table below.

Carno WTW has been taken offline for operational efficiency and is therefore excluded from the planned outage value. However, this WTW is still a standby source if required and is therefore included within the company PWPC value as the water is available when required.

## Restatement of previous years' data

		Units	2020/21	2021/22	2022/23
PWPC	Original reported number	MI/d	1,313.01	1,313.01	1,313.01
	Restated number	MI/d	1,312.47	1,312.47	1,312.47
Reduction in company level PWPC	Original reported number	MI/d	n/a	7.20	13.82
	Restated number	MI/d	n/a	2.20	8.82
Unplanned outage	Original reported number	%	n/a	0.55%	1.05%
	Restated number	%	n/a	0.17%	0.67%

Please see Appendix 1 for details of the compliance checklist for this common performance measure. We are reporting all components as Green except for one amber assessment.

The following table reports our current company level peak week production capacity, our unplanned and planned outage in MI/d.

Reporting Methodology			
Peak Week Production Capacity (PWPC) [Max]	MI/day (Megalitres per day)		
	1,312.47		
Total	MI /Year		
	480,364		
Total Planned Outage	ML /Year	%	MLD
	9,578	1.99	26.17
Total Unplanned Outage	ML /Year	%	MLD
	1,695	0.35	4.63

## 3.5 En1 - Treatment Works Compliance

### Definition

For our water and wastewater treatment works there is a permit which regulates the quality of wastewater the Company is allowed to discharge into rivers and coastal waters, which is regulated by Natural Resources Wales.

The measure is reported as the number of failing sites (as a percentage of the total number of discharges) and not the number of failing discharges.

This measure is reported on a calendar year basis.

### Performance Summary

	2019	2020	2021	2022	2023	2024
Actual	98.18	99.66	98.32	98.5	98.01	n/a
Final Determination		100	100	100	100	100
FD Target Met		X	X	X	X	n/a
ODI (£m)		£0.000	-£0.476	-£0.350	-£0.693	n/a

### How We Performed

Our performance for the year was 98.01% which is worse than the Ofwat Final Determination target of 100%.

There were 12 non-compliant works (eight wastewater treatment works (WwTWs) and four water treatment works (WTWs) out of a total of 602 permitted treatment water and wastewater treatment works.

April 2023 was a particularly poor month for compliance with six sites becoming non-compliant. By mid-2023 we had recorded 10 failed works and established a Silver Incident to focus on improving performance for the remainder of the year. The latter part of 2023 saw some of our best compliance performance in recent years finishing with our lowest number of At Risk sites and also a significant drop in escalations due to operational sampling.

The wet weather proved challenging as high flows entering the WWTWs increased risk of hydraulic loads and solids carry over across sites. It also raised the risk around the return of storm tanks with increased septicity.

This measure is included within our Service Commitment Plan (SCP) which was published in November 2023 following us being classified by Ofwat as 'lagging' in its Water Company Report for 2022/23. The SCP details the initiatives we have planned to improve performance on each of the seven measures affected and can be viewed [here](#).

## 3.6 En3 - Pollution Incidents

### Definition

The total number of pollution incidents per 10,000 km of sewer length (caused by blockages or collapsed sewers). Pollution incidents are categorised as category 1, 2 or 3 incident and reported by Natural Resources Wales and the Environment Agency.

- Category 1 - are the most severe and have a major or serious impact on the environment, people or property;
- Category 2 - significant impact or effect on the environment, people or property; and
- Category 3 - minor or minimal impact on the environment, people or property.

This measure is reported on a calendar year basis.

### Performance Summary

	2019	2020	2021	2022	2023	2024
Actual	26.20	21.46	22.90	24.55	29.52	n/a
Final Determination		24.51	23.74	23.00	22.40	19.50
Final Determination		✓	✓	✗	✗	n/a
ODI (£m)		£0.543	£0.150	-£0.333	-£1.531	n/a

### How We Performed

Our performance for the year was 29.52 which is worse than the Ofwat Final Determination target of 22.40, and worse than our performance of 24.55 last year. This equates to 107 pollution incidents compared to 89 incidents in 2022, seven of which were categorised as serious incidents - 1 x Category 1/High - Major and 6 x Category 2/High - Significant.

The seven serious incidents were:

- The Causeway, Magor - Burst rising main (South East Coastal (SECS) Main) running overland on Sites of Special Scientific Interest (SSSI) site and entering watercourse;
- Pontnewydd, Pontypool - Blockage of roots leading to spill from manhole running overland and entering watercourse;
- Lewiston Park - Collapse of trunk sewer located in the river Taff;
- Morfa Bach, Kenfig Industrial Estate - Burst rising main running overland and entering watercourse;
- Taliesyn Sewerage Pumping Station (SPS) - Pump failure at SPS causing premature spill;
- Marlas Sewerage Pumping Station (SPS) - Discharge from Emergency Overflow as a result of a burst rising main; and
- Marlas Sewerage Pumping Station (SPS) - Discharge from Emergency Overflow as a result of a burst rising main.

Blockages remain the highest cause of incidents, but storm events over the year have resulted in an increased number of pollutions occurring from hydraulic overload. Decision making by the Natural Resources Wales (NRW) has altered during the past year, where discharges as the result of hydraulic overload were previously classed as an event, some are now being classified as Category 3/Low pollutions.

Going forward, the ongoing Pollution Reduction Strategy includes measures to target blockages with risks of pollutions, which consists of targeted inspections, smart network Cello Sewer Alarm (CSA) installation, proactive surveys on the PPR programme, pollution marathons resulting in root cutting and sewer lining.

We do encounter some seasonal variations in pollution performance, which drive proactive inspections. With an increase in potential pollutions reported to us during the summer months, as in previous years, we conduct pre checks of relevant assets, e.g. pre bathing season. In part, these increases are attributed to dryer summer months, increasing the risk of blockages and also lower water courses increasing the risk of impact.

This measure is included within our Service Commitment Plan (SCP) which was published in November 2023 following us being classified by Ofwat as 'lagging' in its Water Company Report for 2022/23. The SCP details the initiatives we have planned to improve performance on each of the seven measures affected and can be viewed [here](#).



## 3.7 En4 - Leakage

### Definition

The percentage reduction of three year average leakage in megalitres per day (MI/d) from the 2019/20 starting baseline.

### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	-3.6	-7.3	-11.5	-15.9	n/a
Final Determination	1.8	4.2	7.3	10.3	13.3
FD Target Met	X	X	X	X	n/a
ODI (£m)	-£1.982	-£3.360	-£4.486	-£5.578	n/a

### How We Performed

For 2023-24 we have not met our Leakage Performance Commitment Level (PCL) of 10.3% reduction target. Reporting a performance level of -15.9%.

Again this year, we have experienced a number of bursts to our asbestos cement (AC) pipes across our rural areas of mid and west Wales. These bursts present a particular challenge to repair due to the difficulties in accessing remote areas, and the need for the pipes to be fully cut out without an alternative water supply due to the lack of network interconnectivity.

As leakage performance continues to lag our targets and as part of our Service Commitment Plans we have set out a clear recovery programme that includes additional leak detection and repair resources, and an upstream losses programme that is focused solely on trunk mains repairs. In the final year of AMP7 (2020-25) we will invest around £150 million in leakage reduction, one of our largest single areas of investment, evidencing our ongoing commitment to reducing leakage.

We have also implemented further improvements in our Leakage and PCC reporting. Following our internal end of year audit process last year we undertook deep dives into the reporting process and governance. This has been supported through early process reviews by Jacobs that occurred in winter 2023/24. Some of the key improvements made are as follows:

- Improved SQL governance;
- Updated Hour to day factor calculation;
- Additional operational data review and validation processes; and
- Full coverage of Zonal flow balances for upstream leakage estimation.

Overall, all components of our Leakage methodologies are scored Green against the Ofwat Consistent Reporting Guidance 'RAG status'. One element of the components scored Amber (element 14a - All sewage treatment sites and other sites and assets supplied downstream of the DI meters using greater than 10 m<sup>3</sup>/d (0.01 MI/d) are metered). This is because there are a number of sites on our system that aren't metered. We are reviewing these during AMP8 as the majority of these unmetered sites have been captured on our system erroneously so include void properties and duplicate connections. See our full compliance checklist in Appendix 2.

This measure is included within our Service Commitment Plan (SCP) which was published in September 2023 following us being classified by Ofwat as 'lagging' in its Water Company Report for 2022/23. The SCP details the initiatives we have planned to improve performance on each of the seven measures affected and can be viewed [here](#).

## 3.8 En5 - Per Capita Consumption

### Definition

Annual average per capita consumption (PCC) is defined as the sum of measured and unmeasured household consumption divided by the total household population. This measure is reported as a % reduction of our three year average PCC from the 2019/20 starting baseline.

### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	-3.9	-5.6	-6.2	-3.4	n/a
Final Determination	1.0	2.0	3.0	4.6	6.3
FD Target Met	X	X	X	X	n/a
ODI (£m)	£0.000 (£0.972 Penalty end of AMP)	£0.000 (£1.485 Penalty end of AMP)	£0.000 (£1.823 Penalty end of AMP)	£0.000 (£1.580 Penalty end of AMP)	n/a

### How We Performed

We have not met our PCC Performance Commitment Level (PCL) of 4.6% reduction target and report a performance level of -3.4%. We are not reporting any under or outperformance payments for this reporting year in line with the planned PCC PCL review at the end of the control period as outlined in Ofwat IN 23/03. Based on the previous ODI approach this year's performance would result in an ODI penalty of £1.580m and current forecast end of AMP7 (2020-25) position of a total penalty of £7.520m.

In terms of PCC, household demand is influenced by external factors which to a certain extent are out of direct control of the company. High rainfall this year has supported with lower water consumption by our customers.

Reduction of per capita consumption in the long-run requires us to influence the consumption behaviour of our customers, and to develop more efficient household water distribution systems. We will achieve these outcomes by:

- Increasing the number of meters that customers have, because our existing data shows that customers on meters tend to consume less water;
- Developing a behavioural change campaign that explains the links between the water our customers consume and the environment around them, including the carbon footprint and costs to them. It is essential to our strategy that we increase awareness, providing our customers with the information they need to consider the role they need to play;
- Advocating changes to building regulations that move towards grey water harvesting and more efficient customer-side supply systems; and
- Promoting the introduction of labelling white goods with their water efficiency to provide customers with the right information to make informed decisions about the efficiency of household appliances.

Overall, all components of our PCC methodologies are scored Green against the Ofwat Consistent Reporting Guidance 'RAG status'. See our compliance checklist in Appendix 2.

This measure is included within our Service Commitment Plan (SCP) which was published in November 2023 following us being classified by Ofwat as 'lagging' in its Water Company Report for 2022/23. The SCP details the initiatives we have planned to improve performance on each of the seven measures affected and can be viewed [here](#).

### 3.9 Ft1 - Risk of Severe Restrictions in a Drought

#### Definition

The overall metric is the percentage of the customer population at risk of experiencing severe restrictions in a 1-in-200 year drought, on average, over 25 years.

#### Performance Summary

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	4.5	4.5	4.5	4.4	4.4	n/a
Final Determination		4.5	4.5	4.5	4.5	0
FD Target Met		✓	✓	✓	✓	n/a

#### How We Performed

For APR 2023/24 we are reporting that the percentage of our customer population at risk of imposition of severe measures (i.e., standpipes and/or rota cuts) during a 1 in 200-year drought, on average, over 25 years is 4.39%, which is identical to the figure reported in APR 2022/23.

The calculation utilises reported population which varies little year on year hence why the % is the same as previous year. The number of zones reported as not achieving our 1 in 200 year target is the same as previous year hence no change in our score. We anticipate reporting a lower figure in 2024/25 as we complete scheme delivery and the two remaining zones achieve the 1 in 200 target.

#### Restatement of previous years' data

In previous years we have included incorrect underlying values for this PC. This does not impact the overall performance commitment level reported as either the difference is insignificant (as per input A below) or the correct values were used in the calculation to provide the reported value, just not inputted correctly in the APR table (input B).

We are therefore restating the values as per the tables below.

Input A - Total population supplied		
Year	Original Number	Restated number
2022/23	3101.55	3102.99

Input B - Total Customers At Risk		
Year	Original Number	Restated number
2020/21	5	136
2021/22	4	141
2022/23	127	136

### 3.10 Ft2 - Risk of Sewer Flooding in a Storm

#### Definition

This measure will record the percentage of the region's population at risk from internal hydraulic sewer flooding from a 1 in 50-year storm, based on modelled predictions.

#### Performance Summary

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
<b>Actual</b>	41.81	26.88	25.05	24.28	23.94	n/a
<b>Final Determination</b>		30.69	30.38	30.07	29.76	29.45
<b>FD Target Met</b>		✓	✓	✓	✓	n/a

#### How We Performed

Our performance for the year was 23.94%. This represents improvement from last year and is better than the Ofwat Final Determination target of 29.76%. Performance is related to an improvement in our understanding of risk. A catchment is assumed to be 100% at risk via the 1a assessment once a catchment is modeled, and the 1b assessment improves our understanding of the route the flow of escaped water could take so that a more realistic number of properties likely to experience flooding is concluded. During this last 12 months the non-modelled catchments have reduced from 626 to 613 which has meant that the 1b assessment now includes a further 13 catchments.

Going forward we only expect changes driven from the company's reassessment of properties and population per household, which can have a minor influence (<1%) on the population at risk percentage. Pre Planning work for the DWMP will also improve our understanding as more models are developed.

### 3.11 Rt1 - Internal Sewer Flooding

#### Definition

The measure is calculated as the number of internal sewer flooding incidents normalised per 10,000 sewer connections including sewer flooding due to severe weather events.

#### Performance Summary

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	1.75	2.05	1.36	1.14	1.35	n/a
Final Determination		1.68	1.63	1.58	1.44	1.34
FD Target Met		X	✓	✓	✓	n/a
ODI (£m)		-£1.581	£1.154	£1.880	£0.385	n/a

#### How We Performed

Our performance for the year was 1.35 which is better than the Final Determination target of 1.44, measured per 10,000 sewer connections. This is equivalent to 201 properties.

As part of our investigation process onsite, we have identified, and self-reported 20 internal flooding incidents (10%). Customers have had to proactively call us for 90% of our internal flooding performance.

As reported by NRW, Wales has seen the wettest 9 months in 189 years of records. The year overall was very wet, with 135% of the average rainfall through the year. Of the 12 reportable months, there have been 9 consecutive months of over 100% rainfall<sup>1</sup> (July 2023 - March 2024), and several named storms in a short period of time. This has meant that the ground has remained saturated into the second half of the year, causing additional issues and pressure around our flooding metrics. We have seen a resulting increase in flooding caused by Hydraulic Overload.

Sewer defects and blockages caused 79% of our internal flooding incidents in 2023-24. Reducing the blockages (and underlying defects) that cause flooding to properties continues to be a key part of our strategy, and we have set up a programme of work to install alarms at known locations to aid in undertaking preventative measures before it leads to a service failure.

We have also launched all-Wales flooding and Blockage and Collapse champion roles and strategy groups which focus on our strategy and ensure best practices. Through these groups, we have improved our investigation process and operational strategy so that we are being more thorough at finding the root cause to prevent flooding, blockages and sewer collapses.

We are reporting all components as green. Please see Appendix 1 for details of the compliance checklist for this common performance measure.

<sup>1</sup> The percentage of rainfall is a metric used and provided by the Met Office. It translates the expected number of rainy days into a percentage. For example, if July typically has 10 days of rainfall but instead experienced 15, this would be reported as 150% of the anticipated rainfall.

## 3.12 Rt3 - Sewer Collapses

### Definition

The number of sewer collapses per 1,000 kilometres of all sewers causing an impact on service to customers or the environment. A sewer collapse is where a structural failure has occurred to the pipe that results in a service impact to a customer or the environment and where action is taken to replace or repair the pipe to reinstate normal service.

### Performance Summary

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	7.23	7.68	6.70	6.67	5.96	n/a
Final Determination		7.20	7.20	7.20	7.20	7.20
FD Target Met		X	✓	✓	✓	n/a
ODI (£m)		-£0.067	£0.000	£0.000	£0.000	n/a

### How We Performed

Our performance for the year was 5.96 which is better than the Ofwat Final Determination target of 7.20 measured per 1,000km of sewers, based on a sewer length of 37,392km. This equates to a total of 223 collapses.

Our improved performance this year is the result of enhanced onsite investigations, and better understanding of data. We have undertaken a Hot Spot Analysis in our most densely populated sewer Area (South East) to highlight potential risks, and have adapted this to promote proactive data driven decision making.

In addition to the 223 incidents reported under Rt3 Sewer collapses in 2023-24, we have reported 650 incidents under 'patch repairs and relining' in the APR table 3I Line 4. 647 of these incidents are also reported as sewer blockages in the Annual Performance Report table 7C line 5. Two of the three repairs were for proactive works, and the remainder was a repair to a leaking joint (not a collapse or blockage).

We are reporting all components as green. Please see Appendix 1 for details of the compliance checklist for this common performance measure.

### Restatement of previous years' data

One of the underlying values for this measure is "7C.22 Length of formerly private sewers and lateral drains (s105A sewers)". For the past three years, we reported this value as 17,175 which is the modelled length of sewers based on the WRC model.

It has been identified this year that PST Rising Mains are not recorded within the WRC report and are not reported anywhere else. We are therefore proposing to include PST Rising Mains here and restate the values for the past three year.

The line forms part of the underlying data for our Sewer Collapses PC. The change has a very small positive impact on our performance although 2020/21 is the only year where the penalty reduces, and this is a small amount (£2,000 lower penalty).

We are therefore restating the values for 7C.22 and our Sewer Collapses PC as per the table below:

	No change	Original Values				Restated values			
		7C.22	Length of main (km)	Sewer collapses per 1,000km	ODI (£m)	7C.22	Length of main (km)	Sewer collapses per 1,000km	ODI (£m)
2022/23	248	17,175	37,125	6.68	0	17,247	37,197	6.67	0
2021/22	248	17,175	36,959	6.71	0	17,246	37,030	6.70	0
2020/21	283	17,175	36,782	7.69	-0.069	17,245	36,852	7.68	-0.067

### 3.13 Sv1 - C-MeX

#### Definition

C-MeX is a customer measure of experience and customer satisfaction. It is comprised of two survey elements:

- Customer Experience Survey – a customer satisfaction survey amongst a random sample of the water company's customers; and
- Customer Service Survey – a customer satisfaction survey amongst a random sample of those customers who have contacted their water company.

The scores of each of the two surveys are weighted equally to produce the combined C-MeX measure.

#### Performance Summary

Item	Unit	2019/20	2020/21	2021/22	2022/23	2023/24
Annual C-MeX score	Number	82.47	85.15	82.93	82.92	79.63
Industry Rank	Number		4th	5th	4th	5th
ODI Reward / Penalty	£m		£2.018	£1.600	£2.191	£1.169

#### How we performed

Our performance for the year was 79.63 which placed us in fifth position against all of the other water companies.

This overall C-MeX score can be broken down into two components:

- Customer Service Survey (CSS) - our score for the year was 78.33 which placed us fifth amongst all other companies.
- Customer Experience Survey (CES) - our score for the year was 80.92, which placed us fifth amongst all the other companies.

There is a 3 point out of 100 deduction if fewer than five communication channels are offered, of which three must be online. During the year we have offered seven channels, four of which are digital. These are:

- Non Digital – Telephone, Written and Visits
- Digital – Emails, Social Media, Webform and Live Chat.

The table below shows our position relative to the other water companies.

Company	2023/24		2022/23	
	C-MeX Score	Rank	C-MeX Score	Rank
PRT	82.89	1	83.17	2
WSX	81.77	2	82.99	3
NES	81.40	3	83.74	1
BRL	80.97	4	80.68	6
WSH	79.63	5	82.92	4
UUW	78.30	6	81.26	5
ANH	77.49	7	78.77	10
HDD	77.38	8	80.03	7
YKY	76.54	9	78.25	11
SSC	76.29	10	79.87	8
SVE	74.17	11	79.08	9
AFW	73.16	12	74.59	14
SWB	72.76	13	76.45	12
SES	72.45	14	76.03	13
SEW	70.81	15	73.47	15
SRN	66.87	16	69.77	16
TMS	64.85	17	67.06	17



### 3.14 Sv2 - D-MeX

#### Definition

D-MeX is a measure of customer satisfaction for Developer Services. The D-MeX score is calculated from two components that contribute equally:

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

#### Performance Summary

Item	Unit	2019/20	2020/21	2021/22	2022/23	2023/24
Annual C-MeX score	Number	84.38	82.69	83.94	84.68	87.76
Industry Rank	Number		12th	12th	13th	11th
ODI Reward / Penalty	£m		-£0.353	-£0.139	-£1.156	-£0.393

#### How we performed

Our performance outcome for D-MeX is 87.76, placing us in 11th position in the league table with all other companies.

##### Quantitative measure

Our end of year performance places us joint 1st position overall (1st compared to WASCs) for the period compared to all companies.

Quantitative performance has remained consistent throughout this reporting period and since implementation of the Water UK measures in 2015, we have consistently remained in upper quartile position. We have delivered our best D-MeX quantitative score this year since the measure's implementation, achieving 1st position compared to all WASCs.

Several water companies are re-stating their data which may alter our end of year position in the league table and performance payment outcomes.

##### Qualitative measure

Our performance for the year places us in 11th position overall for the period compared to all companies. Performance has continued to increase since implementation of this component of measure, however other companies are improving at a rate which has widened the gap, impacting on performance outcomes. Our performance on the qualitative element is also impacted by the different legal framework in Wales that impact developers' views of water companies and the service we provide.

The qualitative score is directly linked to those activities reported for the purposes of quantitative performance and therefore the restatement of this data by many companies would not just alter the quantitative score, it will also lead to either changes to the qualitative score or is being based on incorrect data.

We have used the quarterly anonymous developer survey feedback to identify areas of improvement based on customer comments from the seven question survey and have a Customer Service Delivery Group in place with a detailed action plan to progress areas of improvement and opportunity.

80% of our qualitative survey work relates to the New Water Connections process. We have referenced our improvements within our business plan and several targeted improvements have already been delivered this year or are under way to be implemented in 2024/25 which should further improve performance.

Several of the actions which have been delivered to support performance improvement include:

- Implementation of actions following an end-to-end review of the New Water Connection journey as outlined in the 2023/24 Business plan;
- Revised Key Result Areas with our delivery partner for new connections to incentivise improved performance;
- Proactive customer contact throughout the customer journey within new connections\customer services;

- New account management service for new water connection customers.;
- Revised application form for New Water connections to reduce the volume of missing information;
- Customer Stakeholder Strategy – to continually engage with customers at the level and frequency they want to include facilitating Developer Forums; and
- We have challenged ourselves and are exceeding levels of service targets internally.

### 3.15 Sv5 - Priority Services Register

#### Definition

This performance commitment will help to increase the number of customers in vulnerable circumstances that receive the most appropriate service to their needs. It will also ensure the PSR is kept up to date.

#### Performance Summary

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Actual - Attempted Contact %	92.4	62.8	93.2	96.2	93.4	n/a
Actual - Actual Contact %	57.6	27.1	40.9	43.4	42.1	n/a
Actual - Reach %	4.0	5.5	8.1	10.0	11.5	n/a
Final Determination - Attempted Contact %		45.0	90.0	90.0	90.0	90.0
FD Target Met		✓	✓	✓	✓	n/a
Final Determination - Actual Contact %		17.5	35.0	35.0	35.0	35.0
FD Target Met		✓	✓	✓	✓	n/a
Final Determination - Reach %		4.3	5.0	5.6	6.3	7.0
FD Target Met		✓	✓	✓	✓	n/a

#### How We Performed

For 2023/24 we are reporting there are 167,957 household customers on our Priority Services Register (PSR) as of 31 March 2024. This is an increase of 16% on last year's figure of 144,933.

Welsh Water's Priority Services scheme offers additional practical services to customers who may for example be disabled, chronically sick, of pensionable age, parents with young children, on dialysis, or have sight or hearing impairment. A summary of services provided is:

- 2,676 household receive support with communication;
- 1,685 households received support with mobility and access restrictions;
- 167,737 households receive support with supply interruptions;
- 5,271 households receive support with security; and
- 6,490 households receive support with other needs.

These total to more than 167,957 as some households are registered for more than one service.

- 11.5% of our households were registered for priority services (as of 31 March). The total number of household connections used at 31 March 2024 for this calculation was 1,459,294 and excludes void properties. This is better than the Ofwat Final Determination target of 6.3%.

- As at 31 March 2024 there were 99,265 households which had been on the register for more than 2 years and which were in scope for data checking. Contact was attempted with 92,749 (93.4%) of those households over the last 2 years. This is better than the Ofwat Final Determination target of 90.0%.
- As at 31 March 2024, 41,792 (42.1%) of households which have been on the PSR for more than two years have had an actual contact in the last two year period. This is better than the Ofwat Final Determination target of 35.0%.

### Restatement of previous years' data

As part of our APR submission for this year it has been identified that in previous years the average number of total residential properties was used instead of the number at 31 March each year. In addition, in 2022/23 the number of voids properties was incorrectly deducted twice. The table below shows the original and restated figures. The restatement for residential properties numbers in 2020/21 and 2021/22 does not impact the PSR reach performance commitment.

		Units	2020/21	2021/22	2022/23
Total residential properties	Original reported number	000s	1,426.190	1,438.041	1,393.000
	Restated number	000s	1,434.422	1,441.629	1,450.059
PSR reach	Original reported number	%	n/a	n/a	10.4
	Restated number	%	n/a	n/a	10.0

## 3.16 Wt3 - Acceptability of Drinking Water

### Definition

The number of times the company is contacted by consumers due to the taste and odour of drinking water, or due to drinking water not being clear, reported per 1,000 population. This measure is reported on a calendar year basis.

### Performance Summary

	2020	2021	2022	2023	2024
Actual	2.70	2.44	2.35	2.48	n/a
Final Determination	2.24	2.07	1.91	1.75	1.58
FD Target Met	X	X	X	X	n/a
ODI (£m)	£1.107	£0.891	£1.059	£1.757	n/a

### How We Performed

Our performance for the year was 2.48 contacts per 1,000 population which is worse than the Ofwat Final Determination target of 1.75.

During 2023 we received 7,659 contacts from our customers related to the acceptability of drinking water with the highest volume of contacts, 898, received in June 2023.

The three areas (Water Quality Zones) with the highest number of contacts are:

- Cowlyd / Llyn Conwy (North East) with 339 contacts received. Performance has been attributed to a high historic build-up of manganese within the potable water mains. This stems from the upland reservoir Lyn Cowlyd which supplies raw water to Bryn Cowlyd WTW. Compounding this issue, a high percentage of the Distribution system is constructed from 70-year-old Cast Iron and Asbestos Cement mains. Much of this system due to age degradation is in poor condition and is prone to bursts. Seasonal demand in this area also contributes to customer acceptability contacts;
- Caerau / Ystradfellte (Swansea) with 296 contacts received. There were a high number of contacts within the zone due to illegal third party usage of the system & burst mains. Progress has been made to reduce contacts by high velocity flushing some of the LCAs and plans are being finalised to high velocity flush the trunk main network; and
- Abergavenny / Cwmillery (Eastern) with 295 contacts received. There have been a high number of contacts within the zone due to illegal third party usage of the system and some large impacting third party damages of the trunk main system. Progress has been made to reduce contacts by high velocity flushing some of the worst performing LCA's as well as fixing Automatic Flushing devices into some LCA's.

A combination of factors including our sources water characteristics, our proportion of surface water abstractions to groundwaters, a larger percentage of iron mains in our network than other companies, the age of our network affect our performance.

Our 2020 to 2025 Programme is delivering more than £140m of investment in our Catchments and Water Treatment Works, as well as improving a further 270km of water mains in 17 zones through our Zonal Studies Programme. In addition to investment, we are continuing to optimise our operational practice. During 2023 we have undertaken a review of our Distribution Operational Maintenance Strategy and our supporting organisational structure and response through Project Novello (see 3.2 Supply Interruptions for more information).

We recognise it will take several years to bring our performance in line with wider industry performance. The Acceptability of drinking water is one of the main priorities in the PR24 Water Plan with planned investment of £150m to target a reduction of discoloured water within our distribution network and to address taste and odour concerns.

The Acceptability of Water strategy contains a number of key deliverables for the period 2020-25, including:

- using our in-house predictor tool to provide an understanding of water quality for future years;
- improved monitoring at water treatment works to reduce the levels of Manganese going into supply;
- continuation of our Zonal Studies Programme to clean and replace cast iron pipes and investment;

- improving communication with customers related to water quality, e.g. simplified customers leaflets and social media content; and
- continued locking down vulnerable parts of our network from third party use.

### 3.17 Wt6 - Tap Water Quality Event Risk Index (ERI)

#### Definition

The Event Risk Index (ERI) is a measure of the risk arising from water quality events, as defined by the Drinking Water Inspectorate (DWI). This measure is reported on a calendar year basis.

#### Performance Summary

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	25.881	3.903	355.169	1,102.316	26.904	n/a
Final Determination		10	10	10	10	10
FD Target Met		✓	✗	✗	✗	n/a

#### How We Performed

For 2023, a provisional ERI score was calculated as 26.904. This will remain provisional until confirmed data is published by DWI in April 2025 once all outstanding events have been closed.

There were 3 events in August 2023, all related to elevated levels of chlorate in the drinking water, which contributed 76% of the ERI score for the year. A legal Instrument was issued by DWI (Ref: DWR-2023-00010) to ensure improvements are made to the company's management of sodium hypochlorite storage and dosing to prevent a recurrence of similar events in future.

Performance is much better compared to 2022 (ERI = 1,102.316), although is still worse than our FD target of 10.000. Our improved performance this year has been driven by more favourable weather conditions as 2022 performance was significantly impacted by the hot weather in July/August 2022.

#### Restatement of previous years' data

Last year we reported a value of 1,313.064 which included estimated scores for two outstanding events. One event has been finalised and one is still outstanding. We are therefore restating the updated value for 2022 of 1,102.316. This still includes an estimate for the one outstanding event (Neath discolouration) and we will be restating once again when DWI have completed their assessment. The current DWI score without the estimate for the Neath event is 906.083.

### 3.18 Wt7 - Water Catchments Improved

#### Definition

The number of water treatment works with catchments designated as Safeguard Zones under the Water Framework Directive (WFD) as in effect at the time of the Ofwat Final Determination publication. Drinking Water Safeguard Zones are designated areas where raw water quality has been deemed to be 'at risk' of deterioration.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	23	23	23	23	n/a
Final Determination	23	23	23	23	18
FD Target Met	✓	✓	✓	✓	n/a

#### How We Performed

The de-designation of the five Safeguard Zones will be by agreement from Natural Resources Wales and the Environment Agency, following the successful submission of evidence that demonstrates catchment improvements have been achieved by 2024/25.

As stated in our Final Determination we have published a standalone annual progress report alongside this document.



### 3.19 Wt8 - Lead Pipes Replaced

#### Definition

This performance commitment measures number of lead pipes replaced by the Company. The number of pipes reported as replaced is cumulative over the period 2020-25. The financial implications associated with underperformance or outperformance with this Performance Commitment will be assessed in 2025, which is the end of this five year reporting cycle.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	1,065	1,410	1,731	2,981	n/a
Final Determination	1,400	2,800	4,200	5,600	7,000
FD Target Met	X	X	X	X	n/a
ODI (£m)	Calculated on 31 March 2025				

#### How We Performed

Our performance of 2,981 lead pipe replacements is worse than the Ofwat Final Determination target of 5,600. The main driver of this performance is the low success rate in identifying properties that have lead pipes. Currently, only around 18% of investigations result in the replacement of lead pipes which carries a significant cost. Owing to the cost and low success rate, we will only be undertaking reactive replacement of lead pipes in 2024/25 and will instead focus investment on the measures in our Service Commitment Plan. This will mean that we are unlikely to achieve this Performance Commitment in 2024/25.

The 2,981 lead pipe replacements, includes an additional 33 renewals not reported in 2022/23 but were identified following data cleanse checks carried out post submission of our 2022/23 Annual Performance Report. There is no impact on ODI reward/penalty as this is calculated at the end of AMP7 (2020-25).

There are occasions when customers refuse our offer to renew their private lead supply pipes at the time of us completing work on the communication pipe. An abortive code (AB05) is used in SAP to ensure this information is captured. There are occasions when customers do not engage with us, and a contact method is adopted to ensure best efforts are made to liaise with the customer. This method includes several attempts to call the customer and a letter asking for contact within 10 days.

Should we not receive contact back from the customer, an assumption is made that they are refusing this work and it is closed down on our SAP records as refused (AB98). Should the customer change their mind in the future, this process does not eliminate the possibility of us returning to complete this work at a future date.

We have an internal written methodology statement which documents the process for reporting against this Performance Commitment which was reviewed by our Reporter, Jacobs on 23 December 2020. This review was undertaken by Jacobs using a 24 point scoring mechanism. This includes a check that the process is consistent with the definition in the PR19 final determination. Our Reporter undertakes an annual review of our reported performance in May/June each year and during this review sample a number of lead pipes replacements to check they are reported in line with the PR19 definition.

The assessment report for this performance commitment will be completed by March 2025.

To note - we have utilised the override function within the Ofwat ODI model so that any associated out or under performance payments are calculated on 31 March 2025.

## 3.20 En2 - Wastewater Treatment Works 'look-up table' Compliance

### Definition

Percentage of wastewater treatment works that comply with the following:

- Sanitary Look Up Table limits on permits for Biological Oxygen Demand (BOD), Total suspended solids (TSS) and ammonia.
- Annual average Phosphorus limits.
- Urban Wastewater Treatment Directive (UWWTD) Look up table limits for BOD and Chemical Oxygen Demand (COD).
- UWWTD annual average Phosphorus limits.
- UWWTD annual average Nitrogen limits.

These are set by Natural Resource Wales or the Environment Agency as appropriate. This measure is reported on a calendar year basis.

### Performance Summary

	2020	2021	2022	2023	2024
Actual	100.0	99.82	99.82	99.47	n/a
Final Determination	100	100	100	100	100
FD Target Met	✓	✗	✗	✗	n/a

### How We Performed

Our performance for the year was 99.47% which is worse than the Ofwat Final Determination target of 100%.

There were three non-compliant works out of a total of 563 permitted wastewater treatment works.

The wet weather proved challenging as high flows entering the treatment works increased risk of hydraulic loads and solids carry over across sites. It also raised the risk around the return of storm tanks with increased septicity.

### 3.21 En6 - Km of River improved

#### Definition

The cumulative length of river improved as a result of the Company's action and as a consequence of regulatory and legislative drivers. The length can only be counted once the Environment Agency and/or Natural Resources Wales has agreed all schemes to achieve the improvement have been delivered and each scheme meets the requirements.

The measure is defined as the length (in km) of river with improved water quality, as a result of Welsh Water action. The financial implications associated with underperformance or outperformance with this Performance Commitment will be assessed in 2025, which is the end of this five year reporting cycle.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	5	94	122	345	n/a
Final Determination	0	5	25	25	418
FD Target Met	✓	✓	✓	✓	n/a
ODI (£m)	Calculated on 31 March 2025				

#### How We Performed

Our cumulative performance reported this year is 345km of river improved which is better than the Ofwat Final Determination target of 25km.

The measure includes improvements resulting from Water Industry National Environment Program (WINEP)/National Environment Programme (NEP) Water Quality and Water Resources schemes. Performance this year has been driven by the fact we brought forward regulatory obligations in the WINEP to improve four wastewater treatment Works from a year 5 requirement, delivering early in Year 4. We also delivered four Fish passage schemes providing length of river improvement. At present the forecast is in excess of 500km total for AMP7 (2020-25) which will exceed our BP commitment and outer performance cap.

Natural Resources Wales have issued a business performance letter dated 17 June 2024 confirming our reported performance of 223km of river improved during 2023/24 (cumulative 345km).

## 3.22 En7 - Bioresources Product Quality

### Definition

Percentage of total wastewater sludge treated that is processed through Advanced Anaerobic Digestion facilities and recycled to land meeting certification requirement of the Biosolids Assurance Scheme. Any sludge imported from third parties will be included within the measure.

### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	96.1	99.2	98.3	99.9	n/a
Final Determination	95.0	97.3	97.3	97.3	97.3
FD Target Met	✓	✓	✓	✓	n/a
ODI (£m)	£0.454	£0.454	£0.413	£0.454	n/a

### How We Performed

Our performance for the year is 99.9% which is better than the Ofwat Final Determination target of 97.3%.

All sludge is processed through our four Advanced Anaerobic Digestion sites at Cardiff, Afan (Port Talbot), Cog Moors (Dinas Powys) and Five Fords (Wrexham).

A small percentage of sludge was unable to be processed due to limitations in capacity as a result of downtime for maintenance and reactive repairs. This was sent to a third-party contractor for lime treatment and recycling.

### 3.23 En8 - Bioresources Disposal Compliance

#### Definition

The overall percentage of company sludge satisfactorily used or disposed of in line with version 3 of the Natural Resource Wales and Environment Agency's Environmental Performance Assessment methodology (published November 2017). This measure is reported on a calendar year basis.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	100	100	99.87	100	n/a
Final Determination	100	100	100	100	100
FD Target Met	✓	✓	✗	✓	n/a
ODI (£m)	£0.000	£0.000	-£0.013	£0.000	n/a

#### How We Performed

Our performance for the year is 100% which meets the Ofwat Final Determination target.

During the reporting year any Biosolids which fail to meet the standards are not recycled to agriculture. Any Biosolids with the potential to breach any of these the standards are placed in quarantine and retreated prior to disposal. The company achieved 100% compliance against this measure in 2023/24.

## 3.24 En9 - Combined Sewer Overflow Storage Systems

### Definition

The cumulative additional effective volume of storage delivered by the Company under the National Environment Programme (NEP) obligations. The financial implications associated with underperformance or outperformance with this Performance Commitment will be assessed in 2025, which is the end of this five year reporting cycle.

### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	0	0	0	0	n/a
Final Determination	0	0	0	13,500	27,049
FD Target Met	✓	✓	✓	✗	n/a
ODI (£m)	Calculated on 31 March 2025				

### How We Performed

Our performance of zero is worse than the Final Determination target of 13,500m<sup>3</sup>.

Whilst this is behind the Final Determination target, it is in line with our programme of works, given the time frame from investigations commissioned in Year 1 of AMP7 (2020-25) and released for delivery mid way through AMP7 (2020-25).

This is mainly due to the assets being delivered under a National Environment Programme (NEP) driver code issued by Natural Resources Wales which requires "Urban Waste Water Treatment Regulations (UWWTR) spill frequency reduction scheme where it is cost beneficial and delivery prioritised for completion within AMP7 (2020-25) business plan allocation". As a result, assets had to first progress through the Storm Overflow Assessment Framework (SOAF) v1.6 and reach stage 5 - a process that can take up to 3 years.

With the SOAF programme only commencing in Year 1 of AMP7 (2020-25), assets could not be released into detailed design for delivery until mid-way through AMP7(2020-25) which resulted in a back ended delivery profile.

We are currently on site delivering a number of schemes, these are predicted for completion in Year 5 which will meet our target of 27,049m<sup>3</sup>.

To note - we have utilised the override function within the Ofwat ODI model so that any out or under performance payments are calculated on 31 March 2025.

### 3.25 Ft3 - Energy Self-Sufficiency

#### Definition

Electricity generated and gas injected to grid as a percentage of all electricity and gas consumed by the company, with gas being presented as a gigawatt hours (GWh) equivalent.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	23	24	22	24	n/a
Final Determination	31	32	33	34	35
FD Target Met	X	X	X	X	n/a

#### How We Performed

We are one of the largest energy users in Wales and we generate our own energy through wind, hydro, solar and advance anaerobic digestion. Our performance for the year was 24% which is worse than the Ofwat Final Determination target of 34%. This is largely due to following four reasons:

- consumption within Welsh Water as a whole has been rising year on year primarily due to new assets installed on our Water and Wastewater treatment works;
- a number of capital investment schemes for renewable generation that were planned for AMP7 have not been delivered as a result of planning approval and third-party land issues;
- delays to the delivery of existing renewable projects following design and feasibility studies, and
- temporary renewable asset failures.

Looking ahead, we have several strategies to reduce the lost generation on our existing portfolio. This includes purchasing a new Alternator for the Afan and Cardiff CHP's to be used as a spare. This will prevent significant periods of lost generation in the event of a alternator failure.

## 3.26 Ft4 - Surface Water Removed from Sewers

### Definition

Reduction in volume (m<sup>3</sup>) of surface water entering the surface or combined sewer network through sustainable urban drainage approaches. Solutions include sustainable urban drainage approaches to slow down and reduce the volume of water entering the network.

### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	38,473	0	10,752	0	n/a
Final Determination	141,900	141,900	141,900	862,150	862,150
FD Target Met	X	X	X	X	n/a
ODI (£m)	-£0.050	-£0.050	-£0.050	-£0.304	n/a

### How We Performed

Our performance for the year was 0m<sup>3</sup> which is worse than the Ofwat Final Determination target of 862,150m<sup>3</sup>. There have been no surface-water (SW) removal schemes delivered in 2023-24, which incurs a penalty of £304,439.

The principal drivers for surface-water removal are to reduce hydraulic incapacity (flooding and pollution), reduce spill frequency and/or volume, and to enable growth. Although a number of hydraulic incapacity schemes have been delivered (and whilst SW-removal opportunities were explored in design), the required outcome in each case was not achievable using SW-removal. Other work to reduce hydraulic incapacity has focussed on tackling infiltration (which also does not count against this reporting measure), following prolonged rainfall from July 2023. We are expecting some surface-water removal outputs in 2024-25 although it will be unlikely that we will achieve the FD target. This is for two reasons:

- Costs – costs of Sustainable Urban Drainage systems have increased compared to traditional options.
- Legal framework – it is challenging to remove surface water in areas not owned by Welsh Water. We are engaging with Local Authorities and Highways to explore potential options.

Looking ahead into AMP8 (2025-30), we are expecting more progress against this metric via the Storm Overflow Assessment Framework (SOAF) programme.



### 3.27 Ft5 - Asset Resilience (reservoirs)

#### Definition

This performance commitment is defined as a resilience score for critical impounding reservoirs based on a defined resilience scorecard. Critical assets are those for which failure would have a major impact on service to customers or on the environment.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	92.7	92.7	95.3	96.2	n/a
Final Determination	92.2	92.2	93.3	94.4	95.5
FD Target Met	✓	✓	✓	✓	n/a

#### How We Performed

Our performance for the year was 96.2% which is better than the Ofwat Final Determination target of 94.4%.

Over the reporting period the SEMD (*Security and Emergency Measures Directions (under the Water Industry Act 1991)*) component score has improved due to the completion of work at Lisvane reservoir. This has improved this component score from 97.4% to 100%.

Over the reporting period the failure resilience component score has remained at 90.5%, this is despite changes at the following two sites, the work identified below is all being carried out as a result of statutory safety measures under the Reservoirs Act 1975:

- Llwyn On reservoir. Resilience score decreased from 90% to 50% after the re-evaluation of the site specific risk score based on the current spillway condition and capacity. A major project is planned to construct a new spillway at this site in AMP8 (2025-30). This will increase this failure resilience score back to at least 90%; and
- Usk reservoir. Resilience score has increased from 50% to 90% following the completion of significant work to the tunnel which increases the drawdown capacity and improves condition of the tunnel and pipework within.

## 3.28 Ft6 - Asset Resilience (water network+ above ground)

### Definition

This performance commitment is defined as a resilience score for critical water network plus above ground assets based on a defined resilience scorecard. Critical assets are those for which failure would have a major impact on service to customers or on the environment.

### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	87.4	86.7	87.2	88.4	n/a
Final Determination	84.0	84.0	84.8	85.6	86.5
FD Target Met	✓	✓	✓	✓	n/a

### How We Performed

Our performance for the year was 88.4% which is better than the Ofwat Final Determination target of 85.6%.

There has been a marginal increase of 1.2% in the Ft6 score during 2023/24. This has primarily been due to many of the Service Reservoirs on the list now having bypass facilities in place, which has improved the failure resilience scoring section overall. We have also had power improvements at several sites, including dual incomer installation which has helped with the overall resilience.

One asset has been added to the list that now meets the criteria. This provides a new total of 38 assets compared to the 37 reported during 2022/23.

### 3.29 Ft7 - Asset Resilience (water network+ below ground)

#### Definition

This performance commitment is defined as a resilience score for critical water network plus below ground assets based on a defined resilience scorecard. Critical assets are those for which failure would have a major impact on service to customers or on the environment.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	68.9	68.0	68.9	68.9	n/a
Final Determination	68.0	68.0	70.0	71.0	73.0
FD Target Met	✓	✓	✗	✗	n/a

#### How We Performed

Our performance for the year was 68.9% which is below the Ofwat Final Determination target of 71.0%.

There has been no change to scoring of the Ft7 asset list during 2023/24. This is due to no major issues being found with the critical mains and/or no planned works in the programme that would affect the scoring as AMP7 (2020-25) progresses.

It was deemed from the data that five mains are no longer applicable, as per the criteria. One main has also been abandoned and removed from the scorecard. This provides a new total of 244 assets - a decrease of six assets from the 250 reported during 2022/23.

### 3.30 Ft8 - Asset Resilience (wastewater network+ above ground)

#### Definition

This performance commitment is defined as a resilience score for critical waste network plus above ground assets based on a defined resilience scorecard. Critical assets are those for which failure would have a major impact on service to customers or on the environment.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	73.5	73.6	73.2	72.2	n/a
Final Determination	77.7	77.7	78.5	79.3	80.0
FD Target Met	X	X	X	X	n/a

#### How We Performed

Our performance for the year was 72.2% which is worse than the Ofwat Final Determination target of 79.3%.

Performance for this PC is based on a resilience score for critical waste network+ above ground assets. Critical assets are those for which failure would have a *major impact on service to customers or on the environment*. The critical asset list is reviewed by the Wastewater Asset Teams throughout the year, and assets are added/removed if they meet/fail to meet the criticality definitions. This year however, we have completed a 'full-scale review' including a review of how we apply the definition of critical. This has resulted in a significant number of additional assets now meeting the criteria to be critical. This brings the total from 56 to 120. As a result, our total score has fallen below both the BP and FD targets.

The main driver of the change has been the inclusion of ca. 51 additional Sewage Pumping Stations (SPS) that weren't included previously. The vast majority of the additional SPS have been captured based upon the fact the asset is located in an area with Water Framework Directive moderate or lower. This means that the waterbody where the asset is located is more vulnerable to pollution and the asset failure could have devastating environmental consequences. Therefore, we have decided to include these as critical. Using this updated list of assets, we have also restated our position back to 2020/21 as set out in the table below.

#### Restatement of previous years' data

Year	Original number	Restated number
2020/21	79.0%	73.5%
2021/22	79.4%	73.6%
2022/23	79.0%	73.2%

This year we have also utilised the outputs of a study undertaken by the University of Liverpool for DCWW's Asset Planning team which looked at the risk of coastal erosion on our asset base. This has supported and enhanced our confidence in the scoring assessment for the risk of coastal erosion to our Critical Assets.

### 3.31 Ft9 - Asset Resilience (wastewater network+ below ground)

#### Definition

This performance commitment is defined as a resilience score for critical waste network plus below ground assets based on a defined resilience scorecard. Critical assets are those for which failure would have a major impact on service to customers or on the environment.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	11.4	30.9	36.9	41.5	n/a
Final Determination	28.3	28.3	33.9	39.5	45.0
FD Target Met	X	✓	✓	✓	n/a

#### How We Performed

Our performance for the year was 41.5% which is better than the Ofwat Final Determination target of 39.5%, and an improvement on our 2022/23 performance of 36.9%.

We have 355 assets reported within this performance commitment that are deemed Critical (347) or Unknown (8) when assessed against the criticality definition.

Sites visits have continued in 2023/24 to further assess against the critical asset definition. To date 289 visits have taken place across Wales. This has resulted in the confirmation of criticality for these assets, and an Evidence Document for each asset recording the rationale and supporting evidence for the scoring applied. These site visits have provided the ability to assess those previously non-scoring assets that were added at the start of 2020/21, and provide high confidence in our scoring assessment with evidence to support.

The process of validating existing scores and assessing the new additions to the refreshed dataset for 2020/25 will continue into 2024/25 with site visits and the collation of the supporting evidence documentation. In addition, we'll be looking to further assess the asset condition by continuing with the programme of works to CCTV a selection of the identified critical assets. We are also hoping to utilise the outputs of a study undertaken by the University of Liverpool for DCWW's Asset Planning team which looked at the risk of fluvial and coastal erosion on our asset base. This will support and enhance our confidence in the scoring assessment for the risk of erosion to our Critical Assets.

### 3.32 Ft10 - Community Education

#### Definition

The total number of children and adults who have participated in the Company's educational programme each year.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	5,834	45,655	80,194	87,685	n/a
Final Determination	70,000	72,000	73,000	74,000	75,000
FD Target Met	X	X	✓	✓	n/a
ODI (£m)	-£0.112	-£0.105	£0.014	£0.027	n/a

#### How We Performed

Our performance for the year was 87,685 which is better than the Ofwat Final Determination target of 74,000.

The reported performance is the result of sessions delivered both through our school outreach visits and through class visits to our outdoor environmental education centre. The outreach activities predominantly involve face-to-face delivery (whole-school assembly, classroom workshop), whilst it also includes some online, live sessions to help provide widespread access to our provision. In addition to tracking and recording participants involved in one of our sessions for more than 15 minutes, we also record the amount of time our dedicated team of teachers spend with pupils. During this reporting year, 1,260 hours were spent with pupils and the team delivered 1,215 education sessions. 99% of all completed teacher evaluation forms, confirmed schools were 'very satisfied' with the quality of provision delivered.

A breakdown of the type of sessions that have contributed to this reporting figure, can be found below:

- Participants that have visited the Education Centre: **3,453**
- Company Open Day Visitors reported: **0**
- Participants that have received an assembly: **56,388**
- Participants that have received a workshop: **23,719**
- Participants that have received a live, online session: **4,125**

There has been a 9% increase in reporting figures from 2022/23 to 2023/24, which is the result of improvements in the way we implement our strategy. It is also the result of seconded teacher recruitment being particularly successful for a second successive year. We anticipate taking the success from this year into the next, continuing the current upward trajectory. There is a significant increase in actual figures between 2020/21 and 2022/23. This is directly attributed to Covid-19 school closure and social distancing measures, which impacted our ability to deliver our education programme in full at the beginning of AMP7 (2020-25).

The assessment report for this performance commitment will be completed by March 2025.

### 3.33 Ft11 - Visitors to Recreational Facilities

#### Definition

The total number of visitors to the Company's recreational sites each year. The Company's recreational sites are Llyn Brenig, Elan Valley, Llandegfedd and Llys y Fran. A new visitor centre is planned at the site of Lisvane and Llanishen reservoirs in North Cardiff. Any further recreational sites developed during the 2020-25 period will be included within this measure.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	294,763	842,701	739,294	1,034,101	n/a
Final Determination	560,000	675,000	720,000	775,000	830,000
FD Target Met	X	✓	✓	✓	n/a
ODI (£m)	-£0.530	£0.168	£0.019	£0.259	n/a

#### How We Performed

Our performance for the year was 1,034,101 which is better than the Ofwat Final Determination target of 775,000.

Our performance has increased significantly, as a result of the new visitor centre in Lisvane and Llanishen reservoirs opening in July 2023, which achieved 309,120 visitors since opening. Excluding this site our performance would have been 724,980, a reduction of 2% compared to 2022/23 performance.

We saw 1,034,101 visitors to our five visitor centres at Llyn Brenig in north Wales, Elan Valley in mid Wales, Llandegfedd in south east Wales, Llys y Fran in the west, Lisvane and Llanishen in north Cardiff, as well as two sites which provide recreational access at Lliw and Swiss Valley Reservoirs also in the west.

Visitor numbers by site:

SITE	Number of visitors
Elan	193,349
Brenig	130,593
Llandegfedd	146,580
Llys Y Fran	93,605
Lisvane and Llanishen	309,120
Lliw	61,603
Swiss Valley	99,250
<b>Total</b>	<b>1,034,101</b>
Please note that the sum of the visitors at each of the sites do not sum to the total, due to rounding as per definition for calculating the number of visitors	

Visitors to Wales from overseas has declined by 30% due to Brexit and the pandemic. Similarly, coach tours have been slow to recover and are significantly down on pre pandemic levels, which impacts Elan Valley as a significant coach tour destination site compared with other locations.

UK inflation, increased cost of living and fuel has restricted domestic travel and the UK Tourism accommodation sector reported lower than expected occupancy levels and increased last minute bookings.

The weather has played an important part in determining visitor numbers throughout the year and impacted individual sites differently. High rainfalls and strong winds deter visits to recreational sites that operate water sports (which can close during very strong winds). However, at Elan, this type of weather can attract visitors, especially when the dams are in full spill.

### 3.34 Rt2 - External Sewer Flooding on Customer Property

#### Definition

The measure is calculated as the number of external sewer flooding incidents normalised per 10,000 sewer connections including sewer flooding due to severe weather events. External flooding incidents are those that have occurred within the boundary of residential or non-residential properties.

#### Performance Summary

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	30.85	25.82	26.27	24.42	23.70	n/a
Final Determination		26.70	25.29	23.89	22.48	21.08
FD Target Met		✓	✗	✗	✗	n/a
ODI (£m)		£0.660	-£0.881	-£0.476	-£1.097	n/a

#### How We Performed

Our performance of 23.70 is worse than the Ofwat Final Determination target of 22.48, measured per 10,000 connected properties. This equates to 3,539 incidents..

Sewer defects and blockages caused 70% of our external flooding incidents in 2023-24. Reducing the blockages (and underlying defects) that cause flooding to properties continues to be a key part of our strategy, and we have set up a programme of work to install alarms at known locations to aid in undertaking preventative measures before it leads to a service failure.

The reported external flooding incidents are those that have occurred within the boundary of residential or non-residential properties. This is the fourth year that external flooding has been set as a performance measure across the majority of the industry, and we have continued to focus on external flooding within our wider flooding strategy. We have developed weekly, monthly, 'Repeat Incident' reports, highlighting external flooding within curtilage, and focussing attention on emerging repeat issues and instigating reactive/planned remedial works.

The aim of the external flooding strategy is to reduce the risk of repeat incidents, through improved understanding of our networks, better data, and first-time fix of issues identified following incident investigation, to reduce the likelihood of multiple service failures. We are reviewing best practices further this year to prevent repeat issues and creating more focused repeat flooding reports to focus investigations and investment. We have delivered a number of significant capital schemes to resolve repeat external flooding, due to Hydraulic Overload, at Baglan, Bretton, Port Talbot, and Porth.



### 3.35 Rt4 - Total Complaints

#### Definition

The total complaints by household customers received by the Company per 10,000 connections. It includes the combined total of unwanted contacts (i.e. telephone complaints), written complaints (letter and email), and contacts via new contact channels (such as social media or webchat). This aligns with the data submitted and published by the Consumer Council for Water (CCW) in its annual reports on household complaints.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	122.1	28.2	49.9	62.1	n/a
Final Determination	Upper Quartile	Upper Quartile	Upper Quartile	Upper Quartile	Upper Quartile
FD Target Met	X	✓	X	X	n/a
ODI (£m)	-£0.054	£0.000	-£0.030	-£0.048	n/a

#### How We Performed

During the year we received 9,308 total complaints from household customers, which equates to 62.1 per 10,000 connections. This is worse than the upper quartile target of 30.2 (which has been agreed with Ofwat). Written household complaints totalled 3,029 and non-written, telephone, web chat and social media, totalled 6,279.

The increase in the number of complaints compared to last year is a result of a number of challenges during the year, including the cost-of-living crisis, the direct billing by us of 40,000 customers previously billed by local authorities and external scrutiny from press sources including those related to storm overflows and leakage. As a result of these we have undertaken several lessons learnt sessions which continue, enabling us to identify opportunities to improve performance.

We have a number of initiatives to improve customer service and reduce complaints, some examples are:

- A Customer Service Delivery steering group, led by the Managing Director of Household Customer Services, has been established to oversee company customer service performance. It monitors performance across all customer service measures, shares and expand the insight into the effectiveness of our service delivery, defining and tracking the impact of improvement plans and managing the overall risk to the delivery of these important measures of success;
- Continuation of our Customer Led Success programme with the aim to empower our people, and contract partners, to make the right decision for the customer and be given the time and resources to see our customer queries through from start to finish;
- A Case Management Team that supports customers throughout some of our lengthy processes such as leakage and billing discrepancies;
- An instant feedback platform is in place to allow real-time feedback to be given to our colleagues, to reduce human error and admin error type complaints. This has allowed us to coach our teams how to deal with customers who are dissatisfied;
- A review of our Customer Journeys is ongoing to understand what drivers for complaints are including the introduction of new customer journeys where a need is identified;
- A quality framework which focusses on three key areas (engagement, customer, and company) to better support coaching activities and measures on outcome; and
- Regular reminder and training sessions to ensure that colleagues are able to own and resolve complaints and know when to escalate to ensure the customer's issue is directed to the appropriate person.

To note - we have utilised the override function within the Ofwat ODI model to update the reported penalty of £0.048. Performance - UQ Target  $(30.2 - 62.1) \times 0.00152 = -£0.048m$ .

### 3.36 Rt5 - Worst Served Customers for Water Service

#### Definition

This measure identifies those properties (household or non-household) who consistently receive a poor level of service. The measure consists of three elements:

1. Properties that have had their water supply repeatedly interrupted over a 2 year period. Those properties who have had their water supply interrupted at least once in year one and experienced more than two interruptions in year two.
2. Properties that have had their water supply repeatedly interrupted over a 3 year period. Those properties who have had their water supply interrupted at least once in year one, year two and year three.
3. Properties that received low pressure below the agreed level of service for 3 years or more. Those properties are captured on the Low Pressure longstanding register.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	1,852	3,230	5,029	6,416	n/a
Final Determination	2,148	2,025	1,901	1,778	1,654
FD Target Met	✓	✗	✗	✗	n/a

#### How We Performed

Our performance for the year was 6,416 properties which is worse than the Ofwat Final Determination target of 1,778 properties.

The breakdown of the three elements of this measure is shown below:

Worst Served	2022/23 Performance	2023/24 Performance
1. Interruptions (over a 2 year period)	1,158	1,599
2. Interruptions (over a 3 year period)	3,829	4,769
3. Low Pressure	42	48
Water Services (Total)	5,029	6,416

The unprecedented year in 2022/23 due to extreme weather events such as the summer drought and the freeze thaw during the Winter, has caused a significant impact on this performance commitment.

During the year 231 properties were added in Solva in November 2023, following a burst main. It was the fourth burst main since February 2020. This is currently our second worst affected area by number of properties Worst Served. The worst affected area remains Deri, Bargoed. A scheme has recently been completed that is believed to have resolved the issues in Deri. After confirmed performance improvements we hope to remove the 453 properties in Deri from the register.

Taking a precautionary approach, we have included 331 properties within the reported number where a site visit is required to confirm the connection status of the property.

As this performance commitment is closely linked with Wt2 – water supply interruptions, Project Novello should also provide benefit to the number of customers on the Worst Served list. Please see Wt2 – Supply Interruptions commentary.

We have a Water Fair scheme to ensure that customers who fall into the 'worst-served' category for water or for wastewater are not charged for that service.

### 3.37 Rt6 - Worst Served Customers for Wastewater Service

#### Definition

This measure identifies those properties (of household or non-household customers) that consistently receive a poor level of service and experience repeat sewer flooding incidents i.e. 'worst-served' customers. The measure is comprised of the four categories, outlined below. Two of the categories relate to sewer flooding due to hydraulic overload (HO) and two relate to flooding due to other causes (OC).

1. Properties recorded as being at active risk of flooding internally due to hydraulic overload in the 2-in-10 year risk category (expected probability that sewer flooding will occur two or more times in ten years).
2. Properties recorded as being at active risk of Serious External Flooding due to hydraulic overload in the 2-in-10 year risk category.
3. Properties which have flooded internally more than once in the ten years prior to 31 March in the reporting year due to 'other causes'.
4. Properties which have suffered, on average, more than one Serious External Flooding due to 'other causes' in the three years prior to 31 March in the reporting year.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	547	557	508	514	n/a
Final Determination	374	371	371	357	357
FD Target Met	X	X	X	X	n/a

#### How We Performed

Our performance for the year was 514 properties which is worse than the Ofwat Final Determination target of 357 properties. The breakdown of the four elements of this measure is shown below.

Worst-served Customers (Wastewater)	2022/23 year end	2023/24 year end
Internal Flooding (hydraulic overload)	69	71
Serious External Flooding (hydraulic overload)	276	276
Internal Flooding (other causes)	165	169
Serious External Flooding (other causes)	1	1
TOTAL	508	514

Note - three properties qualify under both hydraulic and other cause categories, but each is only counted once in the overall total.

There has been an increase in new worst-served customers during the year, with 53 properties added (compared to 16 in 2022/23). From July 2023, Wales has seen the wettest nine months in 189 years of data. This has driven an increase in sewer flooding, particularly associated with named storms in October (storm Babet) and January (storms Henk, Isha & Jocelyn). The increase in new worst-served customers has been offset by the delivery of investigations and capital investment during the year, removing 47 customers from the Register. Schemes have been completed in Baglan, Bretton, Cwmbran and Port Talbot, with the latter being accelerated from AMP8 (2025-30) to realise efficiency savings.

Capital schemes are currently onsite in Canton, Fleur-de-Lis & St Dogmaels, and Gwersyllt is in post-scheme verification. We also have a targeted interceptor-removal programme to resolve repeat internal flooding in SE Wales, which is currently in scoping for delivery in 2024.

We have a Water Fair scheme to ensure that customers who fall into the 'worst-served' category for water or for wastewater are not charged for that service.

### 3.38 Sv3 - Customer Trust

#### Definition

The average score of customers asked the question 'How much do you trust your water and sewerage company?' The response is on a scale of one to ten with one being 'do not trust them at all' and ten being 'trust them completely'. This performance commitment is calculated from the Consumer Council for Water's (CCWater) survey. This performance commitment will cease to apply if CCWater discontinues its annual question on the level of trust in water companies.

#### Performance Summary

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	8.2	7.95	8.30	7.75	7.74	n/a
Final Determination		8.15	8.15	8.15	8.15	8.15
FD Target Met		X	✓	X	X	n/a

#### How We Performed

Each year CCWater undertakes a survey asking customers for feedback on their water and sewerage company. This report is the Water Matters report and is usually published in July each year. Our performance reported for the year was 7.74 (April 2023 CCWater report) which placed us second out of the water and sewerage companies but is worse than the Ofwat Final Determination target of 8.15. The highest Water and Sewerage Company's (WASC) score in 2023 was 7.81.

### 3.39 Sv4 - Business Customer Satisfaction

#### Definition

This performance commitment measures the average customer score out of five from four quarterly business customer satisfaction surveys. The Company will undertake a survey of 250 business customers per quarter (1,000 in total per year). It will survey a sample from all customers, not just those who have contacted the company.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	4.4	4.4	4.4	4.3	n/a
Final Determination	4.5	4.5	4.5	4.5	4.5
FD Target Met	X	X	X	X	n/a
ODI (£m)	-£0.125	-£0.125	-£0.125	-£0.250	n/a

#### How We Performed

Our performance for the year was 4.3 which is worse than the Ofwat Final Determination target of 4.5.

To better serve our business customers, and improve future performance, planned improvements include:

- Continue working to deliver our company vision that in all we do 'we will earn the trust of customers every day';
- Review and update relevant policies and processes with a focus on ensuring appropriateness across customer sectors; and
- Improving the flexibility and value for money of value adding services such as Data Logging which we offer to our business customers, to enable better water management.

### 3.40 Sv6 - Customers on Welsh Language Register

#### Definition

The number of customers registered for our welsh language preference service.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
<b>Actual</b>	6,472	6,568	6,649	6,751	n/a
<b>Final Determination</b>	13,000	16,000	19,000	22,000	25,000
<b>FD Target Met</b>	X	X	X	X	n/a

#### How We Performed

Our performance for the year was 6,751 which is worse than the Ofwat Final Determination target of 22,000. This is an increase of 102 compared to 2022/23.

In addition to this performance commitment, we offer a range of other Welsh language services (e.g. telephony, webchat, email and website services) which gives the overall picture of customers using our Welsh services.

A further 9,176 contacts have been received from customers who have used at least one of Welsh services and on average we get 7,571 visitors to the Welsh version of our website.

We are aiming to improve performance by:

- Promoting at external events such as Royal Welsh/ Eisteddfod;
- Raising awareness through social media specific campaigns to sign up to Welsh language documentation;
- Highlighting during all contacts into our Welsh telephony team and chat agents;
- Promotion through our website; and
- Attending events with our community van.

### 3.41 BI1 - Change in Average Household Bill

#### Definition

The percentage increase in the average household bill from the bill in 2019/20. The Company has committed to keeping bill increases below inflation as measured by the CPIH (Consumer Price Index including owner occupiers' housing costs).

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
<b>Actual</b>	0%	-1.5%	-2.4%	-4.0	n/a
<b>Final Determination</b>	<CPIH	<CPIH	<CPIH	<CPIH	<CPIH
<b>FD Target Met</b>	✓	✓	✓	✓	n/a

#### How We Performed

For 2023/24 our average bill increased below the rate of inflation.

This measure is the percentage change since 2019/20 in the average household combined bill before inflation is taken into account, based on the forecast average bill when charges are set. The average household bill is calculated using the same methodology as used when reporting average household bills to Ofwat and for publication on the Discover Water website, in that water and wastewater average bills are calculated separately based on revenues and household customer numbers, and combined to calculate an overall average bill figure.

For 2023/24 we met our performance commitment to keep average bill levels below the level that they were in 2019/20, before inflation is taken into account. Average bills were set to be 4% lower than the 19/20 figure.

Annual bill levels are impacted by financial adjustments made in respect of our performance in prior years. In total these reduced by our 23/24 revenue by £25m, meaning average household bills are around £14 lower than they would have otherwise been.

## 3.42 BI2 - Vulnerable Customers on Social Tariffs

### Definition

The number of residential customers on social tariffs as at 31 March each year. This includes both the HelpU social tariff scheme and the WaterSure scheme. Customers benefiting from Water Collect, Customer Assistance Fund and Water Direct customers are excluded from this measure unless they are also on a social tariff.

### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
<b>Actual</b>	127,238	127,247	128,531	130,226	n/a
<b>Final Determination</b>	133,000	133,000	133,000	133,000	133,000
<b>FD Target Met</b>	X	X	X	X	n/a

### How We Performed

Our performance for the year was 130,226 which is worse than the Ofwat Final Determination target of 133,000. At 31 March there were 96,105 customers on HelpU and 34,121 customers on WaterSure (includes customers on Welsh Water Assist as these tariffs have previously been combined).

During the year, we have accepted 23,714 customers onto a social tariff. Through natural attrition (e.g. customer moves where the applicant no longer qualifies, deceased customers and the new re application process) we have also removed 22,019 giving us a net increase of 1,695.

We will continue to audit customers benefiting from social tariffs to ensure eligibility and will remove customers who are no longer eligible.

Our targeted work in communities in our mobile Community Hub saw us speak directly to over 895 customers in need. We have taken a deep dive into local communities to raise awareness of our support services for our customers in vulnerable circumstances. We identified areas of high deprivation and are collaborating with communities there, partnering with local representatives from organisations like Citizens Advice and Warm Wales. It should be noted that this work can often be high effort for low return. In spite of this, we feel it's the right thing to do and this activity will continue as part of business as usual.

In the year, we have delivered 660 training and awareness sessions. We continue to deliver free Training and Awareness sessions to third party organisations, like Citizens Advice and Housing Associations helping their employees better understand the support we can offer their clients.

Up to this point, there has not been a significant increase in financial distress as a direct result of the cost-of-living crisis. This is also reflected in Citizen Advice's data that indicates that the number of individuals facing financial challenges has not grown. However, for those who were already managing a negative budget, their financial situation has deteriorated further. In the last year we now have a dedicated 'cost-of-living' page on Welsh Water's website. This allows our customers to access information quickly when searching for help. We have in the last year switched on the webchat function for our customers reaching out for financial support to attempt to reach more customers that may find picking up the phone difficult.

We have a number of initiatives to improve our performance, some examples are:

- Continued promotion of our social tariffs through our existing partners and relevant agencies;
- Explore opportunities for data share with local authorities to automatically enrol tenants who qualify for support;
- Utilise data to identify areas of high deprivation and target these areas to collaborate with communities there, including the use of social media posts; and
- Provide an on-line application process for WaterSure to speed up the process and reduce effort for customers.



### 3.43 BI3 - Company Level of Bad Debt

#### Definition

The Company level of bad debt is a measure of the total unpaid water and wastewater bills that are deemed uncollectable as a proportion of the total revenue billed in each reporting year.

#### Performance Summary

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	3.0	4.2	2.4	2.9	3.0	n/a
Final Determination		2.3	2.2	2.1	2.0	2.0
FD Target Met		X	X	X	X	n/a

#### How We Performed

Our performance for the year is 3.0% which is worse than the Ofwat Final Determination target of 2.0%.

The bad debt metric has been calculated based on the retail element of the bad debt charge (Annual Performance Report (APR) Table 2C, Line 3: £27.631m) as a proportion of total appointed revenues (APR Table 1A, Line 1: £910.603m).

We've been able to collect ca. 96% of the money we expected over the past 12 months, up to 31 March 2024. Our bad debt charge has increased compared to prior years correlating to the rise in appointed revenues and a marginal drop in collection rates due to timing issues anticipated to be recovered next year.

We have continued to factor in a £2m increase to our 31 March 2024 year-end provision for bad debt, equivalent to 1% deterioration in cash collection rates to provide against a potential deterioration in collection rates resulting from the cost-of-living crisis.

### 3.44 BI4 - Unbilled Properties

#### Definition

The number of household and non-household properties classified as void as a percentage of the total number of household and non-household properties served by the Company. Void properties are defined as properties, within the company's supply area, which are connected for either a water service only, a sewerage service only or both services but do not receive a charge. This measure includes properties where other companies bill on our behalf.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	4.03	3.78	3.93	3.59	n/a
Final Determination	3.90	3.80	3.70	3.60	3.50
FD Target Met	X	✓	X	✓	n/a
ODI (£m)	-£0.340	£0.052	-£0.601	£0.026	n/a

#### How We Performed

Our performance for the year was 3.59% which is slightly better than the Ofwat Final Determination target of 3.60%.

Performance has been driven by the our Voids Data Cleanse Exercise. This, along with our void investigations undertaken to identify and bill unregistered occupiers has decreased the number of void properties by 10%.

3.45 BI5 - Financial Resilience

Definition

This performance commitment indicates the financial resilience of the company as reflected in the credit ratings for senior class bonds, given by the three main credit rating agencies: Standard & Poor's (S&P), Moody's and Fitch. A score of 'High' represents a strong investment grade credit rating from at least two of the three credit rating agencies. A strong investment grade rating is defined as: Moody's: A3 or better, S&P: A- or better, Fitch: A- or better.

Performance Summary

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	High	High	High	High	High	n/a
Final Determination		High	High	High	High	High
FD Target Met		✓	✓	✓	✓	n/a

How We Performed

During the year our senior bonds were rated A3/A-/A by Moody's S&P and Fitch. These continue to be among the best in the UK utility sector.

### 3.46 Bl6 - Delivery of Our Reservoirs Enhancement Programme

#### Definition

Cumulative number of schemes delivered in the 2020/25 period against the regulatory programme of work for enhancing the safety of our reservoir assets. Work at each site will comprise:

- Reduction in 'Estimating Annual Probability of Dam Failure' due to works completed; and/or
- Completion of Section 10 measures in the interest of safety.

This will be assured by a third party All Reservoirs Panel Engineers.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Actual	2	8	14	21	n/a	n/a
Final Determination	0	8	13	17	26	29
FD Target Met	✓	✓	✓	✓	n/a	n/a
ODI (£m)	£0.000	£0.000	£0.000	£0.000	n/a	n/a

#### How We Performed

Our cumulative performance target of 17 for 2023-24 has been exceeded, with 21 commitments having been delivered to date.

The Improvement have been successfully completed at the following sites:

- Blaen-y-Cwm
- Llyn y Fan Fach
- Canaston Bridge
- Cilcain 1
- Grwyne Fawr
- Llandegfedd
- Llwyn-On

These works followed Section 10 inspections under the Reservoirs Act 1975.

Since our Business Plan submission in 2018 our reservoir safety programme has been updated to reflect the latest risk information from ongoing investigations. We will continue to ensure the programme prioritises work to maximise the benefit in terms of improvements in safety in line with legal requirements. Over the AMP (2020-25) period the programme will deliver the same (at least) overall benefit as the original programme approved by Ofwat at PR19, and our expenditure on the programme will be at least as much as the figure stipulated at the price review. We will provide evidence to confirm these facts in future Annual Performance Report submissions to Ofwat.

We are on track to deliver our target for the remaining years of AMP7 (2020-25).

As per our Final Determination requirements, we have submitted to Ofwat a report from third party panel engineers (Arup) that confirms 26 sites are complete or in progress to be completed by December 2025.

To note - we have utilised the override function within the ODI model so that any associated out or under performance payments are calculated on 31 March 2025.

### 3.47 BI8 - Delivery of Our Water Network Improvement Programme

#### Definition

Cumulative number of schemes delivered to milestone 3 (completed programme of works) over the 2020 to 2025 period. This performance commitment captures the Company's obligations to meet the 17 notices served on it by the Drinking Water Inspectorate (DWI) in force as at 1 April 2020 to address concerns about discolouration of water. The financial implications associated with underperformance this performance commitment will be assessed in 2025, which is the end of this five year reporting cycle.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	0	2	2	4	n/a
Final Determination	0	0	0	0	17
FD Target Met	✓	✓	✓	✓	n/a
ODI (£m)	£0.000	£0.000	£0.000	£0.000	n/a

#### How We Performed

Two schemes have been delivered this year. So far for the five-year period 2020/21 to 2024/25 we have delivered four schemes, which is better than the Ofwat Final Determination target.

We are investing to improve the appearance of drinking water supplied to our customers in 17 Water Quality Zones during the five year reporting period. Construction activities to date have been completed in four zones (Bridgend Pencoed, Cardiff Ely/Radyr, Aberyswyth and Port Talbot).

The following two schemes were due to be completed in 2022/23 but were delayed, these schemes are nearing completion:

- Construction in Sketty Gower was delayed by issues on the final connection on a major roundabout in the Swansea area, we worked with Swansea Council to mitigate water supply and transport disruption to the area. The work has been completed and we will shortly be submitting to DWI for approval; and
- Construction in Rhymney Bargoed was delayed by the business decision to reallocate the construction team to deal with the severe weather events in 2022. The work has now been completed and has been submitted to DWI for approval.

We are on track to complete schemes in 13 zones during 2024/25. AtkinsRéalis have undertaken an audit during March and April 2024 as they were commissioned to undertake a third-party review of the decision-making and scope risk management processes for the Zonal Studies programme. We have shared this report with Ofwat as per our Final Determination requirements.

This review has identified sound decision making, progress monitoring and risk management, but the delayed start until the last two years of the AMP has resulted in a very tight programme, with little float.

To note - we have utilised the override function within the ODI model so that any associated out or under performance payments are calculated on 31 March 2025.

### 3.48 BI10 - Delivery of Our South Wales Grid Water Supply Resilience Scheme

#### Definition

Cumulative proportion of total expenditure spent to deliver the South Wales Grid water supply resilience scheme over the 2020 to 2025 period. The financial implications associated with underperformance this performance commitment will be assessed in 2025, which is the end of this five year reporting cycle.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	0	0	1	15	n/a
Final Determination	0	3	10	95	100
FD Target Met	✓	✗	✗	✗	n/a
ODI (£m)	£0.000	£0.000	£0.000	£0.000	n/a

#### How We Performed

We have not achieved the FD target and we are not going to meet this Performance Commitment (PC) by 2025.

To meet this PC, we are expected to use the allowed expenditure to deliver a bidirectional transfer of 30MI/d providing resilience to over 50,000 customers in the Western Cardiff area. It is assessed as the cumulative proportion spend to deliver the scheme against total expenditure of £15m (2017/18 price).

Following the completion of hydraulic modelling and detailed feasibility during AMP7 (2020-25), we have determined that delivering the scheme as originally proposed at PR19 is no longer in the interests of customers. This is because:

1. The hydraulic modelling has shown that the original solution will not deliver the resilience outcomes originally intended by this PC; and
2. Significant cost inflation in parts of the scheme such as pipe laying means that the solution is no longer affordable under the current allowance.

We are therefore not going to deliver this scheme by the end of AMP7 (2020-25).

In line with the performance commitment definition we will return a total of £13.7m which includes a £1m late delay penalty. The £13.7m will be returned to customers through a performance commitment penalty (£6.4m) and the cost sharing mechanism (£7.3m).

It is likely that the scheme is still required to deliver resilience in the long term, so it is now being considered for delivery in AMP9 (2030-35).

To note - we have utilised the override function within the Ofwat ODI model so that any associated out or under performance payments are calculated on 31 March 2025.

#### Restatement of previous years' data

Last year, we reported a 2% spend, but it was not adjusted for 2017/18 prices. As a result, we are restating last year's value to 1% for 2022/23.

### 3.49 Co1 - Reportable Injuries

#### Definition

The number of individual injuries reported to the Health and Safety Executive under RIDDOR per annum.

#### Performance Summary

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	8	6	9	5	5	n/a
Final Determination		9	8	7	6	5
FD Target Met		✓	✗	✓	✓	n/a

#### How We Performed

Our performance for the year was five, which is better than the Ofwat Final Determination target of six. This equals our performance for last year.

Two of the five injuries met the HSE RIDDOR category of being 'Specified Injuries' which equals the two reported for 2022/23. The two injuries were incurred by contactors.

We will continue to work with our operational contract partners to share learning and best practice to help prevent injuries.

## 3.50 Co2 - Employee Training and Expertise

### Definition

The percentage of the Company's employees that are evaluated as having the necessary skills, experience and knowledge to carry out their specific role safely.

### Performance Summary

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	83.0	79.7	79.6	80.5	66.3	n/a
Final Determination		95.0	95.0	95.0	95.0	95.0
FD Target Met		X	X	X	X	n/a

### How We Performed

Our performance for the year was 66.3% which is worse than the Ofwat Final Determination target of 95.0%.

### Restatement of previous years' data

In previous years reporting, the Waste Sewerage Operator programme statistics were used instead of the Water Distribution Inspector programme. On identification, this programme has been restated with the removal of Waste Sewerage Operator (as per FD definition). The restated figures are shown in the table below.

Year	Original number	Restated number
2020/21	79.0%	79.7%
2021/22	79.6%	79.6%
2022/23	78.7%	80.5%

The reason for the significant decrease this year is due to a new Water Distribution Inspector programme being introduced which was aligned to all necessary roles in the business. Even if a staff member has completed the previous course, there is a requirement for all relevant staff to undergo the new training programme to be considered compliant.



## 3.51 Co3 - Employee Engagement

### Definition

This performance commitment is designed to incentivise the company to maintain the employee engagement score derived from an annual survey of colleague sentiment.

### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	n/a	69	75	75	n/a
Final Determination	80	80	80	80	80
FD Target Met	X	X	X	X	n/a

### How We Performed

Our performance for the year was 75% which matches our performance for last year, but is still worse than the Ofwat Final Determination target of 80%.

Our engagement is measured using four questions.

- I am proud to work for Welsh Water;
- I would recommend Welsh Water to people I know as a great place to work;
- I rarely think about looking for a new job with another company; and
- Welsh Water motivates me to go the extra mile.

Once the surveys are completed, Qualtrics provide the percentage positive score for each of those questions and calculate an average to create the engagement score for Welsh Water.

As part of our 'We Said, We Did' to improve our engagement score some of our key drivers are to strengthen our employee benefits, prioritise the focus in some demographic areas, and build on the work already in progress. The future results will be analysed allowing Welsh Water to better understand our culture and transform feedback into actions and remain an Employer of Choice.

## 3.52 DPC01 - Direct Procurement for Customers: Cwm Taff Water Supply Strategy Scheme (Underperformance)

### Definition

The performance commitment measures successful and timely delivery of key direct procurement for customer control points, the Outline Business Case submission, and the Full Business Case submission.

### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
<b>Actual</b>	0	0	0	0	n/a
<b>Final Determination</b>	TBA	TBA	TBA	TBA	TBA
<b>FD Target Met</b>	n/a	n/a	n/a	n/a	n/a
<b>ODI (£m)</b>	£0.000	£0.000	£0.000	£0.000	n/a

### How We Performed

We were required to submit for the Cwm Taf Water Supply Strategy a Strategic Outline Case (SOC) by no later than 31 December 2020; this was submitted on 18 December 2020.

The proposed timetable within the SOC included submission of an Outline Business Case by 31<sup>st</sup> October 2022 and delivery of the Full Business Case by 31<sup>st</sup> July 2024 for performance commitment DPC01, and competitive appointments of a third party provider for the DPC scheme by 31<sup>st</sup> October 2024 for performance commitment DPC02.

We have kept Ofwat and the DWI fully informed of our review and decision-making processes throughout this period. We have taken the decision to amend the planned approach to the Cwm Taf Water Supply Strategy to include refurbishment of an existing treatment works and construction of a smaller new treatment works. There is therefore an additional need for changes to designs and supporting investigations alongside further public and stakeholder consultation, resulting in a delay to the previously envisaged timescales.

To note - we have used the override function within the Ofwat ODI model as this is an end of period Performance Commitment.

### 3.53 DPC02 - Direct procurement for Customers: Cwm Taff Water Supply Strategy Scheme (Outperformance)

#### Definition

Where DCWW successfully completes an agreed procurement process and, following approval by Ofwat, awards the Cwm Taf Water supply strategy scheme to a competitively appointed provider such that the contract is signed and fully effective in accordance with its terms.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
<b>Actual</b>	TBC	TBC	TBC	TBC	n/a
<b>Final Determination</b>	TBA	TBA	TBA	TBA	TBA
<b>FD Target Met</b>	n/a	n/a	n/a	n/a	n/a
<b>ODI (£m)</b>	£0.000	£0.000	£0.000	£0.000	n/a

#### How We Performed

We were required to submit for the Cwm Taf Water Supply Strategy a Strategic Outline Case (SOC) by no later than 31 December 2020; this was submitted on 18 December 2020.

The proposed timetable within the SOC included submission of an Outline Business Case by 31<sup>st</sup> October 2022 and delivery of the Full Business Case by 31<sup>st</sup> July 2024 for performance commitment DPC01, and competitive appointments of a third party provider for the DPC scheme by 31<sup>st</sup> October 2024 for performance commitment DPC02.

We have kept Ofwat and the DWI fully informed of our review and decision-making processes throughout this period. We have taken the decision to amend the planned approach to the Cwm Taf Water Supply Strategy to include refurbishment of an existing treatment works and construction of a smaller new treatment works. There is therefore an additional need for changes to designs and supporting investigations alongside further public and stakeholder consultation, resulting in a delay to the previously envisaged timescales.

To note - we have used the override function within the Ofwat ODI model as this is an end of period Performance Commitment.

### 3.54 VIS01 - Delivery of a New Visitor Centre

#### Definition

The performance commitment measures successful delivery of the project to construct a new visitor centre at the Llanishen/Lisvane reservoirs site. The financial implications associated with underperformance this performance commitment will be assessed in 2025, which is the end of this five year reporting cycle.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	n/a	n/a	n/a	Delivered	n/a
Final Determination	n/a	n/a	n/a	n/a	n/a
FD Target Met	✓	✓	✓	✓	n/a
ODI (£m)	£0.000	£0.000	£0.000	£0.000	n/a

#### How We Performed

We delivered our new visitor centre at Llanishen/Lisvane on 3rd July 2023. It was delivered in line with Final Determination targets and ahead of target date 31 March 2025 and has attracted over 300k visitors in its first 9 months. For further information see: [www.lisvane-llanishen.com](http://www.lisvane-llanishen.com)

To note - we have used the override function within the Ofwat ODI model as this is an end of period Performance Commitment.

### 3.55 DWMPs - Drainage And Wastewater Management Plans

#### Definition

The cumulative percentage of catchments in which Welsh Water operates, the company implements the Level 1 water company DWMP in accordance with the guideline: A framework for the production of Drainage and Wastewater Management Plans, published September 2018 and updated May 2019.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	0	0	0	100	n/a
Final Determination	0	0	100	100	100
FD Target Met	X	X	X	✓	n/a

#### How We Performed

This measure was designed to develop voluntary drainage and wastewater management plans. Our plan sets out how we will extend, improve and maintain a robust and resilient drainage and wastewater system in light of facing the pressures of climate change, population growth and growing customer expectations.

We did not meet this target last year as we did not meet the publishing deadline. We have since published our DWMP in 2023/24 covering the 13 strategic planning units, so we are reporting a figure 100%. You can find our DWMP on our website here - <https://www.dwrcymru.com/en/our-services/wastewater/drainage-and-wastewater-management-plan>.

### 3.56 NEP01 - Delivery of Environment Programme Requirements

#### Definition

This measure tracks the completion of required schemes in each year, as per the latest WINEP/NEP programme published by DEFRA and Natural Resources Wales. Has the Company 'met' or 'not met' all of its requirements for Water Industry National Environment Program (WINEP)/National Environment Program (NEP), in the reporting year.

#### Performance Summary

	2020/21	2021/22	2022/23	2023/24	2024/25
Actual	Met	Met	Met	Met	n/a
Final Determination	Met	Met	Met	Met	Met
FD Target Met	✓	✓	✓	✓	n/a

#### How We Performed

We have met the Performance Commitment for 2023/24. The table below shows the claims across the three drivers.

Natural Resources Wales have issued a business performance letter dated 17 June 2024 confirming our reported performance. The Environment Agency has provided sign off via the DEFRA SharePoint site for measures that contribute towards this Performance Commitment.

Regulator	Schemes	Monitors	Investigations
EA	5	13	221
NRW	4	20	0

## 4. Assurance

### Assurance processes adopted in preparing this report.

The Company has established appropriate processes and systems of control that provide the necessary assurance in respect of the information contained within and underpinning this report. The following paragraphs summarise the processes and systems of control in place.

#### Policies and Procedures

- Key processes and systems of control are documented, and the quality of systems used for generating regulatory information are continually assessed. These processes have been followed to produce this part 3 of the Annual Performance Report. Although we are no longer required to produce a June Return, we have used the same processes as in previous years and retained the concept of 'data ownership'.
- Methodology Statements are in place for performance commitments reported in this part of the Annual Performance Report and these have either been assessed by the Reporter or subjected to internal review.
- As part of targeted due diligence, each data owner was required to confirm that they had completed the relevant table in accordance with the relevant Methodology Statement. Any changes to the procedures are kept up to date and are published on our intranet Source.
- We have in place a policy document which outlines the formal process to be undertaken and, inter alia, the roles and responsibilities of key people including data owners, the Regulation Department, Dŵr Cymru Executive Directors (collectively and individually), the Audit Committee and the Board.
- A 'Code of Conduct' detailing the behavioural framework required around regulatory data and whistle-blowing was issued in 2014, with updated versions issued in 2018, 2020 and 2023.
- Ownership and responsibility for each relevant data item has been clearly defined. Each individual was responsible for adhering to all appropriate Ofwat guidance in the compilation of accurate and complete data, providing associated commentary and arranging colleague / management checks. This also involved formal 'sign off' by the individual, verifying that the data had been completed in line with the latest Methodology Statement. In addition, confirmation was required that any material judgements or assumptions had been highlighted and documented, ensuring a robust and transparent audit trail, with a review of confidence grades also carried out where applicable.
- Ownership and responsibility is also allocated to the Head of Service, who is also involved in the formal 'sign off' to confirm that they are satisfied the data owner has completed the process and that they have carried out relevant checks to ensure the integrity and accuracy of the data submitted.
- Allocation of overall responsibility for individual data items were also assigned to the appropriate member of the Dŵr Cymru Executive (DCE). Each was responsible for the review and 'sign off' of their own data items at the DCE APR review meetings.
- A large proportion of the data processing is covered by our internal Integrated Management System which has accreditation to various ISO standards.

#### Implementation and Internal Review

- Production of training pack/slides by the Regulation Department ensured that all data owners had a single point of reference for all information necessary to undertake their specific responsibilities. Guidance was included on how to process the relevant data and populate tables, updates required to commentaries, methodology statements and risk matrices, information on confidence grades and details of where to locate previous Reporter's reports. All of the information included within the training packs was made available on our intranet Source
- Each data owner had a dedicated point of contact with a member of the Regulation Department who provided them with 1-2-1 training and support throughout the APR process.
- Several informal question and answer sessions were held virtually for data owners in March 2024, where data owners were given the opportunity to raise any questions on the processes.
- Regular communication between the Regulation Department and all data owners was undertaken prior to and during the preparation of this report.

- There was regular reporting of key performance indicators to the Board, the Quality and Safety Committee (QSC) and the Dŵr Cymru Executive Directors throughout the year.
- A rigorous process of internal due diligence meetings was undertaken by the Regulation Department between April and June 2024 to challenge information, judgements and assumptions made and to ensure compliance with the relevant guidance.
- A review was undertaken by the Regulation Department to ensure consistency between the Annual Performance Report and the individual data items and the relevant commentaries.
- A management review meeting of non-financial measures reported in the Annual Performance Report, involving the Dŵr Cymru Executive Directors, took place on 28 May 2024 and 11 June 2024. This was also attended by the Reporter, an Internal Audit team member and data owners, where relevant. For each performance commitment, a summary containing current year's performance, historical performance (where relevant) and data owner and reporter issues was produced and formed the basis of the discussions. Material issues were highlighted and discussed.

#### External Review and Board Engagement

- The Reporter carried out a formal review and certification of all non-financial measures and provided a detailed report commenting on compliance with reporting requirements and highlighted any issues with the reported figures.
- The Director of Strategy and Regulation reviewed and approved publication of Our Assurance Activities, which was published in April 2024.
- The Audit Committee received papers detailing the processes in place at a meeting held on 1 February 2024. Further progress updates were provided to the Audit Committee on 26 June 2024.
- As part of the external review of data, the Reporter also reviewed performance against the PR19 Final Determination Outcomes and Performance Commitments. The Reporter also attended the Dŵr Cymru Executive Directors meeting on the 28 May 2024 and 11 June 2024, the Audit Committee meetings on the 26 June 2024 (where they provided verbal updates) and the Board meeting on 4 July 2024. The Reporter's letter of assurance can be found in Appendix 2 of this document.
- The Internal Audit Team undertook a high-level review of governance processes put in place to ensure the accuracy and completeness of non-financial data reported in the Annual Performance Report for 2023-24. The report concluded that there was an effective governance framework for the completion, review and approval of Data Tables and assigned an overall rating of "Full Assurance".
- The Board meeting on 4 July 2024 reviewed the overall process, the operation of the systems of internal and external controls and reviewed the key judgements required in compiling the Annual Performance Report.
- Some of our key stakeholders (e.g. Natural Resources Wales, the Drinking Water Inspectorate and CCWater) also carry out audits and scrutiny of our data.



# Appendix 1. Common performance measures - Compliance Checklists

## 1.1 Leakage

	Component / Element	Component R/A/G	Element R/A/G	Reason for any non-compliant components	Confidence Grade
1	<b>1. Coverage</b>				A1
1a	95% of all properties have continuous night flow monitoring through the year				
2	<b>2. Availability</b>				A1
2a	At least 90% of all properties within continuous night flow monitoring networks available for reporting night flow data through the year				
3	<b>3. Properties</b>				A2
3a	All properties mapped to defined zones or DMAs using geo-location or similar methods				
3b	Consistency of property numbers contained within DMAs or zones with company billing system. Valid differences explained				
3c	Properties that are defined as void excluded from night use allowances unless evidence for use or losses from illegal occupation is available				
3d	Leakage allowance applied for properties not within DMAs or monitored zones consistent with other leakage estimates				
3e	Property data updated at least annually				
4	<b>4. Night flow period and analysis</b>				A2
4a	Night flow data frequency at least every 15 minutes				
4b	Leakage derived from a fixed period during the night of at least a one hour period and up to two hours				
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				
4d	Leakage allowance applied for properties not within DMAs or monitored zones consistent with other leakage estimates				
4e	Data infilling for a single DMA or zone does not use more than six months of historic data before moving to area average				
4f	Data infilling where historic data is not available uses the area average in which the DMA is located				

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				
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				
4i	Weekly leakage estimates are used for annual reporting with no exclusions for summer months				
4j	Negative leakage values are used in compiling values of annual average leakage				
4k	The reasons for any prolonged periods of negative leakage are investigated and explained				
5	<b>5. Household night use</b>				B2
5a	The time period for HHNU is the same time period as used for night flow and NHHNU				
5b	Own data or shared data with proximate companies is used for HHNU				
5c	Plumbing losses are included and based on own data				
5d	Evidence that survey is representative (based on demography, property type or other factors) of the company as a whole				
5e	Sample size is sufficient to capture continuous and intermittent night use with reasonable confidence				
5f	Continual monitoring and maintenance of IHMs (individual household monitors) and SAMs (small area monitors)				
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				
6	<b>6. Non-household night use</b>				B2
6a	The time period for NHHNU is the same time period as used for night flow and HHNU				
6b	Own data or shared data with proximate companies is used for NHHNU				
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				
6d	Stratification of non-households to a number of groups and consumption bands is representative of the varying characteristics of commercial and industrial properties				
6e	Sample size is sufficient to capture night use by stratification with reasonable confidence				

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.				
6g	ABV model linked to billing system or replacement database of billed volumes. Average billed volumes updated at least annually				
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				
<b>7</b>	<b>7. Hour to day conversion</b>				<b>B2</b>
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				
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				
7c	Evidence based N1 value used. Expected range is 1.0 to 1.20				
<b>8</b>	<b>8. Annual distribution leakage</b>				<b>A2</b>
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				
8b	The annual value of leakage expressed as MI/d is be derived from an average of the 52 week data				
<b>9</b>	<b>9. Trunk main losses</b>				<b>B3</b>
9a	Company-specific data is used to assess the value of trunk main leakage				
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%				
9c	If trunk main losses greater than 5% of total leakage estimates reviewed annually				
<b>10</b>	<b>10. Service reservoir losses</b>				<b>B3</b>
10a	Company-specific data is used to assess the value of service reservoir losses;				
10b	Reservoirs with known high leakage, structural deficiencies or at risk of water quality failures are investigated on an individual basis				

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.				
11	<b>11. Distribution input</b>				A2
11a	Distribution input to the system is metered with at least daily readings at all defined locations				
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				
11c	Data validity checks are carried out at least monthly				
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				
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				
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				
12	<b>12. Measured consumption</b>				A2
12a	Metered data is derived from own billing system or from CMOS for non-households				
12b	Estimate of supply pipe losses is included for internally metered properties consistent with own current assumption of supply pipe losses				
12c	Inclusion of any leakage allowance is included where a rebate has been applied to a customer's bill				
12d	Meter under-registration (MUR) is applied consistent with own estimates. Evidence of MUR available especially for MUR above 3%.				
12e	Meter replacement consistent with own replacement programme				
13	<b>13. Unmeasured consumption</b>				B2
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				
13b	Consumption is derived from own individual household monitor or small area surveys				

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				
13d	<b>For companies using SAMs</b> – SAM (small area monitor) 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. <b>For companies using IHMs</b> – IHM (individual household monitor) comprises representative sample of customer characteristics. The sample is at least 1000 properties.				
13e	Uncertainty allocated to unmeasured household consumption is estimated and justified				
13f	There is continual monitoring and maintenance of IHMs and SAM monitors				
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				
13h	Estimate of plumbing losses is based on own data				
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				
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				
14	<b>14. Company own water use</b>				<b>B2</b>
14a	All sewage treatment sites and other sites and assets supplied downstream of the DI meters using greater than 10 m <sup>3</sup> /d (0.01 MI/d) are metered			Some sites not metered (c250+) - but these will include some sites without water supplies and also less than 10m3d. AMP8 programme to address this	
14b	An estimate of total company own use is included in the water balance, based on a clear methodology and actual data				
14c	Estimate of distribution operational use is evidence based and not greater than 0.6% of distribution input				

15	15. Other water use				B2
15a	Other use components are based on own data				
15b	Estimate of water delivered unbilled (legally and illegally) is evidence based and not greater than 1.8% of distribution input				
15c	Estimates are updated when there is a material increase or decrease to volumes				
16	16. Water balance and MLE				B2
16a	Fully measured components have a range from 2% to 4%				
16b	Mainly measured with some estimated adjustments have a range from 2.5% to 5%				
16c	Estimated using detailed and reliable methods have a range from 8% to 12%				
16d	Broad estimates not fully detailed or reliable have a range from 20% to 50%				
16e	Water balance discrepancy: <2% = Green >2% and <3% = Amber >3% = Red				

## 1.2 Supply Interruptions

	Component	Component (R/A/G)	Reason for any non-compliant components	Confidence Grade
1	Property Counts			B2
2	Start Time			B2
2a	Evidence to support start time			B2
2b	Treatment of 3m pressure definition			A2
2c	Treatment of blocks of flats		<p>During the year we were successfully able to implement geographical topography data provided by Ordnance Survey called 'OS MasterMap Building Height'. This essentially provides the height of a property enabling a formulation assessment in the determination of the number of stories in a building. We were able to extract properties registered as a 'flat', and through analytical assessment we were able ascertain the maximum building height and projected number of stories. In line with the industry approach understood through benchmarking, mindful assumptions relating to number of stories, and probability of private pumps have been necessary in the reporting method.</p> <p>Due to poor company performance, fundamental changes to the delivery of this measure will be implemented in 2024/25 through 'Project Novello'. As such, the implementation of this additional step to consider flat heights will instead be incorporated into the new approach for delivering this measure.</p> <p>A geospatial layer has been set up in readiness and will be included as part of the training plan, due imminently.</p> <p>The materiality of the impact to flats is very low with around 9% of our total property base being attributed to a flat. Of the 73,439 properties captured in 2023/24 as having an interruption of 3</p>	B3

			<p>hours or more only 4,820 were related to flats, equating to around 6%.</p> <p>In addition, we believe a proportion of flats have private pumps (due to the number of stories) to supply water to the higher stories. Therefore, when water is restored to ground level all higher stories would also regain supply.</p> <p>Flats within DCWW's jurisdiction are predominately in the city / town centres where there's a flatter topography and subsequently less mains pressure. This also coincides with local network performance within our more densely populated areas being more effective.</p>	
3	Stop Time			B2
3a	Evidence to support stop time			B2
3b	Treatment of 3m pressure definition			A2
3c	Treatment of blocks of flats		As per 2c.	B3
4	Short Term Restoration of Supply			A2
5	Exclusions			A2
6	Calculation of Performance			A2
7	Application of Precautionary Principle			A2
8	Records			A2
9	Properties affected >1 interruption in year			B2



### 1.3 Mains Repairs

	Component	Component (R/A/G)	Reason for any non-compliant components	Confidence Grade
1	Mains burst repair work			A2
2	Mains Length			A2
3	Records			A2
4	Methodology Statement			A2

### 1.4 Unplanned Outages

	Component	Component (R/A/G)	Reason for any non-compliant components	Confidence Grade
1	<b>Peak Week Production Capacity (PWPC)</b>			A2
1a	PWPC Annual review			A2
1b	PWPC by site			A2
1c	PWPC by water resource zone			A2
2	<b>Asset failure / unplanned outage</b>			B3
2a	Source Data			B3
3	<b>Planned Outages</b>			B3
3a	Source data – programme of works		<p>The RAG status for this component is Amber. Programmes of work are available for some workstreams eg GAC Filter regeneration and Capital delivered work, however, planned maintenance by local teams eg clarifier cleaning are scheduled and delivered locally. The planned outage data is inputted following the same methodology as unplanned outage i.e. all planned work that may have an impact on PWPC flow is captured on the Area Workbooks, with start and end times confirmed locally or using Prism where possible and therefore all planned work delivered on site is captured accurately. For this reason there is no material impact on the Planned Outage measure.</p> <p>Work will be undertaken in 24-25 to establish a new data system and methodology for incorporating all planned programmes of work into Planned Outage reporting.</p>	B3

			This will be completed ahead of the next annual reporting period in May 2025 and should return the status to green.	
4	<b>Duration</b>			B3
4a	Start time			B3
4b	End time			B3
4c	Rounding			B2
5	Reduction in capacity			A3
5a	Reduced capacity			A3
5b	Total outage			A3
6	<b>Exclusions</b>			A2
6a	Outside normal water quality band			A2
6b	Evidence of water quality events			A2

## 1.5 Per Capita Consumption

	Component / Element	Component R/A/G	Element R/A/G	Reason for any non-compliant components	Confidence Grade
<b>1</b>	<b>1. Household population estimates</b>				<b>A2</b>
1a	Household population derived using WRMP methodology				
1b	Evidence for adjustments for clandestine population if any				
1c	Household population updated annually				
1d	Exclusion of non-household population in accordance with WRMP methods				
<b>2</b>	<b>2. Household property estimates</b>				<b>A1</b>
2a	Definition of household / non-household consistent with eligibility under market separation				
2b	Evidence of void properties updated annually				
2c	Property figures annually updated				
<b>3</b>	<b>3. Measured household consumption</b>				<b>B2</b>
3a	Metered data is derived from own billing system				
3b	If leakage allowances are applied the process and evidence for this is clearly set out				
3c	Average SPL (supply pipe leakage) deductions for externally metered households using company own data updated annually				
3d	Company own estimate of MUR (meter under-registration) for revenue meters which is updated annually				
3e	Meter replacement consistent with own replacement programme				
<b>4</b>	<b>4. Unmeasured household consumption</b>				<b>B2</b>
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				
4b	Consumption is derived from own IHM (individual household monitor) or SAM (small area monitor) or evidence to support other method appropriate for high meter penetration companies				

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				
4d	For companies using SAMs - SAM (small area monitor) 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 (individual household monitor) comprises representative sample of customer characteristics. The sample is at least 1000 properties.				
4e	Uncertainty allocated to unmeasured household consumption is estimated and justified				
4f	There is continual monitoring and maintenance of IHM and SAM monitors				
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				
4h	Estimate of plumbing losses is based on own data				
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				
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				
4k	Company own estimate of MUR (meter under-registration) for monitor meters which is updated annually				
4l	Meter replacement consistent with own replacement programme				

## 1.6 Sewer Collapses

	Component	Component (R/A/G)	Reason for any non-compliant components	Confidence Grade
1	Number of Collapses			B2
2	Sewer Length			B2
2a	Length excluding transferred sewers			B2
2b	Length of sewers transferred under the Private Sewer Regulations 2011			B2

## 1.7 Internal and External Sewer Flooding

	Component	Compliant (R/A/G)	Reason for any non-compliant components	Confidence Grade
1	Assets causing flooding			B2
2	Severe weather			N/A
2a	Individual rainfall events > 1 in 20 years			N/A
2b	Multiple rainfall events			N/A
2c	Surface water run-off not originated from public sewer			B2
2d	River levels > 1 in 100 year return period			B2

## Appendix 2. Reporter's Letter of Assurance

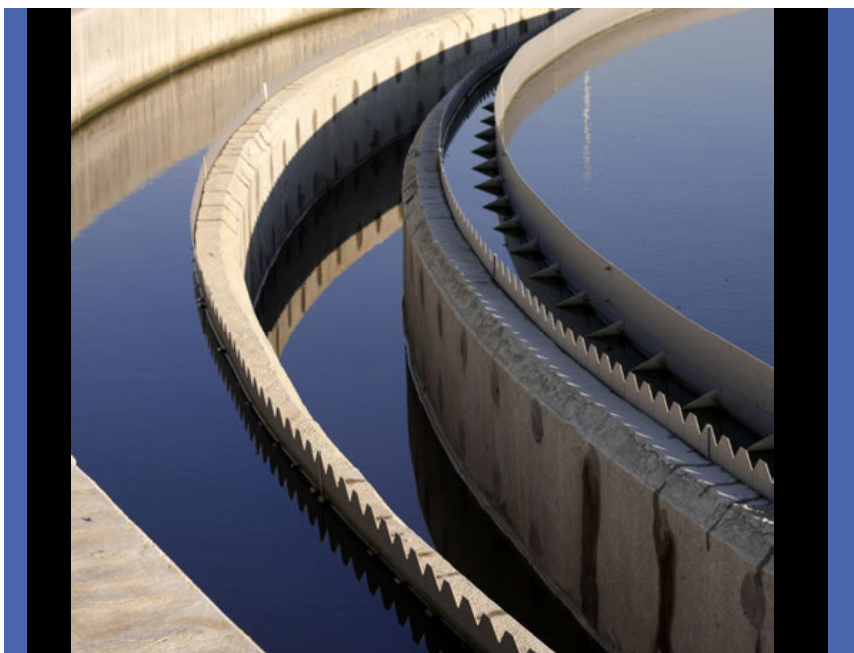
**Jacobs**

### **APR24 Part 3 Assurance Letter**

Revision no: 2.0

**Dŵr Cymru Welsh Water**  
APR24

**Non-financial Assurance Services Framework**  
18 June 2024





APR24 Part 3 Assurance Letter

Client name:

Dŵr Cymru Welsh Water

Project name:

Non-financial Assurance Services Framework

Client reference:

APR24

Project no:

B2271302

Document no:

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Project manager:

Alexandra Crawford

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Prepared by:

Lisa Slade

Date:

18 June 2024

File name:

APR Part 3 Assurance letter Final

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Final

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Revision	Date	Description	Author	Checked	Reviewed	Approved
0.1	06/06/2023	Draft for client comment	LS	SF	YZ	AC
0.2	07/06/2024	Updated draft	LS	SF/YZ	LH	YZ
1.0	10/06/2024	Final version	LS	YZ	SF	AC
2.0	18/06/2024	Final version 2.0	LS	YZ	LH	TM

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18 June 2024

Attn: The Board, Dŵr Cymru Welsh Water

Project name: Non-financial Assurance Services Framework  
Project no: B2271302

**Subject: Part 3 Assurance**

## Overview

This letter provides an overview of our assurance activity relevant to your submission for Part 3 of the Annual Performance Report (APR) for 2023/24.

## Scope of our assurance

You asked us to undertake a risk-based review of your in-period and end of period performance commitments (PCs) to check the robustness and accuracy of the data you intend to submit for Part 3 of the APR, including the calculation of the relevant outcome delivery incentive (ODI) values and the in-period ODI determination model. Our assurance of your data is designed to support your own first and second line assurance activity.

Prior to the data audits, you asked us to undertake a risk-based process review for the below PCs to check the robustness of the method statement process you applied.

- En4 Leakage
- En5 PCC
- Sv1 C-MeX
- En9 Combined Sewer Overflow
- Wt2 Water supply interruptions
- Rt2 Sewer flooding on customer property (external)

## Our assurance approach

The process reviews were held between November 2023 and March 2024 and the data reviews were held between April and May 2024. All audits took place remotely using Microsoft Teams. When reviewing your proposed performance figures, we have taken a risk-based approach (via sampling) to assess the completeness, reliability and accuracy of the source data, the robustness of the reported performance figure and the appropriateness of the confidence grade the team had assigned. Where available, we also checked consistency of your teams' internal commentaries with the data we reviewed and ensured that they did not contain any obviously misleading or false statements.

After each process or data audit we provided you with detailed feedback that explained our assessment of the risk associated with the methodology and reported performance figure and listed any actions.

In addition to the reviews of the method statements and performance data we also held separate meetings with your teams in late May to review the calculations of the ODI values, the in-period ODI determination model and the forecasted performance for end of period and in period PCs.

Reporting for the following PCs is dependent on data from third parties (Drinking Water Inspectorate (DWI), Natural Resource Wales (NRW) and a designated supplier) and this was not finalised at the time of our audit. We assured the data that you had available at the time and confirmed that the approach taken to calculate performance was reasonable. Offline reviews were then undertaken once the third-party data was available.

APR24 Part 3 Assurance Letter

- 3D.1,3 Sv2 D-MeX.
- En1/2 Treatment Works Compliance
- NEP01 Delivery of environment programme requirements, and
- En6 Km of river improved

We note that across the items we reviewed, where we identified any issues, we considered may have a material impact on the APR data, you asked your teams to respond to the issues via email and, where appropriate, requested we complete follow up audits. In such cases, we focused on whether we considered your teams had addressed the issues and checked the impact was understood. In some cases, we re-checked the data to ensure material issues had been addressed and resolved.

Findings

Appendix A details the PCs that were assured for APR24, along with their overall assurance score.

Early Process Audit

During the course of our early process audits, we identified one material issue which was resolved. This therefore presents a low or low-to-medium level of reporting risk.

Table 1: Early process audit material actions

Ref	Material Issue	Resolution
Sv1 C-MeX	Three of the waste data samples were excluded, but it was not clear in the notes in C4C or SAP production why they were excluded.  There were two clean water jobs which were excluded incorrectly by the distribution teams.	<b>Resolved</b> – The team implemented a new process to check exclusions. The new processes are a substantial improvement and should help to reduce the risk of misreporting.

Data Audit

During the course of our data audits, we identified the following three material issues.

Table 2: Data audits material actions

Ref	Material Issue	Resolution
Sv1 C-MeX	We noted an issue with the way internal transfers were logged. The jobs were raised but the contact was not logged in clean, waste or billing systems. This means the contact was not passed over to Accent to be included in the monthly sample checks.	<b>Resolved</b> – process review undertaken and improvements to be put in place.  We recommend a half year data audit for APR25 to check the improvements implemented for the exclusion 'other' category.
3I.1 Planned Outage	The compliance RAG for the source data for planned outage was showing a RAG of green. Evidence presented in the audit was not sufficient to support it.	<b>Resolved</b> – The compliance RAG has been changed to Amber.
Bl10 Delivery of our South Wales Grid water supply resilience scheme	It was discussed that this PC will not be met by the end of year 5, due to increased costs.	<b>Outstanding</b> - We recommend communication with Ofwat as soon as possible and, if possible, before the APR submission deadline.  DCWW decided to report the 15% completion as achieved by now at the end of year 5. They are aware of the financial impact, and this has been discussed in their May DCE meeting.

## APR24 Part 3 Assurance Letter

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We identified no material issues with the remaining data that we reviewed for Part 3, but we raised some non-material actions and recommendations, which therefore presents a low-to-medium level of reporting risk.

### Non-compliance

As part of the assurance, we reviewed the compliance checklists for the following PCs:

- Leakage
- Per capita consumption (PCC)
- Unplanned outage
- Mains repairs
- Water supply interruptions
- Internal sewer flooding
- Sewer collapses

The following areas were amber for non-compliance. It was evidenced in audit that this does not have a material impact on the reported performance.

- Supply Interruptions - Flat heights. DCWW have the data from the Ordnance Survey (OS) and it looks negligible but will be incorporated as part of the project Novello review.
- Unplanned Outage – 3a 'Source data - programme of works'. Programmes of work are available for some workstreams but planned maintenance by local teams are scheduled and delivered locally. This does not fully align to the guidance contributing to the amber assessment. DCWW have an improvement plan in place, and this will be added to the commentary.
- Leakage – Distribution Input (DI)I meters. Some sites were not metered (circa 250+), these include some sites without water supplies and that are less than 10m<sup>3</sup>/d. An AMP8 programme is in place to address this.

### Models

We assured the current year (2023-24) ODI model, the forecast years (2024-25) ODI model, and the in-period adjustment model. We identified no material issues from the audits and the offline review of the updated ODI models. Though some recommendations were raised, a low reporting risk is presented.

## Assurance Statement

Overall, for the process and data we covered, other than the issues identified above, we consider:

- all individuals within the approval process have signed-off the data;
- data is competently sourced, processed and fit for purpose;
- any rewards/penalties are calculated in line with Final Determination (FD) requirements; and
- your teams' internal commentaries were consistent with the data we saw at the time of reviewing them and did not contain any obviously false or misleading statements in relation to that data.

Yours sincerely,



**Sarah Fane**  
Head of Water Strategy and Regulation

Sarah.Fane@Jacobs.com

APR24 Part 3 Assurance Letter

Appendix A – Performance Commitments

As part of our technical role, we have reviewed and provided independent third-party assurance on the Performance Commitments (PCs) as listed in Table 4.

The following PCs were not audited because they were either complete or there was no change:

- 3E.7 - Water catchments improved
- 3A.15 - Delivery of a new visitor centre
- 3A.16 - Direct procurement for customers: Cwm Taff Water supply strategy scheme (underperformance)
- 3A.17 - Direct procurement for customers: Cwm Taff Water supply strategy scheme (outperformance)
- 3E.27 - Drainage and wastewater management plans (DWMPs)

And the following two PCs were audited by DCWW's financial auditors:

- 3E.15 – Company level of bad debt
- 3E.16 - Financial resilience

No red issues were identified in the PC audits. The only amber issue outstanding is for BL10 Delivery of your South Wales Grid water supply resilience scheme as outlined in the findings section above.

The following RAG guidance was used to score the data lines in the assurance audits:

Table 3: RAG scoring definitions

Scoring schedule and colour palette.	
Score	Meaning
A	Low risk – no weaknesses or deviations from methodology in production of data and confidence grade is appropriate (there are no issues/actions identified)
B	Low to medium risk - no material weaknesses or deviations in production of data and confidence grade is appropriate (there are only non-material issues/actions identified)
C	Medium to high risk - material weakness or unjustified deviations (or number of minor ones with material effect) or confidence grade is not appropriate (there is one material issue/action identified)
D	High risk – two or more of: material weakness or deviation (or number of minor ones with material effect) or confidence grade is not appropriate (there are more than one material actions identified)
	Not audited as it was outside our scope

Table 4: Performance Commitments RAG scores

Unique reference	Performance Commitment	RAG	
		Process	Data
PR19WSH_Wt1	Water quality compliance (CRI)	NA	B
PR19WSH_Wt2	Water supply interruptions	B	A
PR19WSH_En4	Leakage	B	B
PR19WSH_En5	Per Capita Consumption	B	B
PR19WSH_Wt4	Mains repairs	NA	A
PR19WSH_Wt5	Unplanned outage	NA	B
PR19WSH_Ft1	Risk of severe restrictions in a drought	NA	A
PR19WSH_Sv5	Priority services for customers in vulnerable circumstances	NA	B
PR19WSH_Rt1	Internal sewer flooding	NA	A
PR19WSH_En3	Pollution incidents	NA	B
PR19WSH_Ft2	Risk of sewer flooding in a storm	NA	A

## APR24 Part 3 Assurance Letter

Unique reference	Performance Commitment	RAG	
		Process	Data
PR19WSH_Rt3	Sewer collapses	NA	A
PR19WSH_En1	Treatment works compliance	NA	A
PR19WSH_Sv1	C-MeX	B	B
PR19WSH_Sv2	D-MeX	NA	B
PR19WSH_Wt3	Acceptability of drinking water	NA	A
PR19WSH_Wt6	Tap water quality event risk index	NA	B
PR19WSH_Wt8	Lead pipes replaced	NA	A
PR19WSH_En2	Wastewater treatment works 'look-up table' compliance	NA	A
PR19WSH_En6	Km of river improved	NA	B
PR19WSH_En9	Combined sewer overflow storage systems	B	A
PR19WSH_En7	Bioresources product quality	NA	A
PR19WSH_En8	Bioresources disposal compliance	NA	A
PR19WSH_Sv3	Customer trust	NA	A
PR19WSH_Sv4	Business customer satisfaction	NA	A
PR19WSH_Sv6	Customers on Welsh language register	NA	B
PR19WSH_Rt2	Sewer flooding on customer property (external)	B	A
PR19WSH_Rt4	Total complaints	NA	B
PR19WSH_Rt5	Worst served customer for water service	NA	A
PR19WSH_Rt6	Worst served customer for wastewater service	NA	A
PR19WSH_BI1	Change in average household bill	NA	B
PR19WSH_BI2	Vulnerable customers on social tariffs	NA	B
PR19WSH_BI4	Unbilled properties	NA	B
PR19WSH_Ft3	Energy self-sufficiency	NA	B
PR19WSH_Ft4	Surface water removed from sewers	NA	A
PR19WSH_Ft5	Asset resilience (reservoirs)	NA	A
PR19WSH_Ft6	Asset resilience (water network plus above ground)	NA	B
PR19WSH_Ft7	Asset resilience (water network plus below ground)	NA	B
PR19WSH_Ft8	Asset resilience (waste network plus above ground)	NA	B
PR19WSH_Ft9	Asset resilience (waste network plus below ground)	NA	A
PR19WSH_Ft10	Community education	NA	B
PR19WSH_Ft11	Visitors to recreational facilities	NA	B
PR19WSH_Co1	Reportable injuries	NA	B
PR19WSH_Co2	Employee training and expertise	NA	A
PR19WSH_Co3	Employee engagement	NA	A
PR19WSH_BI6	Delivery of our reservoir's enhancement programme	NA	A
PR19WSH_BI8	Delivery of our water network improvement programme	NA	B
PR19WSH_BI10	Delivery of our South Wales Grid water supply resilience scheme	NA	C
PR19WSH_NEP01	Delivery of environment programme requirements	NA	B

APR24 Part 3 Assurance Letter

Table 5: ODI model RAG scores

ODI model	RAG
	Data
2023/24 ODI Model	A
2024/25 Forecast ODI Model	A
In-Period Adjustment Model	A

APR24 Part 3 Assurance Letter

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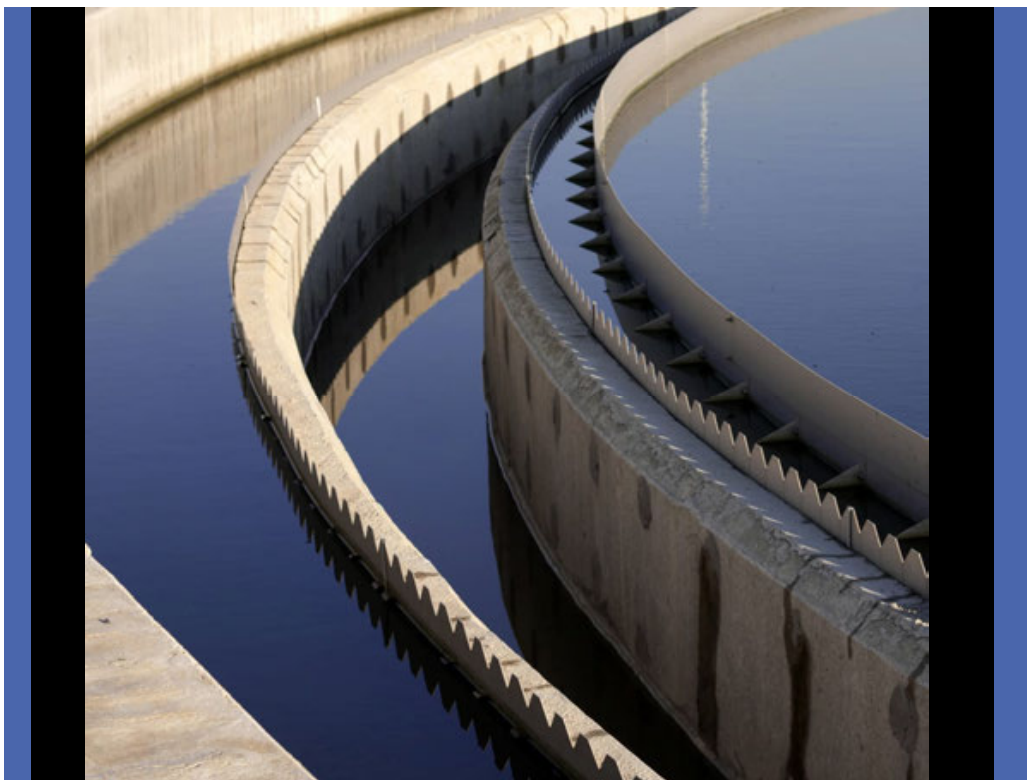


## APR24 Part 3 Assurance Letter

Revision no: 2.0

Dŵr Cymru Welsh Water  
APR24

Non-financial Assurance Services Framework  
18 June 2024







APR24 Part 3 Assurance Letter

Client name:

Dŵr Cymru Welsh Water

Project name:

Non-financial Assurance Services Framework

Client reference:

APR24

Project no:

B2271302

Document no:

1

Project manager:

Alexandra Crawford

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Prepared by:

Lisa Slade

Date:

18 June 2024

File name:

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0.1	06/06/2023	Draft for client comment	LS	SF	YZ	AC
0.2	07/06/2024	Updated draft	LS	SF/YZ	LH	YZ
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2.0	18/06/2024	Final version 2.0	LS	YZ	LH	TM

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18 June 2024

Attn: The Board, Dŵr Cymru Welsh Water

Project name: Non-financial Assurance Services Framework  
Project no: B2271302

**Subject: Part 3 Assurance**

## Overview

This letter provides an overview of our assurance activity relevant to your submission for Part 3 of the Annual Performance Report (APR) for 2023/24.

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## APR24 Part 3 Assurance Letter

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## Findings

Appendix A details the PCs that were assured for APR24, along with their overall assurance score.

## Early Process Audit

During the course of our early process audits, we identified one material issue which was resolved. This therefore presents a low or low-to-medium level of reporting risk.

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## APR24 Part 3 Assurance Letter

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As part of the assurance, we reviewed the compliance checklists for the following PCs:

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- all individuals within the approval process have signed-off the data;
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Yours sincerely,



Sarah Fane  
Head of Water Strategy and Regulation

Sarah.Fane@Jacobs.com

## APR24 Part 3 Assurance Letter

## Appendix A – Performance Commitments

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Table 4: Performance Commitments RAG scores

Unique reference	Performance Commitment	RAG	
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PR19WSH_Wt2	Water supply interruptions	B	A
PR19WSH_En4	Leakage	B	B
PR19WSH_En5	Per Capita Consumption	B	B
PR19WSH_Wt4	Mains repairs	NA	A
PR19WSH_Wt5	Unplanned outage	NA	B
PR19WSH_Ft1	Risk of severe restrictions in a drought	NA	A
PR19WSH_Sv5	Priority services for customers in vulnerable circumstances	NA	B
PR19WSH_Rt1	Internal sewer flooding	NA	A
PR19WSH_En3	Pollution incidents	NA	B
PR19WSH_Ft2	Risk of sewer flooding in a storm	NA	A

## APR24 Part 3 Assurance Letter

Unique reference	Performance Commitment	RAG	
		Process	Data
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PR19WSH_Sv1	C-MeX	B	B
PR19WSH_Sv2	D-MeX	NA	B
PR19WSH_Wt3	Acceptability of drinking water	NA	A
PR19WSH_Wt6	Tap water quality event risk index	NA	B
PR19WSH_Wt8	Lead pipes replaced	NA	A
PR19WSH_En2	Wastewater treatment works 'look-up table' compliance	NA	A
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PR19WSH_Rt4	Total complaints	NA	B
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PR19WSH_BI1	Change in average household bill	NA	B
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PR19WSH_BI4	Unbilled properties	NA	B
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PR19WSH_Ft6	Asset resilience (water network plus above ground)	NA	B
PR19WSH_Ft7	Asset resilience (water network plus below ground)	NA	B
PR19WSH_Ft8	Asset resilience (waste network plus above ground)	NA	B
PR19WSH_Ft9	Asset resilience (waste network plus below ground)	NA	A
PR19WSH_Ft10	Community education	NA	B
PR19WSH_Ft11	Visitors to recreational facilities	NA	B
PR19WSH_Co1	Reportable injuries	NA	B
PR19WSH_Co2	Employee training and expertise	NA	A
PR19WSH_Co3	Employee engagement	NA	A
PR19WSH_BI6	Delivery of our reservoir's enhancement programme	NA	A
PR19WSH_BI8	Delivery of our water network improvement programme	NA	B
PR19WSH_BI10	Delivery of our South Wales Grid water supply resilience scheme	NA	C
PR19WSH_NEP01	Delivery of environment programme requirements	NA	B

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Table 5: ODI model RAG scores

ODI model	RAG
	Data
2023/24 ODI Model	A
2024/25 Forecast ODI Model	A
In-Period Adjustment Model	A

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