

2022/23 Annual Performance Report

Parts 4 to 11

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Change control

Date	Version	Reason for Change
15 July 2023	V1 - First Published	

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Introduction

In line with the Ofwat Regulatory Accounting Guidelines, and in particular, RAG 3.14: Guidelines for the format and disclosures for the Annual Performance Report and RAG 4.11: Guideline for the table definitions in the Annual Performance Report, this Annual Performance Report (APR) document includes a link to the full schedule of all Ofwat APR excel tables and, where relevant, we have included in this document any relevant associated commentary to help explain certain lines of data. This document, reporting commentary by exception, can be read alongside the full suite of APR tables found on our [APR webpage](#).

We are required to publish an Annual Performance Report in a format prescribed by Ofwat which contains eleven parts as listed in the table below.

Part	Content
1 - Regulatory financial reporting	A baseline level of historical cost financial information aligned to the way in which price controls (and associated regulatory performance commitments and incentives) have been set.
2 - Price review and other segmental reporting	Further disaggregation of revenue and costs to allow stakeholders to review companies' performance against final determinations.
3 - Performance summary	A high level report of the performance of the appointed business, including outcome delivery and the regulatory financial results of the regulated business. As a minimum it will include reporting on outcomes and delivery service levels and cost performance.
4 - Additional regulatory information - service level	Additional financial and non-financial information, including (but not limited to) analysis of debt, totex analysis, major project expenditure, and properties, customers and population – non-financial information.
5 - Additional regulatory information - water resources	Additional financial and non-financial information, including (but not limited to) asset and volumes data plus operating cost analysis for water resources.
6 - Additional regulatory information - water network plus	Additional financial and non-financial information, including (but not limited to) raw water transport, raw water storage, water treatment data, treated water distribution mains analysis, communication pipes, metering and leakage activities.
7 - Additional regulatory information - wastewater network plus	Additional financial and non-financial information, including (but not limited to) load, costs and number of sewage treatment works within size bands, sewer and volume data, and energy consumption data.
8 - Additional regulatory information - bioresources	Additional financial and non-financial information, including (but not limited to) bioresources sludge data, operating expenditure analysis, bioresources energy and liquors analysis and sludge treatment and disposal data.
9 - Additional regulatory information - innovation competition	Additional financial and non-financial information, including (but not limited to) revenue collected for the purposes of the innovation competition.

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Part	Content
10 – Additional regulatory reporting – green economic recovery additional impacts reporting, performance reporting and scheme delivery	This section of APR is not applicable to Dŵr Cymru Welsh Water.
11 – Additional regulatory information – operational greenhouse gas emissions reporting	Additional non-financial information, including (but not limited to), Scope one, two and three emissions, Gross operating emissions location and market based and Greenhouse Gas intensity ratios.

In addition to the Ofwat APR Excel tables and this document, the following standalone APR documents covering parts 1, 2 and 3 can be accessed on our [website](#).

- Annual Performance Report Part 1
- Annual Performance Report Part 2
- Annual Performance Report Part 3
- Annual Performance Part 3 (Tables)

The remainder of this document focusses on the APR parts 4 to 11.

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Annual Performance Report (APR)

APR Part 4

This part of the APR covers additional financial and non-financial information, including (but not limited to) analysis of debt, totex analysis, major project expenditure, and properties, customers and population – non-financial information. In total there are 20 tables (applicable to Welsh Water) within part 4 of the APR as listed below:

Table Number	Table Description	Table Number	Table Description
Pro forma 4A	Bulk supply information for the 12 months ended 31 March 2023	Pro forma 4K	Base expenditure analysis for the 12 months ended 31 March 2023 – wholesale wastewater
Pro forma 4B	Analysis of debt	Pro forma 4L	Enhancement expenditure for the 12 months ended 31 March 2023 - water resources and water network plus
Pro forma 4C	Impact of price control performance to date on RCV	Pro forma 4M	Enhancement expenditure for the 12 months ended 31 March 2023 - wastewater network plus and bioresources
Pro forma 4D	Totex analysis for the 12 months ended 31 March 2023 – wholesale water resources and water network plus	Pro forma 4N	Developer services expenditure for the 12 months ended 31 March 2023 - water resources and water network plus
Pro forma 4E	Totex analysis for the 12 months ended 31 March 2023 – wholesale wastewater	Pro forma 4O	Developer services expenditure for the 12 months ended 31 March 2023 - wastewater network plus
Pro forma 4F	Major project capital expenditure by purpose for the 12 months ended 31 March 2023 – wholesale water	Pro forma 4P	Developer services non-price control expenditure for the 12 months ended 31 March 2023
Pro forma 4G	Major project capital expenditure by purpose for the 12 months ended 31 March 2023 – wholesale wastewater	Pro forma 4Q	Developer services - new connections, properties and mains
Pro forma 4H	Financial metrics	Pro forma 4R	Non-financial information - Properties, customers and population
Pro forma 4I	Financial derivatives	Pro forma 4V	Mark-to-Market of financial derivatives analysed based on payment dates
Pro forma 4J	Base expenditure analysis for the 12 months ended 31 March 2023 - water resources and water network plus	Pro forma 4W	Defined Benefit pension Scheme – Additional Information

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The following commentary is provided to help give the reader further clarity on the reported data.

Table 4A – Water bulk supply information for the 12 months ended 31 March 2023

Line	Line Description	Volume	Operating Costs	Revenue	Comments
	Units	MI	£m	£m	
	DPs	3	3	3	
26	Total bulk supply exports	109,879.931	1.517	8.045	The description for each bulk supply match those used on the bulk supply register.

Table 4B – Analysis of debt

Line	Line Description	Interest rates	Nominal Interest cost (full year equivalent)	Cash Interest cost (full year equivalent)	Comments
	Units	%	£m	£m	
805	Totals for all instruments		623.700	98.506	The values for nominal interest costs/ rates reconcile to 1E. The cash interest costs/ rates differ by £5.584m due to forced calculations in 4B on each leg of the finance lease inflation swaps. The impact on the indicative weighted average interest rate is 0.127%.
808	Indicative weighted average nominal interest rate	13.88%			
809	Indicative weighted average cash interest rate	2.19%			

Table 4B is prepared on the basis that it reflects the post hedging position. Subsequently the balance sheet value per instrument includes the effect of all relevant derivatives, regardless of where they are held within the group. This in turn ties back to total net debt – the derivatives have not been shown separately as they do not form part of debt in the balance sheet, and only some are held by the regulated entity (others are on-lent from the financing arm as combined instruments). This is in line with how the table has been prepared historically.

4I & 4V has been prepared to reflect ALL derivatives held by Welsh Water (including those that have been on-lent from the financing arm as combined instruments, and therefore the difference between the two figures is the derivatives that have come from the financing arm.

		Fair values	
		Assets	Liabilities
		£000	£000
DCF UK	Current		
	Index-link	14,353	(10,682)
	Interest rat	3,260	(5,271)
	Interest rat	5,271	(3,260)
		22,885	(19,213)
	Non-current		
	Index-link	307,353	(678,955)
	Interest rat	6,519	(30,664)
	Interest rat	30,664	(6,519)
		344,537	(716,139)
		367,421	(735,352)
			(367,930)

To confirm:

Out of the money (liability) is presented as positive. In the money (asset) is presented as negative.

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Table 4C – Impact of price control performance to date on RCV

Line	Line description	Units	DPs	12 months ended 31 March 2023					Comments												
				Water resources	Water network+	Wastewater network+	Bioresources	Total													
Totex (net of business rates, abstraction licence fees and grants and contributions)																					
2	Actual expenditure subject to cost sharing.	£m	3	60.049	305.647	277.474	33.225	676.395	<p>This line reports the actual totex subject to cost sharing, the guidance outlines that income offset payments reported in 2E should be deducted from actual expenditure. We do not report an income offset in 2E as the Developer Services Charges Rules in England do not apply in Wales. The income offset is applied to the Requisition charges and as such the requisition income in lines 2E.1 (water) and 2E.22 (wastewater) is net of an income offset of £5.856m (Water), £0.965m (Wastewater). The income offset values applied to requisition charges are deducted from the actual expenditure subject to cost sharing to align to our PR19 Final Determination. The income offset was not deducted from the actual totex subject to cost sharing for 2020-21 and 2021-22, we have restated 4C to ensure they are taken into account. The table below outlines the value of the income offset that have been applied for the calculation of line 4C.2.</p> <table><tr><td>outturn</td><td>2020-21</td><td>2021-22</td><td>2022-23</td></tr><tr><td>Income Offset Water (£m)</td><td>3.425</td><td>5.331</td><td>5.856</td></tr><tr><td>Income Offset Wastewater (£m)</td><td>(0.574)</td><td>1.037</td><td>0.965</td></tr></table>	outturn	2020-21	2021-22	2022-23	Income Offset Water (£m)	3.425	5.331	5.856	Income Offset Wastewater (£m)	(0.574)	1.037	0.965
outturn	2020-21	2021-22	2022-23																		
Income Offset Water (£m)	3.425	5.331	5.856																		
Income Offset Wastewater (£m)	(0.574)	1.037	0.965																		

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Table 4C - Impact of price control performance to date on RCV (continued)

Line	Line description	Units	DPs	12 months ended 31 March 2023					Comments
				Water resources	Water network+	Wastewater network+	Bioresources	Total	
Totex (net of business rates, abstraction licence fees and grants and contributions)									
4	Disallowable costs	£m	3	9.579	21.960	10.693	-	42.232	<p>Disallowable costs are costs for which it is inappropriate to share any over (or under) spend with customers. This includes £6.023m for compensation claims, fines and investigation costs, £24.42m relating to exceptional pension costs and £11.789m of ‘return of value’ (discretionary expenditure to benefit customers), as a result of our not-for-shareholder model.</p> <p>Disallowable costs have been restated for 2020-21 and 2021-22 to include £16m per annum as part of our leakage redress to customers for leakage reporting errors. We have committed not to recover the £32m of leakage expenditure through the PR19 cost sharing mechanism.</p>

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Table 4C - Impact of price control performance to date on RCV (continued)

Line	Line description	Units	DPs	12 months ended 31 March 2023					Comments
				Water resources	Water network+	Wastewater network+	Bioresources	Total	
Totex (net of business rates, abstraction licence fees and grants and contributions)									
7	Variance due to timing of expenditure	£m	3	0.680	(7.740)	(29.380)	0.720	(35.720)	<p>Water: The negative timing variance for water is largely driven by delays to our capital programme on meeting lead standards. The programme has been delayed by the impacts of COVID-19 but is subject to an ongoing programme of works and improvements.</p> <p>Wastewater: The negative timing difference is as a result of rephasing our capital programme on storage schemes to reduce spill frequency at CSOs and Storm tanks. The programme of work was initially delayed due to COVID-19 lockdowns. The schemes have therefore been reprofiled with feasibility and investigations in years 1-3 and schemes are planned for delivery in year 4 and 5. Flow to full treatment and storm tank capacity schemes have also been reprofiled as additional design and root cause analysis has been undertaken in years 1 to 3 with the schemes being delivered in years 4 and 5.</p>

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Table 4C - Impact of price control performance to date on RCV (continued)

Line	Line description	Units	DPs	12 months ended 31 March 2023					Comments
				Water resources	Water network+	Wastewater network+	Bioresources	Total	
Totex (net of business rates, abstraction licence fees and grants and contributions)									
8	Variance due to efficiency	£m	3	(10.605)	57.392	7.127	3.167	57.081	<p>Water: The water’ variance due to efficiency’ is driven by additional power costs and chemical costs. This is driven by an increase in wholesale electricity prices and additional consumption as a result of severe weather events. Additional tankering and leakage costs were incurred as a result of the dry summer.</p> <p>Wastewater: The wastewater ‘variance due to efficiency’ for wastewater is driven by additional power and chemical costs over the year. The additional costs are as a result of higher market prices for energy and chemicals and additional chemical consumption to ensure compliance.</p>

Table 4C - Impact of price control performance to date on RCV (continued)

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Line	Line description	Units	DPs	12 months ended 31 March 2023					Comments
				Water resources	Water network+	Wastewater network+	Bioresources	Total	
Totex not subject to cost sharing									
24	Variance-100% company allocation	£m	3	6.774	27.279	12.595	-	46.648	A positive variance of £46.648m is reported for totex not subject to cost sharing, £42.232m of this is due to the disallowable costs reported in line 4C.4. The guidance for 2022-23 was updated to include the disallowable costs, we have updated our 2022-21 and 2021-22 APR values and the cumulative column in this table.

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Table 4D – Totex analysis for the 12 months ended 31 March 2023 – Water resources and water network+

Line	Line description	Units	DPs	Expenditure in report year					Total	Comments																										
				Water resources	Water network+																															
					Raw water transport	Raw water storage	Water treatment	Treated water distribution																												
Operating expenditure																																				
1	Base operating expenditure	£m	3	30.980	4.629	1.193	54.495	132.760	224.057	<div>Atypical costs impact the figures as follows:</div> <table><tr><th>Area</th><th>£m</th></tr><tr><td>Water resources</td><td>4.009</td></tr><tr><td>Raw water transport</td><td>0.368</td></tr><tr><td>Raw water storage</td><td>0.139</td></tr><tr><td>Water treatment</td><td>6.223</td></tr><tr><td>Treated water distribution</td><td>14.733</td></tr><tr><td>Total</td><td>25.472</td></tr></table> <div>The atypical costs consist of:</div> <table><tr><th>Area</th><th>£m</th></tr><tr><td>Past pension service cost</td><td>18.954</td></tr><tr><td>Compensation claim</td><td>2.620</td></tr><tr><td>Cost of living payment</td><td>2.985</td></tr><tr><td>PSC claim</td><td>0.913</td></tr><tr><td>Total</td><td>25.472</td></tr></table>	Area	£m	Water resources	4.009	Raw water transport	0.368	Raw water storage	0.139	Water treatment	6.223	Treated water distribution	14.733	Total	25.472	Area	£m	Past pension service cost	18.954	Compensation claim	2.620	Cost of living payment	2.985	PSC claim	0.913	Total	25.472
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Total	25.472																																			

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Table 4E – Totex analysis for the 12 months ended 31 March 2023 – Wastewater network+ and bioresources

Line	Line description	Units	DPs	Expenditure in report year									Comments																																
				Network+ sewerage collection			Network+ sewerage treatment		Bioresources			Total																																	
				Foul	Surface water drainage	Highway drainage	Sewerage treatment and disposal	Imported sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal																																		
Operating expenditure																																													
1	Base operating expenditure	£m	3	36.626	17.893	8.774	85.284	5.589	7.091	7.438	5.164	173.859	<div>Atypical costs impact the figures as follows:</div> <table><tr><td>Area</td><td>£m</td></tr><tr><td>Foul</td><td>4.970</td></tr><tr><td>Surface WD</td><td>0.077</td></tr><tr><td>Highway drainage</td><td>0.044</td></tr><tr><td>Sewerage TD</td><td>3.197</td></tr><tr><td>Imported Sludge LT</td><td>0.096</td></tr><tr><td>Sludge transport</td><td>0.399</td></tr><tr><td>Sludge treatment</td><td>1.047</td></tr><tr><td>Sludge disposal</td><td>0.257</td></tr><tr><td>Total</td><td>10.087</td></tr></table> <div>The atypical costs consist of:</div> <table><tr><td>Area</td><td>£m</td></tr><tr><td>Past pension service cost</td><td>6.517</td></tr><tr><td>Cost of living payment</td><td>2.657</td></tr><tr><td>PSC claim</td><td>0.913</td></tr><tr><td></td><td></td></tr><tr><td>Total</td><td>10.087</td></tr></table>	Area	£m	Foul	4.970	Surface WD	0.077	Highway drainage	0.044	Sewerage TD	3.197	Imported Sludge LT	0.096	Sludge transport	0.399	Sludge treatment	1.047	Sludge disposal	0.257	Total	10.087	Area	£m	Past pension service cost	6.517	Cost of living payment	2.657	PSC claim	0.913			Total	10.087
Area	£m																																												
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PSC claim	0.913																																												
Total	10.087																																												

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Table 4F – Major project expenditure for wholesale water by purpose for the 12 months ended 31 March 2023

Line	Line Description	Additional Comments
4F.1	Cwm Taf Scheme	Year 3 total spend was £4.857m for direct costs (this is subject to overhead adjustment and Cap Sal accounting changes seeing the overall total reduce to c£4.5m) against an internal approved budget of £6.3m. The underspend against this internal budget was primarily due to the postponement of intrusive GI along the pipeline routes. This has been added to the forecast for Year 4. Alongside progressing with the current single site solution, we have initiated a thorough review of the other multi-site engineering options to achieve the WQ and resilience improvements required. The expected outturn expenditure for DPC in AMP 7 is currently circa £22m due to additional work and the prolonged programme to deliver.

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Table 4H – Financial Metrics for the 12 months ended 31 March 2023

Line	Line description	Units	DPs	Current year	AMP to date	Comments										
Financial indicators																
15	Interest cover (cash)	dec	2	2.82		<p>This is calculated as Funds from operation (£250.329m) plus net interest paid (1D.10)(£137.357) divided by net interest paid (£137.357)</p> <p>Net Interest paid exclude any non -cash accretion of index-linked debt.</p> <p>Net interest paid of £137.357m is taken from 1D.10 and consists of:</p> <table><tr><td>Interest on external borrowings</td><td>£ 19.9m</td></tr><tr><td>Interest on intra group borrowings</td><td>£ 62.5m</td></tr><tr><td>Interest on finance leases</td><td>£ 67.3m</td></tr><tr><td>Interest received</td><td><u>(£ 12.3m)</u></td></tr><tr><td></td><td>£137.4m</td></tr></table>	Interest on external borrowings	£ 19.9m	Interest on intra group borrowings	£ 62.5m	Interest on finance leases	£ 67.3m	Interest received	<u>(£ 12.3m)</u>		£137.4m
Interest on external borrowings	£ 19.9m															
Interest on intra group borrowings	£ 62.5m															
Interest on finance leases	£ 67.3m															
Interest received	<u>(£ 12.3m)</u>															
	£137.4m															
16	Adjusted interest cover (cash)	dec	2	0.63		<p>This is calculated as Funds from operation (£250.329m) plus net interest paid (£137.357m) less RCV run off (£301.021m) divided by net interest paid (£137.357m).</p> <p>Net interest paid exclude any non -cash accretion of index-linked debt.</p>										

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Table 4I – Financial derivatives

Line	Line description	Units	DPs	Expenditure in report year						Comments
				Nominal value by maturity (net)				Total value at 31 March		
				0-1 years	1 – 2 years	2 - 5 years	Over 5 years	Nominal value (net)	Mark to Market	
Other financial derivatives										
27	Other financial derivatives	£m	3	2.718	2.159	-	-	4.877	(9.962)	Other financial derivatives are power hedges; these are operating obligations rather than financing obligations; however, they have been included so as to agree back to total financial derivatives per table 1C. ((Excluding Dwr Cymru Financing (DCF) swaps.)
28	Total financial derivatives	£m	3	2.718	2.159	550.000	1,330.484	1,885.361	434.649	Reconciliation to table 1C £m Non-current assets Financial instruments 11.100 Current assets Financial instruments 12.700 Current liabilities Financial instruments (15.600) Non-current liabilities Financial instruments (74.919) Total financial instruments (66.719)

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										<p>These derivatives will not reconcile back to 1C as 1C does not include any of the DCF swaps. Whereas per the additional guidance in 22/23 within 4I.28, “We expect information to be based on external market position of the company. – i.e. exposures should therefore include derivatives held in the financing company (that issues debt on behalf of the regulated company.)”</p> <table><tr><th></th><th colspan="2">Fair values</th></tr><tr><th></th><th>Assets</th><th>Liabilities</th></tr><tr><th></th><th>£000</th><th>£000</th></tr><tr><td>Current</td><td></td><td></td></tr><tr><td>Index-link</td><td>14,353</td><td>(10,682)</td></tr><tr><td>Interest rat</td><td>3,260</td><td>(5,271)</td></tr><tr><td>Interest rat</td><td>5,271</td><td>(3,260)</td></tr><tr><td></td><td>22,885</td><td>(19,213)</td></tr><tr><td>Non-current</td><td></td><td></td></tr><tr><td>Index-link</td><td>307,353</td><td>(678,955)</td></tr><tr><td>Interest rat</td><td>6,519</td><td>(30,664)</td></tr><tr><td>Interest rat</td><td>30,664</td><td>(6,519)</td></tr><tr><td></td><td>344,537</td><td>(716,139)</td></tr><tr><td></td><td>367,421</td><td>(735,352)</td><td>(367,930)</td></tr></table>		Fair values			Assets	Liabilities		£000	£000	Current			Index-link	14,353	(10,682)	Interest rat	3,260	(5,271)	Interest rat	5,271	(3,260)		22,885	(19,213)	Non-current			Index-link	307,353	(678,955)	Interest rat	6,519	(30,664)	Interest rat	30,664	(6,519)		344,537	(716,139)		367,421	(735,352)	(367,930)
	Fair values																																																				
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	344,537	(716,139)																																																			
	367,421	(735,352)	(367,930)																																																		
The Company holds no financial derivatives other than those reported in the table above.																																																					
Out of the money (liability) is presented as positive values, and in the money (asset) presented as a negative.																																																					

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Table 4J – Base expenditure analysis for the 12 months ended 31 March 2023 – Water resources and water network+

Line	Line description	Units	DPs	Expenditure in report year						Comments																										
				Water resources	Water network+				Total																											
					Raw water transport	Raw water storage	Water treatment	Treated water distribution																												
Operating expenditure																																				
6	Other operating expenditure	£m	3	14.262	0.921	0.922	44.279	56.277	116.661	<div>Atypical costs impact the figures as follows:<table><tr><th>Area</th><th>£m</th></tr><tr><td>Water resources</td><td>4.009</td></tr><tr><td>Raw water transport</td><td>0.368</td></tr><tr><td>Raw water storage</td><td>0.139</td></tr><tr><td>Water treatment</td><td>6.223</td></tr><tr><td>Treated water distribution</td><td>14.733</td></tr><tr><td>Total</td><td>25.472</td></tr></table><div>The atypical costs consists of:<table><tr><th>Area</th><th>£m</th></tr><tr><td>Past pension service cost</td><td>18.954</td></tr><tr><td>Compensation claim</td><td>2.620</td></tr><tr><td>Cost of living payment</td><td>2.985</td></tr><tr><td>PSC claim</td><td>0.913</td></tr><tr><td>Total</td><td>25.472</td></tr></table></div></div>	Area	£m	Water resources	4.009	Raw water transport	0.368	Raw water storage	0.139	Water treatment	6.223	Treated water distribution	14.733	Total	25.472	Area	£m	Past pension service cost	18.954	Compensation claim	2.620	Cost of living payment	2.985	PSC claim	0.913	Total	25.472
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Cost of living payment	2.985																																			
PSC claim	0.913																																			
Total	25.472																																			

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Table 4K – Base expenditure analysis for the 12 months ended 31 March 2023 – Wastewater network+ and bioresources

Line	Line description	Units	DPs	Expenditure in report year									Comments																																
				Wastewater network+					Bioresources			Total																																	
				Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal																																		
Operating expenditure																																													
6	Other operating expenditure	£m	3	19.618	7.916	4.278	41.197	3.183	6.047	14.834	5.140	102.213	<div>Atypical costs impact the figures as follows:<table><tr><th>Area</th><th>£m</th></tr><tr><td>Foul</td><td>4.970</td></tr><tr><td>Surface WD</td><td>0.077</td></tr><tr><td>Highway drainage</td><td>0.044</td></tr><tr><td>Sewerage TD</td><td>3.197</td></tr><tr><td>Imported Sludge LT</td><td>0.096</td></tr><tr><td>Sludge transport</td><td>0.399)</td></tr><tr><td>Sludge treatment</td><td>1.047</td></tr><tr><td>Sludge disposal</td><td>0.257</td></tr><tr><td>Total</td><td>10.087</td></tr></table><div>The atypical costs consists of:<table><tr><th>Area</th><th>£m</th></tr><tr><td>Past pension service cost</td><td>6.517</td></tr><tr><td>Cost of living payment</td><td>2.657</td></tr><tr><td>PSC claim</td><td>0.913</td></tr><tr><td></td><td></td></tr><tr><td>Total</td><td>10.087</td></tr></table></div></div>	Area	£m	Foul	4.970	Surface WD	0.077	Highway drainage	0.044	Sewerage TD	3.197	Imported Sludge LT	0.096	Sludge transport	0.399)	Sludge treatment	1.047	Sludge disposal	0.257	Total	10.087	Area	£m	Past pension service cost	6.517	Cost of living payment	2.657	PSC claim	0.913			Total	10.087
Area	£m																																												
Foul	4.970																																												
Surface WD	0.077																																												
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Total	10.087																																												
Area	£m																																												
Past pension service cost	6.517																																												
Cost of living payment	2.657																																												
PSC claim	0.913																																												
Total	10.087																																												

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Table 4L - Enhancement expenditure for the 12 months ended 31 March 2023 – Water resources and water network+

Line	Line Description	Additional Comments
4L.1-3	Ecological improvements at abstractions	Expenditure for Ecological improvements at abstractions are £8.9m higher than the allowed expenditure. The overspend is mainly due to the additional expenditure to complete the Prioress Mill Habitat Screen. Investment is also ongoing for an ECO monitoring plan for Leintwardine SSSI into year 4 and 5.
4L.4-6	Eels Regulations (measures at intakes)	We have no costs in the year as this project was delivered over years 1 and 2.
4L.7-9	Invasive Non Native Species	In the year we had no projects and to date we have expenditure of £0.018m against an FD allowance of £0.521m. The programme of work has been further delayed due to engagement requirement with environmental partners and regulators but as of early 2023 clarity is now being achieved. Several projects are outlined for delivery in Y4 including seed banks, celtic rainforest and works on sites of special scientific interest. The full expenditure will be achieved by AMP end.
4L.10-12	Drinking Water Protected Areas (schemes)	In the year we have expenditure of £0.629m and an AMP to date expenditure of £0.974m against an FD allowance of £9.870m. Schemes in this investment case were impacted by Covid 19 which significantly impacted our programme until winter 2022. We have reprofiled our programme and we expected to recover by the end of the AMP.
4L.13-15	Water Framework Directive measures	We have nine schemes in the year to address Water Framework Directive Measure at a cost of £0.974m with an AMP total expenditure of £1.447m against an FD allowance of £2.054m. The schemes include HMWB and fish barriers schemes. Work has been completed at two HWMB Sites. Remaining schemes will be delivered over Years 4 & 5 after 3 years of investigations / feasibility. HMWB projects continue across 10 sites with forecast AMP8 outturn of £1.6m. Some delays with respect to the Talybont/Taff project achieving agreement about gravel installation in the river. HMWB projects have been reduced in value in Yr 3 reflecting what is achievable.
4L.20-22	Supply-side improvements delivering benefits in 2020-2025	We are ahead of the FD allowance by £1.6m, the Llysyfran Reservoir to Preseli WTW raw water transfer project is now complete with on-site water in service. Canaston Bridge solution is in development with early procurement of materials ready for year 4 start on site.

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Line	Line Description	Additional Comments
4L.23-25	Demand-side improvements delivering benefits in 2020-2025 (excl leakage and metering)	Our Cartref programme of work to deliver demand side improvements has been significantly impacted by Covid-19 due to limited access to customers' properties in years 1 and 2. Alternative approach to identifying properties for repairs during COVID has identified significant efficiencies. Leakage reductions targeted by this method will be met at reduced spend.
4L.29-31	Internal interconnectors delivering benefits in 2020-2025	We have had expenditure of £0.341m with an AMP total expenditure of £0.347m against an FD allowance of £4.469m. Delays in this programme is due to additional investigation and modelling which have been undertaken at Vowchurch and therefore the programme has been reprofiled over the AMP. The scheme is now in design and is planned for delivery in year 4 and 5.
4L.32-34	Supply demand balance improvements delivering benefits starting from 2026	Capital expenditure has been reprofiled to undertake additional investigation and modelling to ensure the most cost-efficient delivery method is identified
4L.39-63	Metering	We have in the year a total expenditure of £5.318m with an AMP total of £9.767m against an FD allowance of £12.694m for year three year to date. The programme of meter installation was significantly impacted by Covid-19 and the ability to access customers properties in years 1 and 2. We are currently £2.9m behind our Final Determination allowance, however we expect to recover by the end of the AMP.
4L.64-66	Improvements to taste, odour and colour	In the year we have had expenditure of £9.700m with an AMP total of £42.342m against an FD allowance of £70.958m. Our Zonal studies programme has delivered projects in Port Talbot, Rhymney Bargoed and Aberystwyth Zones; however, we have seen delays to the Zonal Programme for pipe replacement and cleansing will be recovered in Year 4 and 5. Delays caused by a water quality concern that needed to be resolved prior to continuing with the programme. The work at WTW has been completed at 4 sites with remaining work planned for Year 4 and 5.
4L.73-75	Addressing raw water deterioration (total)	In the year we have had expenditure of £1.217m with an AMP total of £1.523m against an FD allowance of £7.873m. Schemes in this investment case were impacted by Covid 19 which significantly impacted our programme until winter 2022. We have reprofiled our programme and we expected to recover by the end of the AMP.
4L.76-78	Improvements to river flow	We have had no costs in the year for improvements to river flows with a total expenditure to date of £0.134m against an FD allowance of £1.788m. Work on this investment is planned to be completed in years 4 and 5.
4L.79-81	Enhancing resilience to low probability high consequence events	We have had an in-year expenditure of £0.057m with an AMP total of £0.277m against an FD allowance of 13.728m. The main scheme in this programme is the WEW transfer main, delays to

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Line	Line Description	Additional Comments
		design of route were incurred with the main spend now forecast to be in Year 4 and 5 of the AMP period.
4L.91-93	Meeting lead standards (total)	We have expenditure of £2.252m in the year to address lead standards, in total for the AMP we have expenditure of £5.995m against an FD Allowance of £10.256m. The programme has been significantly impacted by Covid 19 in years 1 and 2 however we have an ongoing programme of work to replace lead pipes
4L.94-96	Security - SEMD	We have expenditure in the year of £1.506m and a cumulative spend for the AMP of £4.874m. We have an ongoing programme of work to upgrade security at DCWW sites. Our internal budgets have been met year on year for both water and waste
4L.97-99	Security - Non-SEMD	We have in the year expenditure of £0.345m with an AMP total of £0.667m against an FD allowance of £6.285m. The Cyber Security Programme overall expenditure was broadly in line with our forecast and budget allocations within the wider Technology ITS budget. Some of the Cyber Capex charges for OT schemes would have been allocated to maintenance / Production budgets up until August 2022, when the budgets and programme delivery functions were merged under the ITS Technology function
4L.100-101	Additional Line- Impounding Reservoirs	We have 26 commitments at Impounding reservoirs to meet by the end of AMP7, plus another 3 by December 2025. We have currently completed a cumulative fourteen, which is ahead of our planned target. Our cumulative spend for years 1 to 3 was £3.7m ahead of our forecast – this is due to being ahead of target in terms of delivering commitments, increase in costs primarily linked to inflation and enabling works for commitments in years 4 and 5.
4L.102-103	Additional Line- Cwm Taf Water Supply	Year 3 total spend was £4.502m against an internal approved budget of £6.3m. The underspend against this internal budget was primarily due to the postponement of intrusive GI along the pipeline routes. This has been added to the forecast for Year 4. Alongside progressing with the current single site solution, we have initiated a thorough review of the other multi-site engineering options to achieve the WQ and resilience improvements required. The expected outturn expenditure for DPC in AMP 7 is currently circa £22m due to additional work and the prolonged programme to deliver.

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Line	Line Description	Additional Comments
4L.104-105	Additional Line – Visitor Centre	In the year expenditure we have expenditure of £7.884m with an AMP total of £12.016m against an FD Allowance of £4.140m. We are ahead of FD allowance by £7.876m. The increased expenditure includes return of value funding rolled over from AMP6 to match fund grant funding for new visitor centre at Llys y Fran. There has also been increased cost of the new centre at Lisvane Llanishen.

Table 4M - Enhancement expenditure for the 12 months ended 31 March 2023 – Wastewater network+ and bioresources

Line	Line Description	Additional Comments
4M.1-3	Conservation drivers	We have had £0.208m of expenditure in the year for this line with expenditure for the three years of the AMP is £0.307m against a FD allowance of 1.091m. It has been agreed with the National Resources Wales (NRW) that Y2 NEP and the commencement of Y5 projects be delayed to allow for agreement on detailed approaches required to comply with the requirements of the conservation drivers
4M.4-6	Event Duration Monitoring at intermittent discharges	We have had expenditure in the year of £4.838m and an AMP to date expenditure of £6.255m against a FD Allowance of £3.423m. We are ahead of the FD Allowance by £2.83m because of an increased number of CSO's added to our programme of work for installation together with increase costs due to complex installations at some of our sites
4M.7-9	Flow monitoring at sewage treatment works	We have incurred expenditure of £4.776m in the year with total costs to date for the AMP of £19.422m against a FD allowance of £17.620m. We are ahead of the FD allowance as there have been a greater number of complex installations requiring larger scale solutions to install. Also, additional regulatory requirements for installations.
4M.10-12	Schemes to increase flow to full treatment	In the year we have expenditure of £2.638m, with a total spend for the AMP to date of £2.806m against a FD allowance of £12.388m. We are behind the FD by £9.580m. During years 1 - 3 we went through a rigorous design phase before committing to a solution. Schemes are now planned for delivery in Years 4 & 5.
4M.13-15	Schemes to increase storm tank capacity	In the year we have incurred expenditure of £0.717m and have expenditure of £1.028m for years 1-3 against a FD allowance of £6.517m. We have taken the approach to do a more detailed root cause analysis and confirmation of Max flow to storm tanks, utilising more flow surveys upfront of releasing the scheme. Therefore, schemes have been re-profiled - with Feasibility and investigations Yrs 1-3 with delivery of schemes in Years 3-5.

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Line	Line Description	Additional Comments
4M.19-4M.21	Storage in the network to reduce spill frequency at CSOs etc (grey solutions)	During the year we have had expenditure of £0.493m and have had expenditure for years 1-3 of £4.486m against a FD allowance of £35.869m. Original resource, scale up and implementation of the novel SOAF framework was disadvantaged by initial COVID lockdown. Resource availability later in year 1, and early year 2, was further impacted by COVID restrictions. Schemes have therefore been re-profiled with feasibility and investigations in Years 1-3 - schemes are planned for delivery in Yr 4 and 5. In the year we have also completed the following scheme Menai Shellfish Water - Coastal Modelling
4M.29-31	Chemicals monitoring/ investigations/ options appraisals	We have incurred expenditure of £0.106m in the year, with expenditure of £1.438m for years 1-3 against a FD allowance of £1.443m. We are currently on track against the FD Allowance
4M35-37	Phosphorus removal	Expenditure in the year was £23.947m with expenditure for the years 1-3 amounted to £47.611m against a FD allowance of £55.601m. Schemes have been re-profiled with feasibility, investigations, and Design being undertaken in years 1-3 to ensure right solutions going forward. Most of the Phosphorous programme will be in construction during years 4 & 5. Year 4 will have construction on major schemes at Rotherwas and Llandrindod Wells.
4M.38-40	Reduction of sanitary parameters	We have incurred expenditure of £3.298m during the year with expenditure of £6.063m for years 1-3 against the FD Allowance of £9.842m. We have taken the approach of undertaking more detailed root cause analysis upfront of releasing the scheme. We have therefore re-profiled feasibility and investigations in Years 1-2 - with design and construction for Years 3-5. Rosemarket delivery moved to Year 3-4, while Rosemarket Feasibility scheme was completed in 2020-21
4M.44-46	Investigations	In the year we have had expenditure of £4.067m and a total expenditure for the AMP to date of £11.077m against the FD allowance of £4.540m. We are ahead of the FD which is largely due to a more thorough upfront investigations ahead of delivery of schemes which are planned for years 4 & 5 along with WFD investigations being reprofiled. AMP8 defined scope delivery for Llanfoist, Monmouth, Letterston West, Llanybydder, Lampeter and Corwen
4M.48-50	Growth at sewage treatment works (excluding sludge treatment)	In the year we have incurred an expenditure of £5.107m. The allowance for growth at sewage treatment has been included in Base, however for consistency with our business plan submission we have included our costs within the enhancement table. We have completed two schemes Monmouth and Clehonger along with overheads of £4.21m

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Line	Line Description	Additional Comments
4M.51-53	Reduce flooding risk for properties	In the year we have incurred an expenditure of £6.965m. The allowance for Reduce flooding risk at properties has been included in Base, however for consistency with our business plan submission we have included our costs within the enhancement table. Our capital flooding programme is profiled to increase in the final three years of the AMP period. Year 3 saw the completion of a major scheme in Cardigan, and we have schemes to protect multiple properties currently onsite in Porth, Wrexham and Chester.
4M.54-56	First time sewerage	In the year we have expenditure of £1.510m with an AMP total of £3.053m against an FD allowance of £3.340m. The programme of works is on track to deliver by end of AMP with 3 of the 4 designated s101a schemes delivered to date with the last scheme programmed to be delivered in year 5.
4M.57-59	Sludge enhancement (quality)	In the year we have expenditure of £3.398m with an AMP total of £3.737m against an FD allowance of £3.989m. We have additional investigation work to be release in year 4 with the view to deliver schemes in Year 5. Magor strategic storage has been completed, an additional small pump away station is currently in progress to remove surface water. Five Fords has a feasibility scheme released to provide 7800m3 strategic storage. A scheme to be released for Moreton-On-Lugg for further enhancement for storage.
4M.60-62	Sludge enhancement (growth)	In the year we have incurred an expenditure of £0.038m and a total expenditure for the AMP to date of £3.275m. The allowance for growth has been included in Base, however for consistency with our business plan submission we have included our costs within the enhancement table. Expenditure here is primarily for COG Moors where an element of Growth has been allocated.
4M.63-65	Odour	We have incurred expenditure of £0.260m during the year with expenditure of £2.825m for years 1-3 against the FD Allowance of £2.278m. Schemes have been reprofiled across the AMP but we have completed a feasibility study on Swansea Bay and have delivered a scheme at Milford Haven OCU Project. Scheme planned for Year 4 - Aberystwyth Sludge Tank. A significant increase on Odour complaints have been seen during and post COVID-19 (included in annual reporting) this has also led to an increase in monitoring equipment and odour mitigation due to customer impact. Cog Moors has been particularly high in customer contact which has resulted in significant investigations and mitigation as a result.

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Line	Line Description	Additional Comments
4M.69-71	Security - SEMD	We have incurred expenditure of £0.405m during the year with expenditure of £1.078m for years 1-3 against the FD Allowance of £0.492m. We are on track to deliver the programme of works for the AMP
4M.72-74	Security - Non-SEMD	We have incurred expenditure of £0.330m during the year with expenditure of £0.626m for years 1-3 against the FD Allowance of £0.250m. The Cyber Security Programme overall expenditure was broadly in line with our forecast and budget allocations within the wider Technology ITS budget. Some of the Cyber Capex charges for OT schemes would have been allocated to maintenance / Production budgets up until August 2022, when the budgets and programme delivery functions were merged under the ITS Technology function.
4M.75-76	Additional Line-DWMPs	We have incurred expenditure of £1.241m during the year with expenditure of £5.194m for years 1-3 against the FD Allowance of £5.378m. We are behind the FD Allowance due to the Publication of DWMP final draft has been delayed, in common with other water companies, by agreement with Ofwat & WG.
4M.77-78	Additional Line- Loughor	We have incurred expenditure of £1.986m during the year with expenditure of £21.551m for years 1-3 against the FD Allowance of £24.896m. The expenditure on this line is snagging costs relating to schemes closures and land issues.
4M.79-80	Additional line- Gowerton /Llanelli UWWTD	We have incurred expenditure of £0.046m during the year with expenditure of £2.201m for the AMP against no FD allowance. The expenditure on this line for both years relates to issues on Land closures. The schemes under this line have all been completed.

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Table 4R - Connected properties, customers and population

Line	Line Description	Additional Comments
17-27	Total new residential properties connected in year Total number of new business properties connections Residential properties billed at year end Residential properties unbilled at year end Residential void properties at year end Total connected residential properties at year end Business properties billed at year end Business properties unbilled at year end Business void properties at year end Total connected business properties at year end Total connected properties at year end	As per the Ofwat Information Notice we have reviewed our data for lines 4R.17 to 4R.27 and identified cattle troughs were previously included in the reported numbers. The restated figure for 2020/21 is 1,452,324 and for 2021/22 is 1,459,290.
28	Resident population	Figure has decreased this year as the following the release of the latest census data. The previously reported figures were based on the estimates produced by ONS using 2011 census data. The 2021 census data showed the forecasts made by ONS to be overestimates.
29	Non-resident population (wastewater)	The figure for this year has decreased. In the past two years, these figures were elevated because of covid that increased domestic tourism. These have returned to 'typical' levels now hence the decrease. These figures are based on a study undertaken by GTS Ltd using the STEAM model.
30-32	Household population Household measured population (water only) Household unmeasured population (water only)	<p>For the resident household population measured and unmeasured, this has decreased as per the updated census data set out in line 4R.28 and as a result of the change in the mHH Occupancy rates used in the calculation.</p> <p>For the non-resident population for water, figures here have increased this year. This represents an increase in the number of visitors into the area as Covid restrictions are reduced, particularly for international travellers. These figures use a different model (based on a study undertaken by Edge Analytics Ltd) to line 4R.29 and are applied to different regions in Wales, based on tourism levels, which is why these figures do not correlate with one another.</p>

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Following an independent review of our leakage and PCC reporting, we have updated our Water Balance Model for AMP7. This impacts the calculation of these lines, so we are restating for 2020/21 and 2021/22 as per the table. For further details, please see APR Part 3 En4 leakage and En5 per capita consumption.

Line	Line Description	2020/21 Original number	2020/21 restated number	2021/22 Original number	2021/22 restated number
31	Household measured population (water only)	1124.574	1262.804	1188.764	1304.197
32	Household unmeasured population (water only)	1856.876	1718.647	1870.102	1754.669

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Table 4V – Mark to market of financial derivatives analysed based on payment dates

Line	Line description	Units	DPs	Derivatives - Analysed by earliest payment date				Derivatives - Analysed by expected maturity date			
				Net settled	Gross Settled outflows	Gross Settled inflows	Total	Net settled	Gross Settled outflows	Gross Settled inflows	Total
1	Due within one year	£m	3	-4.682	0.000	0.000	-4.682	-4.682	0.000	0.000	-4.682
2	Between one and two years	£m	3	-4.131	0.000	0.000	-4.131	-4.131	0.000	0.000	-4.131
3	Between two and three years	£m	3	48.838	0.000	0.000	48.838	48.838	0.000	0.000	48.838
4	Between three and four years	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	Between four and five years	£m	3	100.969	0.000	0.000	100.969	100.969	0.000	0.000	100.969
6	After five years	£m	3	293.655	0.000	0.000	293.655	293.655	0.000	0.000	293.655
7	Total	£m	3	434.649	0.000	0.000	434.649	434.649	0.000	0.000	434.649
The total Mark to Market of financial derivatives in row 7 of £434.649m is equal to the Mark to Market value in 4I.28											

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Table 4W – Defined benefit pension scheme

Line	Line description	Units	DPs	Defined benefit pension schemes	Comments						
				Pension scheme 1							
	Scheme details				<p>As well as the defined benefit scheme reported in table 4W, the Company has an arrangement in place via an Employer-Financed Retirement Benefit Scheme (EFRBS) for four ‘capped’ Executive Members of the scheme. The accrual of benefits under this agreement is conditional on remaining a member of the DCWW Pension Scheme. At 31 March 2023, there were two remaining Executive Members with entitlements under this arrangement, one of whom is in receipt of his benefits.</p> <p>The reconciliation between table 4W and the amount reported as Retirement benefit assets as reported in table 1C is as follows:</p> <table><tr><td>4W.6 Scheme surplus</td><td>£14.684m</td></tr><tr><td>EFRBS liability</td><td><u>(£2.674)m</u></td></tr><tr><td>1C.6 Retirement benefit asset</td><td><u>£12.010m</u></td></tr></table>	4W.6 Scheme surplus	£14.684m	EFRBS liability	<u>(£2.674)m</u>	1C.6 Retirement benefit asset	<u>£12.010m</u>
4W.6 Scheme surplus	£14.684m										
EFRBS liability	<u>(£2.674)m</u>										
1C.6 Retirement benefit asset	<u>£12.010m</u>										
1	Scheme name	Text	n/a	DCWW Pension Scheme							
2	Scheme status	Text	n/a	Closed							
	Scheme valuation under IAS/IFRS/FRS										
3	Scheme assets	£m	3	412.078							
4	Scheme liabilities	£m	3	397.394							
5	Scheme surplus / (deficit) Total	£m	3	14.684							
6	Scheme surplus / (deficit) Appointed business	£m	3	14.684							
7	Pension deficit recovery payments	£m	3	0.000							
	Scheme valuation under part 3 of Pensions Act 2004										
8	Scheme funding valuation date	Date	n/a	31/03/2022							
9	Assets	£m	3	428.600							
10	Technical Provisions	£m	3	423.300							
11	Scheme surplus / (deficit)	£m	3	5.300							
12	Discount rate assumptions	Text	n/a	6.2% Growth portfolio, 2.3% CDI portfolio							
	Recovery plan (where applicable)										
13	Recovery Plan Structure	Text	n/a	n/a as no deficit							
14	Recovery plan end date	Date	n/a	n/a as no deficit							
15	Asset Backed Funding (ABF) arrangements	Text	n/a	none							
16	Responsibility for ABF arrangements	Text	n/a	n/a as no deficit							

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APR Part 5

This part of the APR covers additional financial and non-financial information, including (but not limited to), asset and volumes data plus operating cost analysis for water resources. In total there are two tables within part 5 of the APR as listed below:

Table Number	Table Description
Pro forma 5A	Water resources asset and volumes data for the 12 months ended 31 March 2023
Pro forma 5B	Water resources operating cost analysis for the 12 months ended 31 March 2023

The following commentary is provided to help give the reader further clarity on the reported data.

Table 5A - Water resources asset and volumes data for the 12 months ended 31 March 2023

Line	Line Description	Additional Comments
12	Number of groundwater works excluding managed aquifer recharge (MAR) water supply schemes	There has been just one change to the number of sources reported for 2022-23 compared to last year. This due to us now classifying the sperate boreholes at our Lovesgrove abstraction site (Lovesgrove 1 and 2) as one single source since they now are all licenced under a single abstraction licence.
18	Total number of water reservoirs	A reduction of one from last year due to the discontinuance of Llyn Bran water reservoir. Three reservoirs are reported in APR 6A.1 as they are balancing reservoirs and are not included within the 73 reported in 5A.18.
19	Total volumetric capacity of water reservoirs	See line 5A.18 - A decrease of 257MI for Llyn Bran reservoir.
23	Average pumping head – raw water abstraction	<p>In preparing our 2022/23 Average Pumping Head (APH) data we have identified that in previous years' APR, Cansaston Bridge pumps were incorrectly allocated to the APH – raw water transport instead of this line. The restated figures are 38.83 m.hd for 2020/21 and 34.17 m.hd for 2021/22. See 6A.6 commentary.</p> <p>All sites reported in line have live flow data, so 100% of the APH figure for this line is calculated using live flow data. 37% of the sites reported for this line have live pressure date, which equates to 62% of the APH value for this line being calculated using live pressure data.</p> <p>We will continue our data improvement exercise during the year with the aim to increase the number of sites calculated using live pressure data. This improvement could identify some future changes to previous APH figures.</p>

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Line	Line Description	Additional Comments
		Bulk supply exports have been excluded in line with RAG 2.09 reporting guidance on the definition of APH.
27	Total number of raw water abstraction exports	This relates to the abstraction of raw water from Elan Valley to Severn Trent Water.

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APR Part 6

Additional financial and non-financial information, including (but not limited to), Raw water transport, raw water storage, water treatment data, treated water distribution mains analysis, communication pipes, metering and leakage activities. In total there are five tables within part 6 of the APR as listed below:

Table Number	Table Description
Pro forma 6A	Raw water transport, raw water storage and water treatment data for the 12 months ended 31 March 2023.
Pro forma 6B	Treated water distribution - assets and operations for the 12 months ended 31 March 2023.
Pro forma 6C	Water network plus - Mains, communication pipes and other data for the 12 months ended 31 March 2023.
Pro forma 6D	Demand management - Metering and leakage activities for the 12 months ended 31 March 2023.
Pro forma 6F	WRMP annual reporting on delivery – non-leakage activities.

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Table 6A - Raw water transport, raw water storage and water treatment data for the 12 months ended 31 March 2023

Line	Line Description	Additional Comments
6	Average pumping head ~ raw water transport	<p>In preparing our 2022/23 Average Pumping Head (APH) data we have identified that in previous years', Cansaston Bridge pumps were incorrectly allocated to this line instead of the APH – raw water abstraction line. The restated figures are 16.82 m.hd for 2020/21 and 14.95 m.hd for 2021/22. See 5A.23 commentary.</p> <p>All sites reported in this line have live flow data so 100% of the APH figure for this line is calculated using live flow data. 15% of the sites reported for this line have live pressure data, which equates to 1% of the APH value for this line being calculated using live pressure data.</p> <p>We will continue our data improvement exercise during the year with the aim to increase the number of sites calculated using live pressure data. This improvement could identify some future changes to previous APH figures.</p> <p>Bulk supply exports have been excluded in line with RAG 2.09 reporting guidance on the definition of APH.</p>
8	Total number of raw water transport imports	Import from United Utilities Heronbridge.
13-19	All simple disinfection works W1 works W2 works W3 works W4 works W5 works W6 works	<p>During the year we have undertaken a detailed review on the treatment categories at each of our Water Treatment Works (WTW). As a result of this review it has been identified we have incorrectly categorised our WTW complexity in previous years.</p> <p>We have set out the restated position back to 2011/12 for the number of works and DI associated with each complexity level in Appendix 2, and have separately provided an updated version of the PR24 Cost Assessment Master Dataset Wholesale Water Base Costs.</p>
32	Number of treatment works requiring remedial action because of raw water deterioration	No schemes have been delivered.
34	Average pumping head – water treatment	In preparing our 2022/23 Average Pumping Head (APH) data we have identified that in previous years some erroneous historical lift values were being using as part of the calculation for this line, in the absence of measured pressure data. As a result we reviewed these and updated with a more representative estimation. This has led to a reduction in the APH for water treatment. The restated figures are 12.85 m.hd for 2020/21 and 12.96 m.hd for 2021/22.

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Line	Line Description	Additional Comments
		<p>All sites reported in this line have live flow data so 100% of the APH figure for this line is calculated using live flow data. None of our treatment works have live pressure data.</p> <p>We will continue our data improvement exercise during the year with the aim to increase the number of sites calculated using live pressure data. This improvement could identify some future changes to previous APH figures.</p> <p>Bulk supply exports have been excluded in line with RAG 2.09 reporting guidance on the definition of APH.</p>

Table 6B – Treated water distribution – assets and operations for the 12 months ended 31 March 2023

Following an independent review of our leakage and PCC reporting, we have updated our Water Balance Model for AMP7. This impacts the calculation of these lines, so we are restating for 2020/21 and 2021/22 as per the table. For further details, please see APR Part 3 En4 leakage and En5 per capita consumption.

Line	Line Description	2020/21 Original number	2020/21 restated number	2021/22 Original number	2021/22 restated number
5	Water delivered (potable)	746.79	693.77	761.02	692.85
6	Water delivered (billed measured residential)	181.15	177.96	185.35	182.32
7	Water delivered (billed measured business)	151.71	150.27	163.84	162.42
35	Total annual leakage	163.62	232.66	157.41	240.25
37	Water taken unbilled	14.40	8.81	12.66	7.59
38	Distribution input	864.48	870.32	879.43	884.37
N/A	Distribution losses (this line was 6B.10 in APR 2021/22 tables and is not included as a line in the APR 2022/23 tables)	105.61	175.50	106.64	190.22

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Line	Line Description	Additional Comments
19	Number of potable water pumping stations that re-pump water already within the treated water distribution system	An increase of five from last year. One of these is a new water pumping station that we commissioned in the year. The other four, are a result of data quality improvements and should have been reported last year. The restated figure for APR 2021/22 is 536 (previously reported figure was 532).
21	Total number of service reservoirs	A decrease of seven as a result of a new service reservoir being built (Pengarnddu SRV No.3) and eight being decommissioned in the year.
24	Average pumping head – treated water distribution	<p>All sites reported in this line have live flow data so 100% of the Average Pumping Head (APH) figure for this line is calculated using live flow data. 70% of the sites reported for this line have live pressure data, which equates to 52% of the APH value for this line being calculated using live pressure data.</p> <p>We will continue our data improvement exercise during the year with the aim to increase the number of sites calculated using live pressure data. This improvement could identify some future changes to previous APH figures.</p> <p>Bulk supply exports have been excluded in line with RAG 2.09 reporting guidance on the definition of APH.</p>
35	Total annual leakage	See APR part 3 (En4 Leakage).

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Table 6C – Water network plus - Mains, communication pipes and other data for the 12 months ended 31 March 2023

Line	Line Description	Additional Comments
9-15	<p>Total length of potable mains laid or structurally refurbished pre-1880</p> <p>Total length of potable mains laid or structurally refurbished between 1881 and 1900</p> <p>Total length of potable mains laid or structurally refurbished between 1901 and 1920</p> <p>Total length of potable mains laid or structurally refurbished between 1921 and 1940</p> <p>Total length of potable mains laid or structurally refurbished between 1941 and 1960</p> <p>Total length of potable mains laid or structurally refurbished between 1961 and 1980</p> <p>Total length of potable mains laid or structurally refurbished between 1981 and 2000</p>	<p>Only recently constructed mains have a very high confidence of age recorded on our system (around 40%). Other mains have been allocated to age bands based on local knowledge, evidence on surrounding properties or the years that the pipe material was available. For the mains allocated the earliest year the pipe material was available, the midpoint of the year has been applied.</p>
16	Total length of potable mains laid or structurally refurbished between 2001 and 2020	The definition has changed this year to include mains laid between 2001 and 2020. Previously this line included all mains from 2001 onwards so in previous submissions would have included the mains that are now included in the new line 6C.17.
17	Total length of potable mains laid or structurally refurbished post during and after 2021	See 6C.9.
18	Number of lead communication pipes	We have continued to use the lead predictor model (update in APR 2021/22 commentary).
19	Number of galvanised iron communication pipes	The method for estimating the number of galvanised iron communication pipes has improved for this year with a new predictor model. In previous years the model had significantly underestimated the total number which is which the reported number for 2022/23 has increased to 48,548.
21	Number of lead communication pipes replaced or relined for water quality	We have replaced three lead communication pipes for water quality.
22	Company area	Due to the change in line definition we have not excluded the area supplied by NAVs, hence the increase of ca. 2k from last year.
23	Compliance Risk Index	Provisional data provided by DWI 28/04/23, revised 25/05/23. Will remain provisional until it is confirmed in July.

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Line	Line Description	Additional Comments
24	Event Risk Index	Provisional data provided by DWI 28/04/23. Will remain provisional until it is confirmed by April 2024.
25	Properties below reference level at end of year	During the year we will be undertaking a review of processes used by the Operations teams to monitor and report on low pressure. The aim of this review is to improve consistency and effectiveness of the processes, by using permanent pressure loggers and increased automation of monitoring. This will improve data quality and we will provide an update in the 2023/24 APR.

Table 6D - Demand management – Metering and leakage activities for the 12 months ended 31 March 2023

Line	Line Description	Additional Comments
6	New optant meters installed for existing customers	<p>Metering</p> <p>Water Resource Management Plan (WRMP) forecast of household metered properties reflects our AMP7 metering policy namely metering any new connections and our household meter option programme. Throughout the year we have seen an increase in customers applying for a water meter due to the cost-of-living crisis, as more customers are trying to save money. As a result of this meter optant volumes have risen, which is a 34% increase on last year and a trend we expect to continue into 2023-24.</p> <p>Smart metering</p> <p>There is currently no wide-scale smart meter programme across AMP7 and this aligns with our current WRMP and business plan. Manually read meters are the current policy option, but smart meters are chosen for specific situations. AMR meters (defined as smart under RAG 4.10) will tend to be used where there is access or health and safety concerns and where drive-by meter reading retrieval is preferred. The company also uses a smart meter option on new connections which require a domestic fire sprinkler. In the context of the definition, whilst we have some smart (AMR/AMI) meter installations in our metering estate, these are for specific purposes. The meters are not read on an increased frequency nor is consumption information offered back to the customer. As such, there is no supply demand benefit in the retrieval of meter readings through AMR or AMI through the current policy.</p> <p>Leakage</p>

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Line	Line Description	Additional Comments
		The volume quoted in Line 6D.17 relates to our Cartref programme which is included in our current 2019 WRMP and business plan. Cartref forms part of the programme of initiatives to deliver our AMP7 Leakage target which is on track with business plan targets.
22	Leakage improvements delivering benefits in 2020-25	RAG 4.11 requires this totex cost to include all leakage activities. In 2021-22 we included the cost of our outsourced cost and did not include the cost of our internal leakage departmental cost. If we had included these costs then the reported figure would have increased by £6m from £32.999m to £38.999m
23	Leakage improvements delivering benefits in 2020-25	<p>As per RAG 4.11 (April 2023), the volumes are positive numbers and therefore reported as benefits. The RAG 4.11 (April 2023) also defines delivery of benefits in the context of the maximum dry year annual average or dry year critical period benefits. The Cartref programme was selected as part of the 2019 WRMP Least cost Planning and Options Appraisal process based on the demand benefits against the Dry Year and/ or Critical Period planning scenarios therefore the reported volumes which represent the actual Yr2 savings from the Cartref programme, are Dry Year or Critical Period benefits.</p> <p>The increase year on year is reflected of the diversification of the programme offering and upscaling following impact from COVID-19 (inability to access peoples homes) into the first half of 2021-2022. It is expected that year on year results will stabilise for the remainder of the AMP period.</p> <p>We account for intermittent leaks on toilets, by removing them from the leakage figure presented – as they behave more like usage events.</p> <p>A reduction in leakage savings in Yr 2 have been reported. This is due to improved method of calculation around the “Leaky Loo” offering we carry out. Previous calculations made an assumption on run time of leaky toilets of a year. This has been revised down to account for a more realistic run time for leaks of this nature. This is based on DCWW Customer Supply Pipe Leakage 2022-2023 modelling in support of our metering strategy – using 319 days as estimated run time (This is for a leak reported as a result of anomalous meter readings i.e. a nudge). A growth factor of 0.65 has been applied – based on UKWIR</p>

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Line	Line Description	Additional Comments
		Growth Estimates on customer side leakage best practice where a growth factor cannot be applied.

Following an independent review of our leakage and PCC reporting, we have updated our Water Balance Model for AMP7. This impacts the calculation of these lines, so we are restating for 2020/21 and 2021/22 as per the table. For further details, please see APR Part 3 En4 leakage and En5 per capita consumption.

Line	Line Description	2020/21 Original number	2020/21 restated number	2021/22 Original number	2021/22 restated number
24	Per capita consumption (measured)	144.74	126.58	140.14	125.63
25	Per capita consumption (unmeasured)	194.90	186.15	196.60	176.50

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Table 6F – WRMP annual reporting on delivery – non leakage activities

Line	Line Description	Additional Comments
6F	WRMP annual reporting – non leakage activities	<p>WRMP Schemes excluding interconnectors</p> <p>For APR 2022/23 we are reporting a value of 1.22 ML/d for supply and demand side improvements to the supply demand balance under both the dry year annual average and/or critical period planning scenarios.</p> <p>Crai WTW supernatant return is a project that will save up to 1 ML/d from 2023/24 and will continue providing benefits in the rest of the AMP7.</p> <p>Since the start of AMP7 to the end of this reporting year, Project Cartref has delivered 1.22 ML/d of savings in water demand across our supply area.</p> <p>In 2023/24 we have a planned scheme underway in Pembrokeshire, which will deliver an increased Llysyfran pump-back transfer and an upgrade to Canaston Bridge pumping station. When completed the scheme will deliver 13.6 ML/d of supply side benefits to our supply demand balances. The benefit reported for this scheme last year was 14 ML/d and the revised figure of 13.6 ML/d reflects an improved understanding of the deficit the scheme will resolve.</p> <p>Interconnectors only: WRMP Vowchurch</p> <p>In APR 2022/23, we are reporting a value of 0 ML/d for the supply demand benefits derived from the delivery of internal interconnections. In AMP7 we have a planned scheme underway to connect our Vowchurch zone with the Hereford zone, which will deliver up to 3 ML/d and will result in increased supply resilience.</p>

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APR Part 7

Additional financial and non-financial information, including (but not limited to), load, costs and number of sewage treatment works within size bands, sewer and volume data, and energy consumption data. In total there are six tables within part 7 of the APR as listed below:

Table Number	Table Description
Pro forma 7A	Wastewater network plus - Functional expenditure for the 12 months ended 31 March 2023.
Pro forma 7B	Wastewater network plus - Large sewage treatment works for the 12 months ended 31 March 2023.
Pro forma 7C	Wastewater network plus - Sewer and volume data for the 12 months ended 31 March 2023.
Pro forma 7D	Wastewater network plus - Sewage treatment works data for the 12 months ended 31 March 2023.
Pro forma 7E	Wastewater network plus - Energy consumption and other data for the 12 months ended 31 March 2023.
Pro forma 7F	Wastewater network plus – WINEP phosphorus removal scheme costs and cost drivers.

Table 7B – Wastewater network+ - Large sewage treatment works for the 12 months ended 31 March 2023

Line	Line Description	Additional Comments
5	BOD ₅ consent	Consistent with previous years we have reported the tighter consent of the UWWTD or WRA permits.

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Table 7C – Wastewater network+ - Sewer and volume data for the 12 months ended 31 March 2023

Line	Line Description	Additional Comments
1	Connectable properties served by s101A schemes completed in the report year	There was one s101A scheme at Middlegates, Abergele delivered in 2022-23 to serve six properties.
2	Number of s101A schemes delivered in the report year	See 7C.1.
4	Number of network pumping stations	An increase of 28 compared to last year. One new pumping station has been commissioned in the year and two have been adopted. Two pumping stations have been decommissioned in the year. As a result of data quality improvements, we have identified 27 pumping stations should have been reported last year. The restated figure for 2021/22 is 2,504 (previously submitted as 2,477).
5	Total number of sewer blockages	We have not made any exclusions for third party incidents.
6	Total number of gravity sewer collapses	See APR Part 3 Rt3 - Sewer collapses.
10	Number of settled storm overflow	Further to Ofwat's APR clarification question and answer dated 9 June 2023 related to 7C.8 and 10, as in previous years we have included 11 Pumping stations assets with settled storm discharges within the reported number for this line. To ensure consistency of reporting we will continue to follow this approach until additional clarity/guidance is provided.
11	Sewer age profile (constructed post 2001)	The total length of Private Sewer Transfer (PST) sewers currently held within GIS represents approximately 27% of the total PST sewers estimated by the Water Research Centre (WRC). In order to account for the remaining PST sewers, the percentage of public sewers constructed Post 2001 and up to Oct 2011 was calculated and an equal percentage of PST sewers added to the total. Length includes sewers constructed during 2001 to maintain consistency with previous years reported figures.
22	Length of formerly private sewers and lateral drains (s105A sewers).	Modelled length of sewers based on the WRC model.

Table 7D – Wastewater network+ - Sewage treatment works data for the 12 months ended 31 March 2023

Line	Line Description	Additional Comments
17	Current population equivalent served by STWs with tightened/new P consents	During the year we have completed one scheme (Presteigne STW - NEP Unique ID: 7CDC0873).
21	Population equivalent treatment capacity enhancement	We have completed three schemes in the year (Presteigne, Clehonger and Weobley).

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Table 7E – Wastewater network+ - Energy consumption and other data for the 12 months ended 31 March 2023

Line	Line Description	Additional Comments
1	Total sewerage catchment area	Private and Inset Area Catchments have been removed.
2	Designated bathing waters (inland and coastal)	There are two new designated coastal bathing waters this year (Penarth Beach and Llantwit Major). In addition, an inland bathing water has been included this year as per the change in definition for this line.
9-18	<p>Cumulative shortfall in FFT addressed by WINEP / NEP schemes to increase STW capacity</p> <p>Number of sites with an increase in sewage treatment works capacity delivered to address a shortfall in FFT</p> <p>Additional storm tank capacity provided at sewage treatment works (grey infrastructure)</p> <p>Additional effective storm storage capacity at sewage treatment works (green infrastructure)</p> <p>Additional volume of network storage at CSOs etc to reduce spill frequency (grey infrastructure)</p> <p>Additional effective storage in the network delivered through green infrastructure</p> <p>Total number of sewage treatment works sites where additional storage has been delivered (grey infrastructure)</p> <p>Number of sewage treatment works sites where additional storage has been delivered with pumping (grey infrastructure)</p> <p>Number of sewage treatment works benefitting from green infrastructure replacing the need for storm tank storage</p> <p>Number of sites delivering additional network storage (grey infrastructure)</p>	No completed schemes.
19	Number of sites delivering additional network storage including pumping (grey infrastructure)	We have completed one scheme at Cardigan to prevent flooding from a combined sewer overflow at high tide.

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Line	Line Description	Additional Comments
20	Number of schemes delivered to meet tightened or new sanitary consents	No completed schemes.
21	Surface water separation drainage area removed	We have interpreted the guidance for this line as measuring the area of surface water drainage separated from the foul or combined sewer network. Our reported figure of 11,500 m2 is based on one scheme (in Prestatyn) which disconnected private surface water drainage from the combined sewer - this was reconnected to a separated public surface water sewer.
22	Number of schemes delivered to meet tightened or new sanitary consents	No completed schemes.
24	Number of installations requiring civils for event duration monitoring at intermittent discharges	There are currently no AMP7 scheme delivery requirements.
25	Number of storm overflows where improvements have been made to reduce harm or reduce spill frequencies.	No completed schemes.

Table 7F – Wastewater network+ - WINEP phosphorus removal scheme costs and cost drivers

Scheme Name	Driver on WI(NEP)	Enhanced permit level for phosphorus (mg/L)	Commentary
Crosshands WwTW	7CDC0348	0.65	Reduced from 6.0mg/l currently in NEP as the NEP is yet to be updated following Gwili Gwendraeth investigation results and subsequent phosphorous permit change. The 0.65mg/L is the permit limit being used for design and therefore capex and opex expenditure.
Pontyberem WwTW	7CDC0859	0.5	Reduced from 1.0mg/l currently in NEP as the NEP is yet to be updated following Gwili Gwendraeth investigation results and subsequent phosphorous permit change. The 0.5mg/L is the permit limit being used for design and therefore capex and opex expenditure.
Rhayader WwTW	7CDC0900	2.0	Increased from 0.7mg/L currently in NEP as modelling completed during feasibility produced an amended requirement for phosphorous used for design, and therefore for capex and opex expenditure. The river modelling completed has been externally audited and agreed with the regulator. Change control is pending.

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Scheme Name	Driver on WI(NEP)	Enhanced permit level for phosphorus (mg/L)	Commentary
Llandrindod Wells WwTW	7CDC0603	0.8	Reduced from 1.25 as currently in the NEP. Modelling of the SAC rivers has resulted in a tighter permit for AMP8, the AMP8 limit is being used for design for efficiency and to prevent any abortive spend from having phosphorous removal schemes in consecutive AMPs. The river modelling completed has been externally audited and agreed with the regulator. Change control is pending.
Spittal WwTW	7CDC0956	0.6	Reduced from 1.0 as currently in the NEP. Modelling of the SAC rivers has resulted in a tighter permit for AMP8, the AMP8 limit is being used for design for efficiency and to prevent any abortive spend from having phosphorous removal schemes in consecutive AMPs. The river modelling completed has been externally audited and agreed with the regulator. Change control is pending.
Llanarth WwTW	7CDC0577	3.5	Increased from 0.5 in the NEP as this scheme's driver was assessed for cost benefit and found to be non-cost beneficial which would have removed this driver. However, due to an increase in DWF, a phosphorous limit was needed and the driver re-applied. Modelling during feasibility resulted in the more relaxed phosphorous limit which has been used for design. Change control is pending.
Rhiwlas WwTW	7CDC1116	2.2	Our PR19 NEP was to deliver a consent level of 0.5, the SAGIS model now shows a consent value of 2.2. Change Control is currently awaiting NRW sign off.
Clyro WwTW	6DC002875	2.2	Increased from 1.7 currently in NEP as modelling completed during feasibility produced an amended requirement for phosphorous used for design, and therefore for capex and opex expenditure. The river modelling completed has been externally audited and agreed with the regulator. Change control is pending.
Brecon WwTW	N/A	2.0	Growth led scheme. Not in the AMP7 NEP but is an AMP8 requirement following the completion of the modelling on the SAC rivers. The AMP8 limit is being used for design for efficiency and to prevent any abortive spend from having capital removal schemes in consecutive AMPs. Also due to a planning embargo enforced by the council due to high phosphorous levels in the receiving water course, the growth would not be enabled unless a phosphorous permit limit is applied.

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Scheme Name	Driver on WI(NEP)	Enhanced permit level for phosphorus (mg/L)	Commentary
Monmouth WwTW	N/A	2.0	Growth led scheme. Not in the AMP7 NEP but is an AMP8 requirement following the completion of the modelling on the SAC rivers. The AMP8 limit is being used for design for efficiency. Whilst a significant growth scheme is required here during AMP8, this scheme will allow compliance until then. Also due to a planning embargo enforced by the council due to high phosphorous levels in the receiving water course, the growth would not be enabled unless a phosphorous permit limit is applied.
Cog Moors WwTW	N/A	N/A	Added to the table to note that there is an opex increase here due to the pump away scheme from Weycock Cross. No capex required.
Eign and Rotherwas	7DC200048 and 7DC200055	0.4 mg/l at both sites now 21.8 kg/d discharge	Scheme was originally split for 0.4 mg/l at both sites, however on review a load-based permit was agreed and costs associated with the scheme was split 60:40 Rotherwas to Eign based on receiving load at the works.
Weycock Cross	6DC002881	N/A	<p>See Cog Moors above, receiving works has no P consent so Opex updated for sludge.</p> <ul style="list-style-type: none"> What is the STWs that would receive the sewage?; <ul style="list-style-type: none"> Weycock is pumping to Cog Moors WwTW. Are opex and capex to accommodate the transferring flows reflected in the receiving STWs? <ul style="list-style-type: none"> Weycock cross pump away didn't result in the need for any capex expenditure at Cog Moors. OPEX impact at Cog Moors for treating additional flow from Weycock cross is £3.3k per annum from 2020-21, there is no P-consent at Cog Moors STW. Is the additional PE transferred reflected in the receiving STWs design PE and PE served? <ul style="list-style-type: none"> Weycock cross PE was transferred to Cog Moors there is no P-consent at Cog Moors.

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Scheme Name	Driver on WI(NEP)	Enhanced permit level for phosphorus (mg/L)	Commentary
			<ul style="list-style-type: none"> Is the capex recorded under the transferring from works reflecting only the expenditure needed to facilitate the transfer (eg building the pipeline) and no other expenditure? <ul style="list-style-type: none"> Only costs associated with the pump away are included against Weycock Cross. Cog Moors required no additional Capex to receive additional flow from Weycock cross. Is the STWs closing permanently as part of the transfer? <ul style="list-style-type: none"> The STW will be permanently closed at this site and an SPS is in it's place, noting that wherever possible some assets may be re-used.
Norton	7CDC0794	N/A	<p>Scheme to transfer to pump station. Reporting a 2.1km and 2.03km rising main. Based on Handover Document (CAF609) confirmed 2.03 km of rising main installed.</p> <ul style="list-style-type: none"> What is the STWs that would receive the sewage?; <ul style="list-style-type: none"> Norton is now pumping to Presteigne WwTW. Are opex and capex to accommodate the transferring flows reflected in the receiving STWs? <ul style="list-style-type: none"> The opex and capex to accommodate the transferring flows from Norton is included in the scheme costs reported against the receiving works Presteigne WwTW. Is the additional PE transferred reflected in the receiving STWs design PE and PE served? <ul style="list-style-type: none"> We can confirm the design PE for the receiving works included the transferred flows from Norton. Is the capex recorded under the transferring from works reflecting only the expenditure needed to facilitate the transfer (eg building the pipeline) and no other expenditure? <ul style="list-style-type: none"> Only costs associated with the pump away are included against Norton. Where capex is needed at receiving works this is included

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Scheme Name	Driver on WI(NEP)	Enhanced permit level for phosphorus (mg/L)	Commentary
			<p>against the receiving work P-Schemes at Malpas WwTW and Presteigne WwTW.</p> <ul style="list-style-type: none"> Is the STWs closing permanently as part of the transfer? <ul style="list-style-type: none"> The STW will be permanently closed at this site and an SPS is in it's place, noting that wherever possible some assets may be re-used.
No Mans Heath	7DC200030	N/A	<p>Rising main is installed but work completing still ongoing.</p> <ul style="list-style-type: none"> What is the STWs that would receive the sewage?; <ul style="list-style-type: none"> No Mans Heath will pump to Malpas WwTW (not yet completed). Are opex and capex to accommodate the transferring flows reflected in the receiving STWs? <ul style="list-style-type: none"> The opex and capex to accommodate the transferring flows from No Mans Heath is included in the scheme costs reported against the receiving works Malpas WwTW. Is the additional PE transferred reflected in the receiving STWs design PE and PE served? <ul style="list-style-type: none"> We can confirm the design PE for the receiving works included the transferred flows from No Mans Heath. Is the capex recorded under the transferring from works reflecting only the expenditure needed to facilitate the transfer (eg building the pipeline) and no other expenditure? <ul style="list-style-type: none"> Only costs associated with the pump away are included against No Mans Heath. Where capex is needed at receiving works this is included against the receiving work P-Schemes at Malpas WwTW and Presteigne WwTW. Is the STWs closing permanently as part of the transfer? <ul style="list-style-type: none"> The STW will be permanently closed at this site and an SPS is in it's place, noting that wherever possible some assets may be re-used.

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APR Part 8

Additional financial and non-financial information, including (but not limited to), bioresources sludge data, operating expenditure analysis, bioresources energy and liquors analysis and sludge treatment and disposal data. In total there are four tables within part 8 of the APR as listed below:

Table Number	Table Description
Pro forma 8A	Bioresources sludge data for the 12 months ended 31 March 2023.
Pro forma 8B	Bioresources operating expenditure analysis for the 12 months ended 31 March 2023.
Pro forma 8C	Bioresources energy and liquors analysis for the 12 months ended 31 March 2023.
Pro forma 8D	Bioresources sludge treatment and disposal data for the 12 months ended 31 March 2023.

Table 8A – Bioresources sludge data for the 12 months ended 31 March 2023

Line	Line Description	Additional Comments
1	Total sewage sludge produced, treated by incumbents	In preparing our 2022/23 sludge data we have identified in 2021/22 we double counted liquid sludge imports at Five Fords, this only impacted the 2021/22 data. This has been corrected which resulted in small reduction in the reported figure. The restated value for 2021/22 is 76.4 ttds/ year, originally reported as 78.8 ttds/ year.
2	Total sewage sludge produced, treated by 3rd party sludge service provider	Due to issues at four of our advanced anaerobic digestion sites (degrit at Afan, breakdown and maintenance) we utilised a third party Biosolids Assurance Scheme (BAS) approved contractor to lime treat sludge.
3	Total sewage sludge produced	In preparing our 2022/23 sludge data we have identified in 2021/22 we double counted liquid sludge imports at Five Fords, this only impacted the 2021/22 data. This has been corrected which resulted in small reduction in the reported figure. The restated value for 2021/22 is 77.0 ttds/ year, originally reported as 79.4 ttds/ year.
4	Total sewage sludge produced from non-appointed liquid waste treatment	The recorded value of 1.9 ttds/year is the domestic tankered waste we receive from private companies. This volume is included in line 3.
5	Percentage of sludge produced and treated at a site of STW and STC co-location	In preparing our 2022/23 sludge data we have identified in 2021/22 we double counted liquid sludge imports at Five Fords, this only impacted the 2021/22 data. This has been corrected which resulted in small reduction in the reported figure. The restated value for 2021/22 is 42.07%, originally reported as 43.82%.
7	Total sewage sludge disposed by 3rd party sludge service provider	See 8A.2.

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Line	Line Description	Additional Comments
9	Total measure of intersiting 'work' done by pipeline.	This is the value transported between Rotherwas and Hereford Eign WWTWs.
11	Total measure of intersiting 'work' done by truck	An increase this year as a result of advanced anaerobic digestion issues at Afan, other maintenance issues and more use of strategic storage has resulted in more transport of sludge.
19	Chemical P sludge as % of sludge produced at STWs	In preparing our 2022/23 sludge data we have identified in 2021/22 we double counted liquid sludge imports at Five Fords, this only impacted the 2021/22 data. This has been corrected which resulted in small reduction in the reported figure. The restated value for 2021/22 is 30.33%, originally reported as 32.44%.

Table 8C – Bioresources energy and liquors analysis for the 12 months ended 31 March 2023

Line	Line Description	Additional Comments
1	Energy consumption - bioresources	In preparing our 2022/23 Energy consumption data we have identified that we have not been including transport and other fuel types in the total consumption used to calculate the costs reported in this line. The restated value for 2020/21 is £7.436m and for 2021/22 is £7.547m. There has been a significant increase in costs for 2022/23 as a result of electricity and gas price increases.
5	Energy generated by bioresources that is unused	Unused heat from CHP engines and the biogas flares from waste gas burners. There is a high degree of estimation, which will continue without expenditure to install additional monitoring.
18	Energy consumption - bioresources	In preparing our 2022/23 Energy consumption data we have identified that we have not been including transport and other fuel types in the total consumption used to calculate the costs reported in this line. The restated value for 2020/21 is £7.436m and for 2021/22 is £7.547m. There has been a significant increase in costs for 2022/23 as a result of electricity and gas price increases.

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Table 8D – Bioresources sludge treatment and disposal data for the 12 months ended 31 March 2023

Line	Line Description	Additional Comments
2	% Sludge treatment process - raw sludge liming	Due to issues at four of our advanced anaerobic digestion sites (degrit at Afan, breakdown and maintenance) we utilised a third party Biosolids Assurance Scheme (BAS) approved contractor to lime treat sludge.
11	% Sludge disposal route - sludge recycled to farmland	All sludge recycled to agriculture. For some sludge we have utilised a Biosolids Assurance Scheme (BAS) approved contractor to lime treat sludge and disposal (see 8D.2).

APR Part 9

Additional regulatory information – innovation competition. There is one table within part 9 of the APR as shown below

Table Number	Table Description
Pro forma 9A	Innovation competition.

Table 9A – Innovation competition

Line	Line Description	Additional Comments
9	Innovation project 1 Reservoir water community monitoring for algal associated risk assessment	This project was completed in January 2023. The reservoir monitoring project developed new methods for sampling and eDNA analysis to identify cyanobacteria that are responsible for taste and odour forming compounds.
10	Innovation project 2 HyValue	This project is awaiting final bill but has been completed. The HyValue project looked at making Cardiff Wastewater Treatment Works a hydrogen hub. The project entailed a desk top study by Costain to look at the feasibility of a hydrogen hub. Unfortunately, we did not win a further phase of the project in the latest round of OFWAT bids.
11	Innovation project 3 Background Leakage	This project is ongoing. The aim is to attempt to quantify background leakage and identify the causes by employing a variety of novel monitoring techniques.

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APR Part 11

Additional non-financial information, including (but not limited to), Scope one, two and three emissions, Gross operating emissions location and market based and Greenhouse Gas intensity ratios. There is one table within part 11 of the APR as shown below:

Table Number	Table Description
Pro forma 11A	Greenhouse gas emissions reporting for the 12 months ended 31 March 2023

Table 11A – Greenhouse gas emissions reporting for the 12 months ended 31 March 2023

We have an aspirational intention to reach Net-Zero by 2040 and are continually working to reduce carbon emissions from its activities. During 2022/23 we saw broadly stable carbon emissions compared to the previous year, with increases from Scope 1 process emissions being mitigated by a corresponding reduction in Scope 2 electricity emissions. This has kept net operational emissions (against Ofwat’s definition) broadly the same compared to the previous year. Increases in Company Scope 3 activity related emissions has also been mitigated by a reduction in supply chain related Scope 3 emissions. We continue to be on a trend toward its Net-Zero target in 2040 as confirmed following its recent ISO14064 ‘Carbon Reduce’ audit.

The following section gives an appraisal of the position around industry reporting of carbon emissions. There is an opportunity leading into Price Review 24, and the Greenhouse Gas Performance Commitment to be applied to appointed companies, to develop sector reporting and align to international best practice (Scope 1, Scope 2 and Scope 3) categorisation of emissions, rather than “Operational” and “Embedded” emissions. This would aid transparency and help the Sector to develop further emissions reporting maturity to increase accuracy and confirm the most material areas for different companies to focus their decarbonisation areas.

Operational’ emissions

Table 1 – SWOT analysis of operational emissions reporting

<u>Strengths:</u> <ul style="list-style-type: none">• Ease of comparison across companies• Existing familiarity with Carbon Accounting Workbook tool• Already reports emissions by business area	<u>Weaknesses:</u> <ul style="list-style-type: none">• Lack of Scope 3 focus (chemicals)• Confusion may be caused as reporting boundaries do not align with international carbon reporting parameters• Limited data on specific processes (Scope 1 uncertainty)
<u>Opportunities:</u> <ul style="list-style-type: none">• Ricardo (or replacement) can collate changes centrally• Sector wide technical panel can advise any changes	<u>Threats:</u> <ul style="list-style-type: none">• May not be able to adapt quickly to meet changing needs of Ofwat<ul style="list-style-type: none">○ PR24 planning○ Baseline setting and uncertainty

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Embedded emissions

Table 2 – SWOT analysis of embedded emissions reporting

<u>Strengths:</u> <ul style="list-style-type: none"> Flexibility on method, not stipulated within Carbon Accounting Workbook 	<u>Weaknesses:</u> <ul style="list-style-type: none"> Use of old/obsolete emissions intensities Confusion may be caused as reporting boundaries do not align with international carbon reporting parameters
<u>Opportunities:</u> <ul style="list-style-type: none"> Industry can jointly develop the Carbon Accounting Workbook, or other tool, to meet changing needs 	<u>Threats:</u> <ul style="list-style-type: none"> Inexperience on Scope 3 emissions may lead to high degrees of uncertainty / inaccuracy in reported data

Ofwat requirements for Red, Amber, Green reporting:

Ofwat require new data points to be ‘traffic lighted’ to reflect confidence and accuracy of associated figures. The additional data reported for 2022/23 are chemicals, waste generated, and electricity emissions associated with ‘fuel and energy activities’ i.e. the emissions associated with processing fuels subsequently used for electricity generation.

Chemicals:

This figure is reported as ‘Amber’. A Methodology has been produced and utilises the Carbon Accounting Workbook processes to report a footprint using product volumes (from invoice data) and the emission factors. The emission factors are out-dated in the Carbon Accounting Workbook which incorporates some degree of uncertainty to the figures. The volumes of chemicals are not always clear on the Purchase Order/invoice summary data so estimations have been made. As it is the first year of reporting there will also be refinements to the apportionment of emissions between Water and Wastewater in future years. These uncertainties prevent this data from being considered ‘Green’.

Waste generated:

This figure is reported as ‘Green’ as it has been published as part of the Carbon Accounting Workbook’s DEFRA tables for a number of years, although not formed part of Ofwat reporting scope for the Annual Performance Report. Due to the established data collection for mileage and recent published emission factors this is reliable and accurate. This will be possible to improve in future years by further detailing the apportionment across Water and Wastewater, as the Carbon Accounting Workbook only produces a total for the business.

Fuel and energy activities:

This figure is reported as ‘Green’. The electricity consumption for the business areas is based on A1 source data in the Carbon Accounting Workbook and then converted to a carbon emission using a UK Government published emission factor for the current reporting year. Although a new figure to include in Table 11A (Line 25), in addition to the Transmission and Distribution associated emissions historically reported, the means of producing the data is well

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established. This is a significant (20 kiloTonne) addition to the scope of reported carbon emissions and therefore drives ~17% increase in reported carbon footprint, compared to 2021/22.

Lines 49, 50 and 51 regarding 'embodied carbon':

Welsh Water considers this to be 'Amber' given the current data availability and the current approach to allocate these emissions to the different Lines. Improvements are planned for 2023/24 to use project data, either from package plant emissions or new software systems as yet to be procured, to attribute emissions to every project which would enable a breakdown by clean and waste and project type, to meet all the reporting line requirements.

Following discussion with our Auditor for 2022/23 all emissions from the current methodology process have been apportioned to Line 50, it is Welsh Water's understanding that this could be broken down between spend allocated via Welsh Water's Alliance to Line 50 and Engineering Delivery Team to Line 51, which would separate directly procured "purchased goods and services" to Line 51 and spend directly associated with major Capital projects to Line 50. Welsh Water intended to do this based on spend data as a 55% apportionment (~10,000 Tonnes to Line 50) and 45% apportionment (~7,000 Tonnes to Line 51), however this methodology was not accepted by the Auditor and all emissions have been attributed to Line 50. It should be noted that this approach would avoid any of the double counting concerns raised from using other data sources within the Carbon Accounting Workbook, as this would be specific to Capital/Scope 3 emissions.

Scope 3 emissions reporting

We have not separated scope 3 emissions as per Lines 33 to 36. This is because the current version of the industry wide Carbon Accounting Workbook that is used to generate these figures cannot calculate these figures with a high degree of accuracy.

Appendix 1 - Additional Regulatory Information

Notes to regulatory accounts

Accounting Policies

Basis of preparation

The principal accounting policies adopted in the preparation of the regulatory financial statements included in parts 1 and 2 are set out below, while they remain relevant for parts 4 to 11. They have been prepared in accordance with International accounting standards in accordance with UK-adopted international accounting standards ("UK-adopted IFRS") and applicable law, except where Ofwat's Regulatory Accounting Guidelines (RAGs) require a departure from these (such instances are highlighted on the face of the principal regulatory financial statements in part 1).

The regulatory financial statements have been prepared under the historical cost convention, as modified by the revaluation of fixed assets, financial assets and financial liabilities (including derivative financial instruments) at fair value through profit or loss.

Basis of consolidation

The regulatory financial statements report the results of Dŵr Cymru Cyfyngedig (DCWW) and comprise all of the activities of the appointed business.

Appointed and non-appointed businesses

Each non-appointed activity is treated separately within the Company's accounting records. Examples of non-appointed activities include tankered waste, property searches, treatment of biosolids from external suppliers and recreation and amenity services. Revenues, costs, assets and liabilities are generally directly allocated to particular business activities. General and support costs have been apportioned from the non-appointed business on an activity cost basis.

Leases

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, and subsequently at cost less any accumulated depreciation and impairment losses and adjusted for certain re-measurements of the lease liability.

The Group presents right-of-use assets that do not meet the definition of investment property in property, plant and equipment and lease liabilities in borrowings in the balance sheet.

Notes to the regulatory accounts (continued)

Accounting policies (continued)

Leases (continued)

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate.

The lease liability is subsequently increased by the interest cost on the lease liability and decreased by lease payments made. It is re-measured when there is a change in future lease payment arising from a change in an index or rate or, as appropriate, changes in the assessment of whether a purchase or extension option is reasonably certain to be exercised or a termination option is reasonably certain not to be exercised.

The Group has also elected to apply a single discount rate to the portfolio of leases that are deemed to have reasonably similar characteristics as well as to exclude any initial direct costs in the measurement of the right-of-use asset. The discount rate of 4% is based on the Company's estimated incremental borrowing rate.

All other leases that do not involve right-of-use assets are charged to the income statement over the period of the lease.

When the Group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease.

To classify each lease, the Group makes an overall assessment of whether the lease transfers substantially all the risks and rewards incidental to ownership of the underlying asset. If this is the case, then the lease is a finance lease; if not, then it is an operating lease. As part of this assessment, the Group considers certain indicators such as whether the lease is for the major part of the economic life of the asset.

The Group has used a number of practical expedients when applying IFRS 16 to leases previously classified as operating leases under IAS 17. In particular the Group:

- did not recognise right of use assets and liabilities for leases for which the lease term ends within 12 months of the date of initial application;
- did not recognise right of use assets and liabilities for leases of low value assets (e.g. IT equipment);
- excluded initial direct costs from the measurement of the right of use asset at the date of initial application; and
- used hindsight when determining the lease term.

Notes to the regulatory accounts (continued)

Accounting policies (continued)

Revenue recognition

Revenue represents the income receivable in the ordinary course of business from the regulated activities of the business in the year exclusive of value added tax. Charges billed to customers for water, wastewater and retail services are recognised in the period in which they are earned. An accrual is estimated for measured consumption that has not been billed.

The measured income accrual is an estimation of the amount of mains water and wastewater charges unbilled at the balance sheet date. The accrual is calculated using a defined methodology based upon average historical water consumption by customer and tariff and is recognised within revenue.

Where an invoice has been raised, or payment made but the service has not been provided in the year, this is treated as a payment in advance and is not recognised in the current year's revenue but within creditors.

Charges on income arising from court, solicitors and debt recovery agency fees are added to the relevant customer accounts; they are not recognised within revenue, rather the recognition of any resulting receipts is deferred until payment is made when they are credited to operating costs.

In line with the regulatory guidelines New Connections income is treated as 'Other Income' in table 1a

Bills raised for customers having a record of non-payment are recognised as revenue. Only in the following circumstances are bills not recognised as turnover:

- a) voids adjustment for local authority agreements. DCWW bills some local authorities for all of their tenanted premises whether occupied or not and the collection commission its pays includes an element in respect of voids. An adjustment is therefore made between commission costs (included in operating costs) and revenue in respect of the amount relating to voids; and
- b) where bills are subject to formal legal pricing disputes we do not recognise as turnover the disputed portion of bills raised.

Notes to the regulatory accounts (continued)

Accounting policies (continued)

Revenue recognition (continued)

Charging policy

Billing of unoccupied properties: an unoccupied property is a connected property or premises that is unoccupied and unfurnished and does not have use or any water or wastewater service. This definition is applied in the following ways:

- a) unmeasured supplies: if an unoccupied property is furnished normal charge will apply (subject to allowances e.g. if the sole occupier is in a nursing home, hospital, prison or is overseas long-term). Unfurnished and unoccupied properties do not incur charges unless they are in use e.g. under renovation or redecoration, in which case the customer will be offered the option of being compulsorily metered, continuing on unmeasured charges or being disconnected. Unmeasured properties will be billed a “surface water-only” charge if the water supply is temporarily disconnected; and
- b) metered supplies: metered standing charges are applied to each metered property unless there is no water consumption, the property owner cannot be identified, and it is unfurnished.

Billing “the occupier”: very few premises are billed in this manner; no bills are sent speculatively in this manner, only when there is evidence suggesting an actual occupier e.g. a visit, finance check or Land Registry search.

New properties: all new properties are metered. The developer, being the consumer, is billed for water and wastewater charges between the date of connection and first occupancy. Income from the developer for metered charges is recognised as revenue.

Bad debt policy

Our policy is to write off debt when it is shown that a debt is not collectable. A debt is regarded as being not collectable when one of the following conditions has been satisfied:

- the debtor has been declared bankrupt;
- the debtor cannot be traced;
- the debtor has died without an estate;
- all reasonable legal remedies have been exhausted and two collection agencies have failed to recover the debt; or
- the debt is too small to pursue beyond specified recovery action.

Notes to the regulatory accounts (continued)

Accounting policies (continued)

Bad debt policy (continued)

All debt that has completed the full recovery process is held in an “end of line bucket” pending write-off. Write-offs are scheduled as part of a routine procedure; however, initiatives continue to be taken in respect of “end of line” debt to review collectability and debts are currently only written off post completion of these initiatives.

Generally, when debt reaches the “end of line bucket” the majority will have been fully provided for in the bad debt provision. As a result, the timing of the write-off has little impact on the overall charge for bad debts in any year. As a consequence, the level of write-offs throughout the year is not monitored in isolation but as a component of the overall movement in collections when considering the level of bad debt provision required. No changes have been made to the write-off policy or procedures during the year.

Accounting separation policy

The regulatory accounts have been drawn up in accordance with Dŵr Cymru’s Accounting Methodology Statement. The purpose of this document is to explain the systems, processes and allocation methods involved in the preparation and population of the accounting methodology tables included within these regulatory accounts. The financial information used to populate the tables is processed and extracted from the Company’s accounting system and customer billing system.

Water and sewerage services

Alternative cost centre structures have been created (as part of Dŵr Cymru’s overall accounting methodology cost centre group) in the accounting system to allow water and sewerage service operational costs to be captured in a format that facilitates the completion of the water and sewerage service tables.

It contains specific cost centre groups for each of the water activities along with further groups capturing the cost of scientific services and general and support activities. A number of ‘work management systems’ results in greater accuracy of cost allocation and a reduced incidence of manual allocations across activities.

Asset-related cost centres and most operational support staff can be attributed directly to individual water and wastewater activities. Non-operational staff costs are allocated directly to activities where possible; where this has not been possible cost drivers have been used to apportion departmental costs in line with Ofwat’s hierarchy of cost drivers.

Notes to the regulatory accounts (continued)

Accounting policies (continued)

Accounting separation policy (continued)

Retail service

An alternative cost centre structure has been created within the accounting system to allow retail operational costs to be captured in a format that facilitates the completion of the retail service table.

Non-operational costs are allocated directly to activities where possible; where this has not been possible cost drivers have been used to apportion costs in line with Ofwat's hierarchy of cost drivers.

Fixed assets

The fixed assets tables consist of capitalised assets as recorded on the fixed asset register plus assets under construction. The opening balances are reconciled to the previous year's closing balances and current year transactions are analysed as follows:

- Assets in the SAP register are allocated to cost collectors which identify the operational business owner. Each asset has an asset class which identifies the split between infrastructure, operational and other assets, and a review of the current year's expenditure is undertaken with reference to data capture sheets and meetings with capital operational managers to check that these have been allocated appropriately; and
- Retail asset costs have been allocated to household and non-household based on the number of bills raised and customer numbers for other assets.

Capitalisation policy

The economic value of the Company's water and sewerage business is derived from the Regulatory Capital Value (RCV) set by Ofwat during its five-yearly price reviews. The Company considers that a fair value approach to valuing its assets better reflects the underlying value of the assets than historical cost accounting which understates the assets' current value in use.

As at 31 March 2023 the total value of tangible and intangible fixed assets has been revalued to the Company's 'shadow RCV', being the 31 March 2023 RCV published by Ofwat in its PR19 Final Determination as adjusted for the impact of any totex over/underspend and Outcome Delivery Incentive rewards/penalties. The classes of asset impacted are infrastructure assets and operational structures.

Notes to the regulatory accounts (continued)

Accounting policies (continued)

Capitalisation policy (continued)

The carrying value of assets is reviewed for impairment if circumstances dictate that the carrying value may not be recoverable; asset lives and residual values are reviewed annually.

In accordance with RAG 1.09 para 4.8 and 4.9, in its regulatory financial statements the Company has dis-applied the IAS 16 requirement to capitalise applicable borrowing costs.

Infrastructure assets

Infrastructure assets comprise principally impounding reservoirs and a network of underground water and wastewater systems. For accounting purposes, the water system is segmented into components representing categories of asset classes with similar characteristics and asset lives. The wastewater system is segmented into components representing geographical areas, reflecting the way the Company operates its wastewater activities.

Expenditure on infrastructure assets relating to increases in capacity, enhancements or material replacements of network components is treated as additions, which are included at cost. Expenditure incurred in repairing and maintaining the operating capability of individual infrastructure components, 'Infrastructure Renewals Expenditure', is expensed in the year in which the expenditure is incurred.

The depreciation charge for infrastructure assets is determined for each component of the network and is based on each component's cost, estimated residual value and the expected remaining average useful life. The useful economic lives of the infrastructure components range principally from 35 to 150 years.

Other assets

Other assets are depreciated on a straight-line basis over their estimated useful economic lives, which are as follows:

Freehold buildings:	60 years
Operational structures:	5-80 years
Plant, equipment and computer hardware:	3-40 years

Assets in the course of construction are not depreciated until commissioned. Land is not depreciated.

Notes to the regulatory accounts (continued)

Accounting policies (continued)

Capitalisation policy (continued)

Intangible assets

Intangible assets, which comprise principally computer software, systems developments and research and development, are included at cost less accumulated amortisation. Cost reflects purchase price together any expenditure directly attributable to bringing the asset into use, including directly attributable internal costs.

Research expenditure is recognised as an expense as incurred. Costs incurred on development projects are recognised as intangible assets when the relevant recognition criteria are met (as per IAS 38).

The carrying values of intangible assets are reviewed for impairment if circumstances indicate they may not be recoverable. Intangible assets are amortised on a straight line basis over their estimated useful economic lives, which range between 3 and 20 years.

Right of use assets

Certain assets are financed by leasing arrangements which transfer substantially all the risks and rewards of ownership of an asset to the lessee. These assets are capitalised and included in 'property, plant and equipment' with the corresponding liability to the lessor included within 'financial liabilities – borrowings'. Leasing payments consist of a capital element and a finance charge; the capital element reduces the obligation to the lessor and the finance charge is recognised over the period of the lease based on its implicit rate so as to give a constant rate of interest on the remaining balance of the liability.

Contracts which do not meet the criteria of a lease are charged to the income statement as rental costs on a straight-line basis over the period of the contract.

Grants and customer contributions

Grants and customer contributions in respect of expenditure on property, plant and equipment have been offset against these assets.

Grants in respect of revenue expenditure are credited to the income statement over the same period as the related expenditure is incurred.

Notes to the regulatory accounts (continued)

Accounting policies (continued)

Capitalisation policy (continued)

Capital expenditure programme incentive payments

The Company's agreements with its construction partners involved in delivery capital programmes incorporate incentive bonuses payable after completion of the programmes. The cost of property, plant and equipment additions includes an accrual for incentive bonuses earned to date, relating to projects substantially completed at the year-end, where the likelihood of making the incentive payment is considered probable. Amounts recoverable from contract partners relating to targets not being achieved are only recognised on completed projects.

Price control units

The regulatory accounts have been prepared in accordance with RAG 2.08 and RAG 2.09 'Guideline for classification of costs across the price controls.

The tables presented in parts 2 and parts 4 to 11 of the Annual Performance Report have been prepared in accordance with our Accounting Methodology Statement which can be found at www.dwrcymru.com. Wherever possible, direct costs and assets have been directly attributed to price controls. Where this is not possible, appropriate cost allocations have been applied as described in the methodology. Material changes to the allocation approach compared to the previous year are documented in the methodology statement.

Trade receivables

Trade receivables are recognised initially at fair value and subsequently measured at amortised cost less provision for impairment. They are first assessed individually for impairment, or collectively where the receivables are not individually significant. Where there is no objective evidence of impairment for an individual receivable, it is included in a Group of receivables with similar credit risk characteristics and these are assessed collectively for impairment based on their ageing. Movements in the provision for impairment are recorded in the income statement.

Cash and cash equivalents

Cash and cash equivalents include highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of change in value. Such investments are normally those with less than three months' maturity from the date of acquisition and typically include cash in hand and deposits with banks or other financial institutions.

Notes to the regulatory accounts (continued)

Accounting policies (continued)

Pension benefits

i) Defined benefit scheme

The Company operates a defined benefit scheme, the DCWW Pension Scheme, which was closed to future accrual from 1 April 2017 for all members except for 18 ESPS section members. The scheme is funded by employer contributions as well as employee contributions from the remaining active members. Contribution rates are based on the advice of a professionally qualified actuary. The most recent actuarial valuation of the scheme was carried out as at 31 March 2022.

The asset recognised in the balance sheet in respect of defined benefit pension plans is the fair value of plan assets less the present value of the defined benefit obligation at the end of the reporting year. The fair value of these assets has been estimated based on the latest available observable prices, updated with reference to movements in comparable observable indices to the reporting date, and adjusted for judgements to reflect differences in the liquidity and credit components of the asset pricing. The defined benefit obligation is calculated annually by an independent actuary using the projected unit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension obligation. In countries where there is no deep market in such bonds, the market rates on government bonds are used.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise.

Past-service costs are recognised immediately in the income statement.

ii) Defined contribution scheme

The Company operates a defined contribution scheme, the DCWW Group Personal Pension Plan, which all employees are eligible to join. Obligations for contributions to the scheme are recognised as an expense in the income statement in the period in which they arise.

Notes to the regulatory accounts (continued)

Accounting policies (continued)

Financial liabilities

Debt is measured initially at fair value, being net proceeds after deduction of directly attributable issue costs, with subsequent measurement at amortised cost. Debt issue costs are recognised in the income statement over the expected term of such instruments at a constant rate on the carrying amount.

Trade payables are obligations to pay for goods and services acquired in the ordinary course of business from suppliers. Accounts payable are classified as current liabilities if payment is due within one year, or in the normal operating cycle of the business.

Derivative instruments utilised by the Company are interest rate swaps, inflation swaps and power hedges. Derivative instruments are used for hedging purposes to alter the risk profile of existing underlying exposures within the Group. Derivatives are recognised initially and subsequently re-measured at fair value. During the year to 31 March 2023, one of the Company's derivatives qualified for hedge accounting (2022: none), but the Company elected not to apply hedge accounting. These instruments are carried at fair value with changes in fair value being recognised immediately in the income statement.

Taxation

The Company continues to invest heavily in capital expenditure for the benefit of our customers. The tax relief for this capital expenditure and the interest the Company pay to fund it have the effect of delaying corporation tax payments to future periods.

Income tax for the year comprises current and deferred tax. Tax is recognised in the income statement, except to the extent that it relates to items recognised in other comprehensive income or directly in equity

Current tax is the expected tax payable on the taxable income for the year using rates substantially enacted at the balance sheet date, and any adjustments to tax payable in respect of prior years. Amounts receivable from tax authorities in relation to research and development tax relief under the RDEC scheme are recognised within operating profit in the period in which the research and development costs are treated as an expense. Where amounts are outstanding at the year end and have not been formally agreed, an appropriate estimate of the amount is included within other receivables.

Notes to the regulatory accounts (continued)

Accounting policies (continued)

Deferred taxation

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the balance sheet date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income tax has been recognised in relation to rolled-over gains except for where reinvestment has been made in certain operational assets which the Company plans to use until the end of their useful economic life. The Company anticipates that these assets will then be scrapped for negligible proceeds, or proceeds less than their tax base, and therefore no chargeable gain is expected to arise in the future.

Deferred income tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised.

Provisions

Provisions for restructuring costs, restatement of leakage and per capita consumption performance, uninsured losses and billing disputes are recognised when the Company has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and the amount has been estimated reliably. The provision of £15 million for the restatement of leakage and per capita performance represents the Board's decision to apply a £10 refund to every customer's bill in financial year 2023/24. Restructuring provisions comprise employee severance and pension fund top-up costs. Where the Company receives claims that are either not covered by insurance or where there is an element of the claim for which insurance cover is not available, a provision is made for the expected future liabilities. Provisions are not recognised for future operating losses.

Where there is a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligation is small.

Notes to the regulatory accounts (continued)

Differences between statutory and RAG definitions

As set out under 'basis of preparation' in the accounting policies section, the regulatory financial statements as set out in the preceding tables have been prepared under IFRS as modified by Ofwat's Regulatory Accounting Guidelines (RAGs). These notes provide the supplementary information specifically required by the RAGs. They do not cover the full range of disclosures required in a full annual report and accounts prepared under IFRS; these are included in the statutory financial statements of Dŵr Cymru Cyfyngedig which are available from the Company's website.¹

Ofwat's aim is to minimise differences in reporting between statutory and regulatory accounts, unless it is absolutely necessary for regulatory purposes. RAG 1.09 - Principles and guidelines for regulatory reporting under the 'new UK GAAP' (using IFRS, FRS101, or FRS102) regime defines treatment of particular items where Ofwat requirements differ from those normally required under IFRS and Companies Act legislation. Ofwat requires deviations from IFRS in the following areas:

- Revenue recognition

The RAG's require that companies bill all properties where a service is being received unless confirmed as void and should fully recognise the billed amounts in the reported turnover. Properties will therefore only fall into one of the following two categories for regulatory accounting statement purposes:

- billed and recorded in turnover; or
- void properties

Companies should assume that for regulatory accounting purposes that where an amount is billed it is probable that cash will be collected. This is a deviation from requirement under IFRS where revenue is only recognised when it is probable that the economic benefits associated with the transaction will flow to the entity. RAG 1.09 requires a deviation from that requirement in that there is no judgement applied to the probability of collection and should all be considered collectable. Dŵr Cymru adheres to this accounting policy and therefore no adjustment is needed.

¹ available on website www.dwrcymru.com or on request from the Company Secretary, Dŵr Cymru Cyfyngedig, Linea, Fortran Road, St Mellons, Cardiff, CF30LT.

Notes to the regulatory accounts (continued)

Differences between statutory and RAG definitions (continued)

- **Capitalisation of interest:** IAS 23.8 requires borrowing costs to be capitalised where they directly relate to the construction of an asset. The regulatory requirement is that this rule is disappplied.
- **Derivatives:** Companies are required to disclose fair value adjustments for financial instruments separately, so that the profit/loss before such adjustments can be clearly seen on the face of the income statement. This is a presentation changes rather than an adjustment that will affect the financial results.
- **Grants and contributions:** Companies are required to show grants and contribution included as revenue or other operating income as other income on the face of the income statement.
- **Asset adoption:** the amortisation of the deferred income relating to adopted assets should be shown as 'other income'

Reconciliation of statutory financial statements to regulatory accounting tables

1A – Income statement for the year ended 31 March 2023

	£m	
Loss for the year per statutory accounts	(299.310)	
Capitalisation of interest	(28.300)	Ofwat's RAG override to disapply capitalisation of borrowing costs under IAS 23
Depreciation on capitalised interest	4.420	Ofwat's RAG override to disapply capitalisation of borrowing costs under IAS 23
Revenue recognition-measured income accrual adjustment	0.256	Deviation from IFRS 15 as no judgement applied to the probability of collections when recognising revenue
Innovation fund	2.500	Innovation fund provision removed from operating expenditure as it's not an operating expense
Deferred tax	5.281	
	(15.843)	
Non-appointed loss (net of tax)	0.255	Regulatory tables prepared in respect of the appointed business only
Loss for the year per regulatory accounts	(314.898)	

1D – Statement of cash flows for the year ended 31 March 2023

	£m	
Decrease in net cash per statutory accounts	(141.085)	
Non-appointed profit for the year	0.341	Regulatory tables prepared in respect of the appointed business only
Increase in net cash per regulatory accounts	(140.744)	

Notes to the regulatory accounts (continued)

Differences between statutory and RAG definitions (continued)

1C – Statement of financial position as at 31 March 2023

	£m
Net assets per statutory accounts	1,545.488
Capitalisation of interest	
- Fixed assets	(118.376)
- Intangible assets	(12.602)
	(130.978)
Trade and other receivables:	
- Measured income accrual	4.300
	4.300
Trade and other payables:	
- Deferred income	553.162
- Accrued interest	(50.328)
- Innovation provision	7.233
	510.067
Borrowings	
- Accrued interest	50.328
	50.328
Deferred income	
Deferred income – G&C	0.003
Deferred income – adopted assets	(540.808)
	(540.805)
Provisions	(12.357)
Deferred tax	29.915
Net assets allocated to non-appointed activities	(42.583)
Net assets per regulatory accounts	1,413.374

Ofwat's RAG override to disapply capitalisation of borrowing costs under IAS 23

Ofwat's RAG override to disapply capitalisation of borrowing costs under IAS 23

Ofwat's RAG override to deviate from IFRS15; no judgement to be applied to the probability of collections, and all is considered as collectable

RAG requirement to report separately on face of statement

RAG requirement to include accrued interest in trade and other payables

Removal of accrual for innovation competition as it's not an operating expense

RAG requirement to include accrued interest in trade and other payables

RAG requirement to report separately on face of statement

RAG requirement to report separately on face of statement

RAG requirement to include deferred income > 1 year to provisions

Deferred tax impact on RAG deviation (above)

Regulatory tables prepared in respect of the appointed business only

Notes to the regulatory accounts (continued)

Revenues by customer type

Table 2G, “Revenues by tariff type for the year ended 31 March 2023 – non-household water”, reports all >50MI customers as being on non-default tariffs as the Company has electively reduced the retail margin below the price determination default tariff. The table below reports the split of tariffs if those customers were treated as being on default tariffs and reports each tariff in the same categories as previously reported.

	Wholesale charges revenue	Retail revenue	Total revenue	Number of connections	Average non-household retail revenue per connection
	£m	£m	£m	000s	£
Non-default tariffs					
Raw water > 50MI (measured)	1.864	0.018	1.882	0.010	1,800
Partially treated water > 50MI	0.917	0.009	0.926	0.001	9,000
Water large user 50MI-99MI (measured)	5.001	0.050	5.051	0.052	962
Water large user 100MI-249MI (measured)	5.200	0.052	5.252	0.030	1,733
Water large user 250MI-499MI (measured)	4.229	0.045	4.274	0.011	4,091
Water large user 500MI-1000MI (measured)	3.496	0.040	3.536	0.005	8,000
Special agreement register – ref WSHNONPOT9	2.067	0.023	2.090	0.001	23,000
Special agreement register – ref WSHNONPOT10	0.751	0.007	0.758	0.002	3,500
Total non-default tariffs	23.525	0.244	23.769	0.112	2,179
Default tariffs					
Raw water < 50MI (measured)	0.003	0.000	0.003	0.003	-
Partially treated water < 50MI (measured)	0.004	0.000	0.004	0.003	-
Potable water < 50MI (non-household) Measured	61.962	3.442	65.404	91.544	38
Potable water < 50MI (non-household) Unmeasured	1.915	0.268	2.183	7.201	37
Special agreement register – ref WSHPOT1	0.001	0.000	0.001	0.001	-
Total default tariffs	63.885	3.710	67.595	98.752	38

Notes to the regulatory accounts (continued)

Transactions with associates

The Directors of Dŵr Cymru Cyfyngedig (DCWW) are also Directors of other companies within the Glas Cymru Holdings Cyfyngedig group; however, their emoluments are paid in full by the Company as their activities are predominantly related to the regulated water and sewerage business. During the year the Directors' emoluments amounted to £1,695,000 (2022: £1,821,000).

Company interest payable to Dŵr Cymru (Financing) Limited (DCFL), another member of the Glas Cymru Holdings Cyfyngedig group, was £223.7m during the year (2022: £128.4m) as well as £187.4m (2022: £93.6m) for bond swap indexation. As at 31 March 2023 the balance outstanding on the intercompany loan and accrued interest from DCFL stood at £3,227.9 (2022: £3,085.3m). In addition the bond swap indexation outstanding on the bonds owed to DCFL amount to £344.7m (2022: £157.3m). All borrowings raised by DCFL are immediately on-lent to the Company on an arms-length basis. The intercompany loan is subject to the terms and conditions of the whole business securitisation structure of Glas Cymru Holdings Cyfyngedig and its subsidiaries. DCWW, in its capacity as debtor, repays such principal and interest as is due on each borrowing on the due date plus 0.01%. Further intercompany balances with other members of the Glas Cymru Holdings Cyfyngedig group comprised a loan from Glas Cymru Anghyfyngedig of £2.0m (2021: £2.0m) and a loan from Dŵr Cymru Holdings Limited totalling £2.8m which remains outstanding as at 31 March 2023. Interest payable on these loans has been waived.

As at 31 March 2023 intercompany trading balances owing to the Company were: Welsh Water Infrastructure Limited £3,560 (2022: £13,350), Welsh Water Organic Energy (Cardiff) Limited £2,098,786 (2022: £1,153,352), Welsh Water Organic Energy Limited £13,655 (2022: £nil), Cambrian Limited £25,419 (2022: £20,239), Glas Cymru Anghyfyngedig £8,481 (2022: £8,481), Glas Cymru Holdings Limited £74,290 (2022: £18,901), Welsh Water Holdings Limited £17,330 (2022: £nil) and Welsh Water Organic Waste £480,661 (2022: £55,131).

During the year no dividends were paid or received (2022: none) to Dŵr Cymru (Holdings) Limited.

There were no other transactions with companies that are part of the Glas Cymru group except as disclosed below.

Notes to the regulatory accounts (continued)

Transactions with associates (continued)

RAG 3.14 requires the Company to disclose transactions with both associated companies and the non-appointed business in accordance with the guidance provided in RAG 5.07.

Service	Company	Turnover of associate £m	Terms of supply	Value £m
Services provided by the regulated business to associated businesses				
Staff secondments	Welsh Water Organic Energy (Cardiff) Ltd	2.587	Fully absorbed cost	0.508
	Welsh Water Organic Waste Ltd	0.774	Fully absorbed cost	0.236
Other costs	Welsh Water Organic Energy (Cardiff) Ltd	2.587	Fully absorbed and support cost	0.272
	Welsh Water Organic Waste Ltd	0.774	Fully absorbed and support cost	0.045
Loan interest	Dŵr Cymru (Financing) Limited	-	Loan interest payable at 0.01% mark up	223.724
	Dŵr Cymru (Financing) Limited	-	Loan interest payable relating to bond swap indexation ²	187.352
Intercompany balances	Welsh Water Organic Energy Ltd ¹	2.839	Intercompany balances; net increase of £0.014m.	0.014
	Welsh Water Organic Energy (Cardiff) Ltd	2.587	Intercompany balances; net increase of £0.946m.	2.099
	Welsh Water Organic Waste Ltd ¹	0.774	Intercompany balances; net increase of £0.426m	0.481
	Welsh Water Infrastructure Ltd ¹	-	Intercompany balances; decrease of £0.009m	0.004
	Glas Cymru Anghyfyngedig ¹	-	Intercompany balances; no movement in year	0.008
	Cambrian Ltd ¹	-	Intercompany balances; net increase of £0.005m	0.025
	Glas Cymru Holdings Ltd ¹	-	Intercompany balances; net increase of £0.074m	0.074
	Welsh Water Holdings Ltd ¹	-	Intercompany balances; net increase of £0.017m	0.017
	Dŵr Cymru (Financing) Limited	-	Loan interest outstanding; net increase of £0.589m	(1.207)
Intercompany loan to	Glas Cymru Anghyfyngedig ¹	-	Intercompany loan; no movement in year	1.971
	Dŵr Cymru Holdings Limited ¹	-	Intercompany loan; no movement in year	2.812
Intercompany loan from	Dŵr Cymru (Financing) Limited	-	Intercompany loan which includes bond swap indexation ² ; net increase of £329m	(3,571.365)
Services provided by the associated businesses to the regulated business				
Supply of power costs from AD plant to Cardiff Treatment works	Welsh Water Organic Energy (Cardiff) Ltd	2.587	Arm's length contract in 2014 with third party	(0.452)
Rental of appointed assets	Welsh Water Organic Waste Ltd	0.774	Arm's length contract for rental of appointed assets	0.072

Notes to the regulatory accounts (continued)**Transactions with associates (continued)**

There has been no group relief received or surrendered during the year

Service	Basis of recharge made by the appointed business	Value £m
Treatment of tankered waste	The recharge is based on the strength of waste and volume received using the Mogden formula	1.417
Treatment of external sludge	The recharge is based on a model prepared by an external consultant- the costs transferred is at arms length. The profit margin is shared equally with the appointed business	0.040
Visitor centres	Fully absorbed cost of Visitor Centres	3.285
Search fees	Cost of team supporting this activity	0.248
Support costs for non regulated activity	Support costs based on FTE of non appointed activity	1.656

Statement of changes in equity (Company level)

	Ref	Share capital £m	Capital redemption reserve £m	Revaluation reserve £m	Retained earnings £m	Total equity £m
At 1 April 2022		309.9	166.2	914.8	(84.5)	1,306.4
Loss for the year	1A	-	-	-	(299.3)	(299.3)
Revaluation net of tax	1B	-	-	445.1	-	445.1
Actuarial gain net of tax	1B	-	-	-	93.3	93.3
Transfer to retained earnings		-	-	(92.8)	92.8	-
At 31 March 2023	1C	309.9	166.2	1,267.1	(197.7)	1,545.5

Financial derivatives (Table 4I)***Interest rate swaps (sterling – floating to/from fixed rate) (Table 4I – 4I.1)***

This is a single floating to fixed derivative which swaps £192m of debt from 3-month SONIA plus a margin to 5.67% fixed.

Notes to the regulatory accounts (continued)

Financial derivatives (Table 4I) (continued)

Interest rate swaps (sterling – floating to/from index-linked) (Table 4I – 4I.3)

All swaps that are floating to index linked are now in this table. This is due to the amendment of the guidance within note 4.24 of RAG 4.11 as shown below:

“We expect information to be based on the external market position of the company – i.e. exposures should therefore include derivatives held in the financing company (that issues debt on behalf of the regulated company.)”

As at 31 March 2023, £438m of swap notional are held in DCWW. These swaps were taken out to hedge floating rate leasing liabilities and follow the amortising profile of the finance leases. The “year on year” index-linked swaps convert the floating rate leases to index-linked liabilities. Due to the swaps being Pay as you go in relation to indexation, they fall under the ‘(A) Super-senior swaps with breaks of accretion paydowns’ and as such are reflected in that table.

All other swaps fall under ‘(D) Other Swaps’ and are reflected in the associated table.

4V – New table for this year using mark-to-market instead of notional. The table includes all swaps in the group in-line with 4I.

Credit breaks

None of the swaps in DCWW or DCF UK has credit breaks, with the longest-dated swap being in place until 2057. In the case of the long-dated swaps, this is because the swaps were entered into before the financial crisis when banks were more prepared to take a long-term view of a water company’s credit.

In April 2021 DCF UK entered into three fixed to index linked (RPI) bond swaps with a combined notional value of £300 million. These swaps will pay RPI accretion on maturity and the maturity profile of the notional is:

- £300 million maturing 2034

None of these swaps have credit breaks therefore the accretion will be not fall due until the maturity of the swaps.

Notes to the regulatory accounts (continued)

Financial derivatives (Table 4I) (continued)

Policy for determining composition of debt

DCWW's policy for raising debt is to reduce refinancing risk by borrowing across a range of maturities and from a mix of sources, currently comprising bi-lateral revolving credit bank facilities, EIB & KfW term loans, bonds, and finance leases, with a mix of maturities to comply with the Company's refinancing policy. The refinancing policy is governed by the Company's bond covenants and states that no more than 20% of the Group's debt is permitted to fall due within any rolling 24-month period.

Policy for determining composition of debt

DCWW's policy for raising debt is to reduce refinancing risk by borrowing across a range of maturities and from a mix of sources, currently comprising bi-lateral revolving credit bank facilities, EIB & KfW term loans, bonds, and finance leases, with a mix of maturities to comply with the Company's refinancing policy. The refinancing policy is governed by the Company's bond covenants and states that no more than 20% of the Group's debt is permitted to fall due within any rolling 24-month period.

Hedging policy

The Company's policy is to hedge at least 85% of its total outstanding financial liabilities into either RPI or fixed-rate obligations. To comply with this policy and in order to keep debt costs as low as possible we will raise debt at the lowest interest rate commensurate with the maturity of the debt. There is no specific optimum mix of RPI and fixed rate debt. As of 31 March 2023, 100% of our debt is either fixed or index-linked.

Other financial derivatives

The other financial derivatives detailed in line 4I.27 are power hedges which swap the price of floating rate electricity into fixed rate. The notional is derived by calculating the total number of hours hedged multiplied by the fixed price per hour. As these swaps fix commodity prices, there is no applicable interest rate to include in columns O and P.

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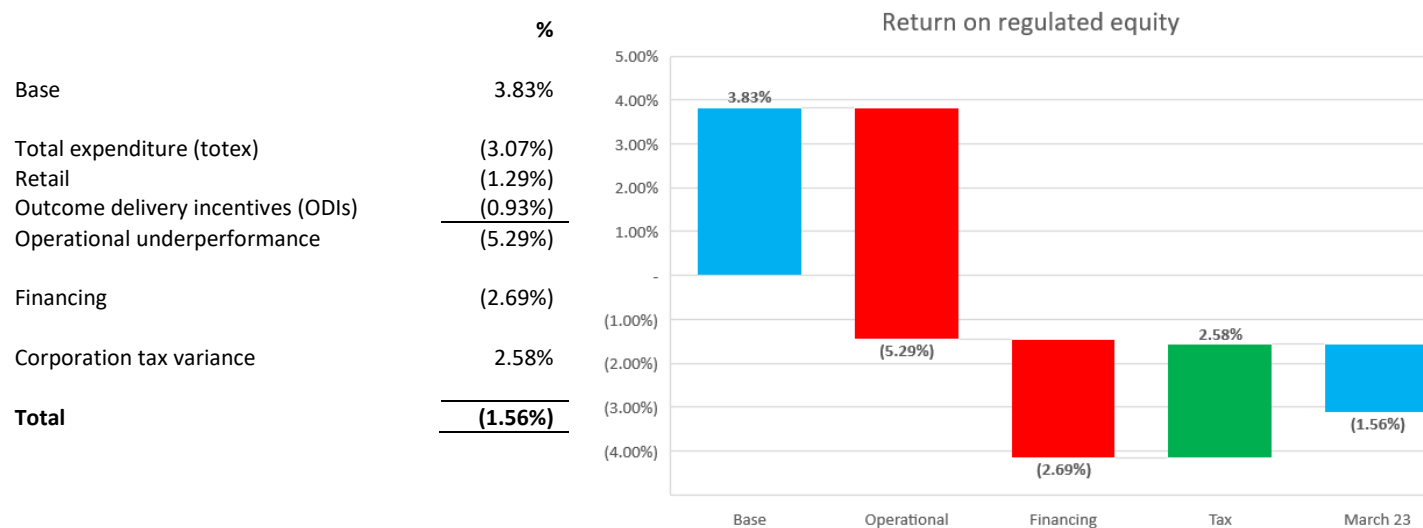
Notes to the regulatory accounts (continued)

Return on regulated equity

Dŵr Cymru has a base actual return on regulated equity (RORE) of 3.83% for 2022/23, based on the allowance set at the 2019 price review.

The Company delivered an actual RORE of -1.56% for the year ended 31 March 2023.

The Company's share of overall operational underperformance, adjusted where appropriate for timing differences, delivered a negative return of 5.29%. The difference between the actual and allowed average real interest rates on debt reduced the overall return by (2.69%). A corporation tax variance increased the actual return by 2.58%.



RORE calculations are based on a notionally structured, efficient company, and average RCVs. Tax has been assumed at the headline rate of 19%, in line with regulatory accounting guidance. Values below are quoted in 2017/18 year-average CPIH prices.

Wholesale Totex and Retail cost performance

The Company share of underperformance totalled £98m in the year, split Wholesale Totex £69m and Retail £29m, reducing RORE by 3.13% and 1.29% respectively. Tables 4C and 2C provide detailed analysis of Wholesale Totex and Retail cost performance.

Notes to the regulatory accounts (continued)

Return on regulated equity (continued)

ODI performance

Dŵr Cymru has a range of performance commitments which have potential penalties or rewards attached to them; these are set out in table 3A. Rewards and penalties are included in the RORE calculation when they are recognised rather than when collected. An ODI charge of £20m was accrued in 2021/22 which lowered RORE performance by 0.93%.

Financing performance

Dŵr Cymru's average real interest rate in 2022/23 was 3.93% (including the impact of hedging instruments), 1.77% higher than the cost of debt allowed for by Ofwat in PR19 (2.16%). The real interest rate excludes the movement in CPIH, not RPI, which the majority of our debt is linked to, which has risen by a larger proportion due to the macroeconomic environment impacting our interest and indexation charges, increasing our cost of debt this year.

Impact of voluntary customer sharing arrangements

During 2022/23, £10m of revenue, based on 2017/18 prices, was foregone in order to support the provision of affordability tariffs. This is not included in the RORE calculation but is included in "Total shareholder return" in table 1F (Line 19). Adjusted for customer value spend, the totex underperformance would reduce by 0.47% and overall RORE would reduce to 1.09%.

Notes to the regulatory accounts (continued)

Taxation

Current tax	£m
Current period:	
Corporation tax on R&D tax credit included	0.103
Prior periods	(0.157)
Total current tax credit	(0.054)

Current tax is corporation tax which is payable on a company's profit or loss adjusted for tax purposes and is only charged where a taxable profit arises after these tax adjustments - see current tax reconciliation.

Operating expenditure includes a Research & Development tax credit of £0.6m (2022: £0.6m). The tax credit is taxable and the corresponding charge of £0.1m (2022: £0.1m) is shown above. The Research & Development Expenditure Credit claimed is a government incentive that provides tax credits for qualifying R&D expenditure. Claims are made based on an assessment of qualifying expenditure in accordance with the criteria specified under the incentive.

Current taxes in respect of prior years of £0.2m (2022: £0.2m) relate to tax credits for R&D, energy efficient capital expenditure and the remediation of contaminated land.

Deferred taxes in respect of prior years includes a £7.0m charge (2022: £nil) arising from movements in deferred taxes resulting from changes to the valuation of inflation linked swaps during the year. At 31 March 2022, the underlying temporary difference was expected to reverse after March 2023 when the corporation tax rate would be 25%, and accordingly deferred taxes were calculated using this rate. Following an increase in inflation during the period, there has been a reversal in the current period in which the corporation tax rate is 19%. The effect of the difference between these tax rates gives rise to a change in the deferred tax balance and therefore an additional tax charge of £7.0m. This has been shown as a prior year item as it relates to a change in estimate made in a previous period.

In addition, the prior year deferred tax charge includes a credit of £0.5m (2022: £0.2m charge) relating to adjustments to deferred tax balances in respect of capital expenditure.

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Notes to the regulatory accounts (continued)

Taxation (continued)

Deferred taxes have been calculated at 25%. A rate of 25% was also used for the previous year, with the exception of temporary differences with a tax value of £42.4m which were expected to reverse in the year ended 31 March 2023. These were calculated using a rate of 19%, being the corporation tax rate applicable to that year.

The Company estimates that expenditure of £49m will qualify for a 130% 'super deduction' (2022: £26m). Consequently a tax benefit of £2.8m (£49m x 30% x 19%) has arisen in the period (2022: £1.5m) which reduces the net deferred tax liability.

The effective rate of tax for the year is higher (2022: lower) than the standard rate of corporation tax in the UK of 19% (2022: 19%). The differences are explained below:

Current tax reconciliation	£m
Loss before tax and fair value movements on derivatives	(518.520)
Multiplied by standard rate 19%	(98.519)
Expenses not deductible for tax purposes	0.150
Non-taxable IFRIC 18 income	(2.318)
Corporate interest restriction	-
Other timing differences – general provision	6.438
Tax losses (utilised)/created	61.126
Capital allowances in excess of depreciation	33.226
Prior year tax credit	(0.157)
	(0.054)
 Effective tax rate	 £m
Corporation tax credit relating to current period	0.103
Loss before tax and fair value movements on derivatives	(518.520)
 Effective corporation tax rate (current year)	 (0.02%)

Notes to the regulatory accounts (continued)

Taxation (continued)

Reconciliation of current tax for the year to the allowance for current tax included in the Final Determination

	£m	Commentary
Final determination current tax allowance	-	
Key differences are as follows:		
Adjustment re prior years	(0.157)	Additional tax credits claimed R&D expenditure and the remediation of contaminated land.
Tax on R&D expenditure credit	0.103	Corporation tax charge on R&D expenditure credit of £0.655m x 19%
Current tax charge	<u>(0.054)</u>	

The Group does not expect to pay corporation tax during AMP7 (2020 – 2025) in line with the Final Determination.

Notes to the regulatory accounts (continued)

Taxation (continued)

Deferred tax	£m
At 1 April	672.526
Charge to income statement	(88.204)
Charge to revaluation reserve	148.350
Credit to SOCI – re pensions	31.113
At 31 March	763.785
Analysis of amounts charged to the statement of comprehensive income and revaluation reserve:	
Defined benefit pension schemes	31.113
Increase in corporation tax rate-pension scheme	-
Credit to SOCI – re pensions	31.113
Revaluation of fixed assets	148.350
Increase in corporation tax- revaluation of fixed assets	-
Charge to revaluation reserve	148.350
Effect of	£m
Tax allowances in excess of depreciation	296.685
Deferred tax on revaluation of fixed assets	565.817
Capital gains rolled over	3.975
	866.477
Deferred tax on capital losses c/f	(87.564)
Deferred tax on losses of derivatives	(16.636)
Pensions	3.671
Other tax differences	(2.163)
	763.785

Notes to the regulatory accounts (continued)

Taxation (continued)

Tax charges for Statement 1A – Income Statement for the year ended 31 March 2023

	Statutory Accounts £m	RAG differences £m	Non appointed income £m	Reg accounts total £m
Loss before tax	(382.373)	(21.124)	0.341	(403.156)
Current tax				
Current period	-	-	-	-
Corporation tax on R&D tax credit included in operating costs	0.103			0.103
Prior periods	(0.157)			(0.157)
Total current tax	(0.054)	-	-	(0.054)
Deferred tax				
Current period	(89.436)	(5.281)	0.086	(94.631)
Prior periods	6.427			6.427
Effect of rate change	-			-
Total deferred tax	(83.009)	(5.281)	0.086	(88.204)
Total tax (charge)/credit	(83.063)	(5.281)	0.086	(88.258)

Reconciliation of deferred tax between statutory accounts and APR

	£m
Balance per statutory accounts	793.433
Differences between statutory accounts and APR	(29.915)
Differences re non- appointed income	0.267
At 31 March	763.785

Notes to the regulatory accounts (continued)

Taxation (continued)

Our group tax strategy

Our approach to risk management and governance arrangements

Our Chief Financial Officer has overall responsibility for tax governance and strategy with oversight from the Board and the Audit Committee.

Our tax strategy is supported by a detailed internal Group Tax Policy, together with a framework of internal systems and controls which govern the commercial operations of Glas Cymru Holdings and its subsidiaries (the Group). Our Head of Tax is responsible for the day-to-day application of the tax strategy and the management of the Group's tax affairs. Our Head of Tax works closely with our Chief Financial Officer and Director of Finance. All material tax issues, risks and developments are regularly communicated to the Audit Committee.

Our tax team comprises a small group of professionals with extensive experience of tax in the water sector. This expertise is supplemented by the use of reputable external advisers where required.

Our approach to tax planning and tax risk

All of our group companies are UK tax resident and subject to UK corporation tax on their profits. We do not use tax havens for tax avoidance purposes.

Our focus is on compliance; ensuring that all taxes are correctly calculated, accurately reported and paid when due.

We do not engage in artificial arrangements with no commercial purpose, or transactions which are directed at exploiting tax legislation in order to reduce the tax we pay. We comply with the spirit of the law as well as the letter of the law.

Tax risks are held within the Group's risk register and are updated regularly.

Our key tax risks principally arise from business developments and changes to tax legislation which may result in unforeseen tax implications. Where possible we seek to mitigate tax risk so that residual risk is minimal.

Our tax team is involved in all significant business developments enabling a full assessment of the tax implications to be made. We seek input from reputable external advisers where the tax implications are still unclear. In cases where residual uncertainty remains we liaise with HMRC to gain clarity.

Notes to the regulatory accounts (continued)

Taxation (continued)

Our group tax strategy (continued)

Our tax team participates in a number of water industry tax forums. The team receives regular technical updates from our professional advisers and from our periodic meetings with HMRC. This ensures that the team is kept informed of all relevant developments in tax law, enabling them to develop appropriate systems and controls to address legislative changes.

We actively contribute to the UK tax policy making process by participating in Government consultations.

Our relationship with HMRC

We are committed to an open, transparent relationship with HMRC. Our policy is to fully disclose any issues or errors as they arise and seek to resolve them as soon as practicable and hold the Fair Tax Mark accreditation.

We meet HMRC annually to formally discuss our business plans and developments, together with relevant changes to tax legislation.

The Group has been classified as low risk by HMRC from the inception of the Business Risk Review process in 2009. This was reviewed and reaffirmed by HMRC in the most recent triennial business risk review which took place during the year ending 31 March 2020.

Tax reliefs and incentives

Our Group has no shareholders and is run solely for the benefit of our customers. We therefore seek to utilise available tax reliefs and incentives put in place by the Government in order to maximise funds available to benefit our customers.

The Group invests heavily in capital expenditure, for example treatment works and our network of pipes and pumping stations, to continually improve the service we provide to our customers. We are therefore able to take advantage of tax reliefs which aim to stimulate this type of investment. A significant proportion of this capital expenditure can be deducted in calculating the Group's taxable profit. We are also able to deduct interest costs incurred to fund this capital investment. This effectively delays corporation tax payments to future periods. Our customers therefore also benefit from cheaper bills.

The Government's Research & Development (R&D) Expenditure Credit regime incentivises companies to increase their investment in R&D. The Group invests heavily in R&D and claims tax credits under this regime.

Notes to the regulatory accounts (continued)

Taxation (continued)

Transparency

We understand the value of insightful financial reporting to our customers, investors and other stakeholders. Taxation is an area which can be difficult to understand. We therefore seek to provide enhanced disclosures in order to give a clear and balanced view of our tax affairs.

Contribution

The Group is subject to a range of taxes and duties, including corporation tax, business rates, environmental taxes, employment taxes, National Insurance, VAT, fuel duty and licences. The Group thus makes a significant contribution to public finances, as well as employing nearly 3,500 people and playing an important role in the regional economy.

Full details of our tax strategy is available at <https://dwrcymru.com/taxstrategy>.

Annual Performance Report 2022/23

Long term Viability Statement

This statement can be found on page 100 in the Glas Cymru Holdings Cyfyngedig Annual Report and Accounts and is available on <https://corporate.dwrcymru.com/en/library/group-annual-report-and-accounts/glas-cymru-cyfyngedig>

Remuneration Committee Report

This statement can be found on page 173 in the Glas Cymru Holdings Cyfyngedig Annual Report and Accounts and is available on <https://corporate.dwrcymru.com/en/library/group-annual-report-and-accounts/glas-cymru-cyfyngedig>

Annual Performance Report 2022/23

Appendix 2 - WTW Complexity and DI restatement

Please note that we have included the number of imports in the restated data for all years (not just 2020/21 and 2021/22). This requirement was introduced at AMP7. For clarity, we have also included the data on imports separately in the columns blue columns.

We have also restated the DI for 2020/21 and 2021/22, so the total DI will not align with what we originally submitted. For all years prior to 2020/21, the DI is the same.

2021/22	Surface water				Ground water				Surface Water		Ground Water	
	Original		Restated		Original		Restated		Restated import		Restated import	
	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works
SD	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W1	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W2	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W3	188.18	19	7.22	2	0	0	0.00	0	0.00	0	0.00	0
W4	6.16	2	346.15	23	0.01	1	22.98	10	6.31	2	0.01	1
W5	657.44	29	503.20	25	27.64	14	4.83	5	0.00	0	0.40	1
W6	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0

2020/21	Surface water				Ground water				Surface Water		Ground Water	
	Original		Restated		Original		Restated		Restated import		Restated import	
	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works
SD	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W1	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W2	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W3	186.77	19	6.50	2	0	0	0.00	0	0.00	0	0.00	0
W4	6.12	2	353.77	24	0.01	1	25.15	11	6.07	2	0.01	1
W5	644.78	29	483.20	24	26.79	14	1.70	4	0.00	0	0.35	1
W6	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0

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2019/20	Surface water				Ground water				Surface Water		Ground Water	
	Original		Restated		Original		Restated		Restated import		Restated import	
	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works
SD	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W1	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W2	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W3	189.87	20	6.91	2	0	0	0.00	0	0.00	0	0.00	0
W4	5.96	0	350.14	25	0.02	0	25.39	11	5.96	2	0.02	1
W5	624.69	29	463.48	24	26.07	13	0.69	4	0.00	0	0.42	1
W6	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0

2018/19	Surface water				Ground water				Surface Water		Ground Water	
	Original		Restated		Original		Restated		Restated import		Restated import	
	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works
SD	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W1	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W2	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W3	179.23	20	6.60	2	0	0	0.00	0	0.00	0	0.00	0
W4	6.07	0	353.70	25	0.03	0	26.31	11	6.07	2	0.03	1
W5	628.17	29	453.18	24	27.35	13	1.07	4	0.00	0	0.44	1
W6	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0

Annual Performance Report 2022/23

2017/18	Surface water				Ground water				Surface Water		Ground Water	
	Original		Restated		Original		Restated		Restated import		Restated import	
	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works
SD	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W1	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W2	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W3	187.96	20	8.94	3	0	0	0.00	0	0.00	0	0.00	0
W4	5.73	0	370.76	26	0.03	0	24.79	12	5.75	2	0.03	1
W5	595.76	29	409.75	22	25.72	14	0.96	4	0.00	0	0.42	1
W6	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0

2016/17	Surface water				Ground water				Surface Water		Ground Water	
	Original		Restated		Original		Restated		Restated import		Restated import	
	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works
SD	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W1	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W2	0.00	0	0.00	0	0.35	0	0.00	0	0.00	0	0.00	0
W3	284.79	21	116.87	5	0	0	0.00	0	0.00	0	0.00	0
W4	5.64	0	288.69	25	0.00	0	21.71	13	5.45	2	0.02	2
W5	489.42	28	367.54	21	23.82	14	9.21	4	0.00	0	0.34	1
W6	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0

Annual Performance Report 2022/23

2015/16	Surface water				Ground water				Surface Water		Ground Water	
	Original		Restated		Original		Restated		Restated import		Restated import	
	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works
SD	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W1	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W2	4.32	1	0.00	0	0.4	0	0.00	0	0.00	0	0.00	0
W3	284.74	21	134.70	6	0	0	0.00	0	0.00	0	0.00	0
W4	5.88	0	267.17	26	0.00	0	23.67	14	5.69	2	0.03	2
W5	475.53	29	361.19	21	24.74	15	8.89	4	0.00	0	0.39	1
W6	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0

2014/15	Surface water				Ground water				Surface Water		Ground Water	
	Original		Restated		Original		Restated		Restated import		Restated import	
	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works
SD	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W1	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W2	8.18	1	0.00	0	0.52	0	0.00	0	0.00	0	0.00	0
W3	377.66	24	156.17	8	0	0	0.00	0	0.00	0	0.00	0
W4	5.83	0	278.58	25	0.00	0	21.83	15	5.59	2	0.51	3
W5	384.11	25	336.64	19	24.69	15	7.77	3	0.00	0	0.00	0
W6	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0

Annual Performance Report 2022/23

2013/14	Surface water				Ground water				Surface Water		Ground Water	
	Original		Restated		Original		Restated		Restated import		Restated import	
	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works
SD	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W1	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W2	8.11	1	0.00	0	0.51	0	0.00	0	0.00	0	0.00	0
W3	388.31	25	162.17	8	0	0	0.00	0	0.00	0	0.00	0
W4	5.82	0	275.45	26	0.00	0	24.33	15	5.88	2	0.56	3
W5	372.53	24	337.01	18	24.79	15	1.11	3	0.00	0	0.00	0
W6	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0

2012/13	Surface water				Ground water				Surface Water		Ground Water	
	Original		Restated		Original		Restated		Restated import		Restated import	
	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works
SD	0.00	0	0.00	0	0.01	1	0.00	0	0.00	0	0.00	0
W1	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W2	8.28	1	0.00	0	0.43	0	0.00	0	0.00	0	0.00	0
W3	379.15	25	170.42	9	0	0	0.00	0	0.00	0	0.00	0
W4	5.96	0	330.07	27	0.00	0	23.26	16	6.05	2	0.52	3
W5	379.11	24	271.86	16	23.23	15	0.55	3	0.00	0	0.00	0
W6	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0

2011/12	Surface water				Ground water				Surface Water		Ground Water	
	Original		Restated		Original		Restated		Restated import		Restated import	
	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works	DI	nr works
SD	0.00	0	0.00	0	0.041	1	0.00	0	0.00	0	0.00	0
W1	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0
W2	8.95	1	0.00	0	0.333	0	0.00	0	0.00	0	0.00	0
W3	385.18	25	167.37	9	0	0	3.04	1	0.00	0	0.00	0
W4	6.51	0	347.34	27	0.00	0	21.24	15	6.68	2	0.48	3
W5	400.84	24	287.01	16	25.81	15	1.67	3	0.00	0	0.00	0
W6	0.00	0	0.00	0	0	0	0.00	0	0.00	0	0.00	0

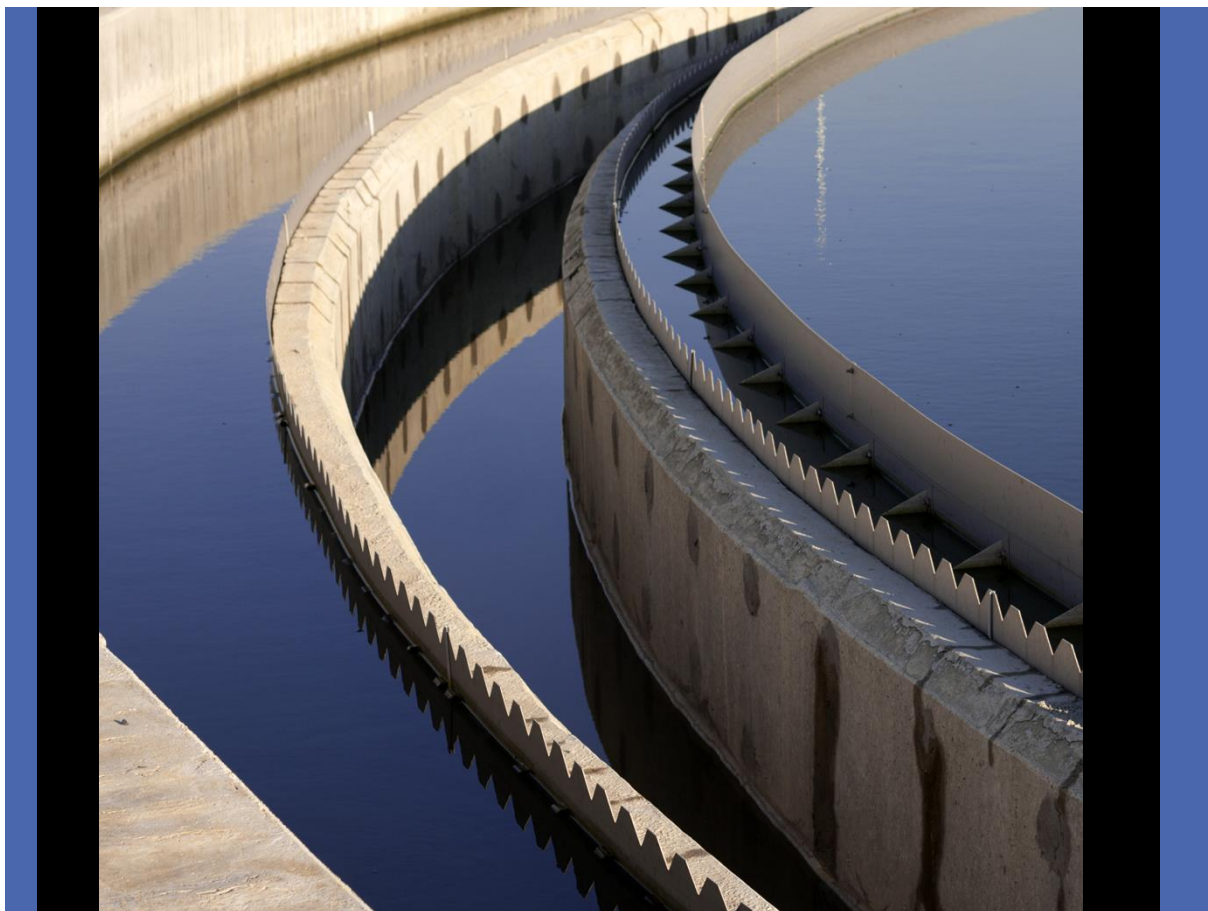
Appendix 3 - Reporter’s Letter of Assurance

APR23 Parts 4-11 Assurance Letter

Revision no: 0.3

Dŵr Cymru Welsh Water

Non-financial Assurance Services Framework
30 June 2023



APR23 Parts 4-11 Assurance Letter

Client name: Dŵr Cymru Welsh Water
Project name: Non-financial Assurance Services Framework
Client reference: **Project no:** B2271302
Document no: **Project manager:** Jose Colino
Revision 0.3 **Prepared by:** James Luger
Date: 30 June 2023 **File name:** APR23 Parts 4-11 Assurance Letter
Doc status: Final

Document history and status

Revision	Date	Description	Author	Checked	Reviewed	Approved
0.1	08/06/2023	Draft for client comment	JL	AKM	AKM	
0.2	16/06/2023	Final draft for comment	JL	AKM	AKM	
0.3	30/06/2023	Final issue	JL	AKM	AKM	JC

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30 June 2023

Attn: The Board, Dŵr Cymru Welsh Water

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

Subject: APR 2022-23 Parts 4-11 non-financial assurance

Overview

This letter provides an overview of our assurance activity relevant to your submission for Parts 4-11 of the Annual Performance Report (APR) for 2022/23.

We have provided separate assurance letters for Part 3 of the APR, for your Risk and Compliance Statement and for the Bioresources Market Information Return.

Scope of our assurance

You asked us to undertake a risk-based review to check the robustness and accuracy of the data you intend to submit for Sections 4-11 of the APR. Our assurance of your data is designed to support your own first and second line assurance activity.

Our assurance approach

All data reviews were held in May and June 2023 and have taken place remotely using Microsoft Teams. When reviewing your performance figures, we have taken a risk-based approach (via sampling) to 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 data audit we provided you with detailed feedback that explained our assessment of the risk associated with the reported performance figure and listed any actions.

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 either requested we complete follow up audits or asked your teams to respond to the issues via email. In such cases, we focused on whether we considered your teams had addressed the issues and sense checked the impact. In some cases, we re-checked the data to ensure material issues had been addressed and resolved.

Findings

During the course of our audits we identified the following material issues:

Ref	Material Issue	Resolution
4R 27	Total connected properties Cattle troughs have previously been included within the reported numbers for total connected properties which is not compliant with the RAG definition. Data quality to identify cattle troughs is inconsistent.	Resolved – Your team has taken a precautionary approach and is excluding the highest number of cattle troughs identified. Prior years data will be restated on this basis. The team has committed to undertake a study during 2023/24 to improve the data quality.
4R 28-32	Properties and population SQL Process automation scripts for all processes not independently reviewed and signed-off.	Resolved - SQL scripts will be independently reviewed as part of an ongoing plan.
5A 24	Energy consumption – water resources (MWh) Out of date emissions factors used for fuels/transport.	Resolved – Latest emissions factors applied at second audit and methodology statement revised to ensure future updates applied.
6A 7	Energy consumption – raw water transport (MWh) Issue related to identification of manually updated data (some examples of outdated information being used) and high confidence grades assigned to estimated data.	Resolved – Change log recommended to help track manual updates, and confidence grades revised.
6B 23	Energy consumption – treated water distribution (MWh) Data amendment issue (similar to above) and consistency in data being used and approach to billed electricity data, instead of charged data.	Resolved – Confidence grade reliability and accuracy to be revisited and changes to commentary made.
6C.25	Low pressure Concerns regarding the robustness of the process followed by the local ops teams to identify and quantify events using pressure loggers.	Resolved – The team acknowledged the issues and committed to develop a plan for the interim (remainder of current AMP) and longer term (AMP8) to move to a more automated process of data logging and reporting. As there is no better data available for the reporting year the commentary will note the potential shortcomings.
6D 15-20	SDB from metering Spreadsheets used for population and SDB benefit processes not independently reviewed or checked.	Resolved – The team have now undertaken independent checks and reviews of the process spreadsheets (1 st and 2 nd line assurance).
6D 23	Leakage improvements delivering benefits in 2020-25 Calculation for 6D.23 does not account for run time and over-estimates savings.	Resolved – Revised calculations revisited at second audit.
7E.21	Surface water separation drainage area removed The definition for this line is 'Drainage area removed from wastewater network from surface water separation activities' and is linked to performance commitment ft4 Surface water removed from sewers (m3).	Resolved – The team provided post-audit evidence of the scheme being compliant with mandatory Welsh Government standards for sustainable drainage and approval for the scheme

Ref	Material Issue	Resolution
	One scheme has been delivered in the year. A redeveloped site, Home Bargains, has been disconnected from the combined sewers and is now connected to the company's surface water sewer via drains on the site . Since the area still drains into the company sewers it is not clear that this should be included in reporting for this data line. We conclude that there is a risk that Ofwat might challenge the volume reported under this scheme.	by the SuDS Approving Body (Denbighshire County Council). This evidence was verbally shared with Jacobs on 13 th June and hard copy subsequently provided. On this basis the scheme can be considered as qualifying under this data line.
11A (all lines except 49-51)	Greenhouse gas (GHG) emissions reporting Several iterations of the data audit were required to confirm final figures. Material issues were noted regarding robustness of the internal data management, checks and assurance process.	Resolved – The data is now corrected for APR23, and the team have agreed to both an early process audit in 2023 and ongoing internal actions to improve GHG data management and ensure first and second line assurance processes are robust.
11A 49-51	Greenhouse gas (GHG) emissions reporting (Embodied emissions) Outstanding issue relating to the apportionment of emissions across the different lines, and the choice of RAG status to report to Ofwat.	Resolved – The team will be reporting data for 49-51 apportioned to a single line (50) due to the current availability of data and the maturity of the approach. This will constitute an 'Amber' report to Ofwat in 2023. Going forward, the team have committed to improvements in data and disaggregation across the lines for 23/24.

We identified no material issues with the remaining data that we reviewed for Sections 4-11 which therefore presents a low or low-to-medium level of reporting risk.

Assurance Statement

Overall, for the data we covered, 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 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,



Alexandra Martin
Director of Operations

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