Dŵr Cymru
Welsh Water

2021/22 Annual Performance Report

Parts 4 to 11 including Supporting Information

Contents

Page

Introduction

In line with the Ofwat Regulatory Accounting Guidelines, and in particular, RAG 3.13: Guidelines for the format and disclosures for the Annual Performance Report and RAG 4.10: 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.

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.
10 – Additional reporting to account for impacts of green recovery	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.

Annual Performance Report 2021/22

In addition to the Ofwat APR Excel tables and this document, there are also separate standalone APR documents covering parts 1, 2 and 3 which can be viewed from the hyperlinks given below.

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, plus several supporting documents within the appendices.

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 18 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 2022		Pro forma 4J	Base expenditure analysis for the 12 months ended 31 March 2022 - water resources and water network plus
Pro forma 4B	Analysis of debt		Pro forma 4K	Base expenditure analysis for the 12 months ended 31 March 2022 – wholesale wastewater
Pro forma 4C	Impact of price control performance to date on RCV		Pro forma 4L	Enhancement expenditure for the 12 months ended 31 March 2022 - water resources and water network plus
Pro forma 4D	Totex analysis for the 12 months ended 31 March 2022 – wholesale water resources and water network plus		Pro forma 4M	Enhancement expenditure for the 12 months ended 31 March 2022 - wastewater network plus and bioresources
Pro forma 4E	Totex analysis for the 12 months ended 31 March 2022 – wholesale wastewater		Pro forma 4N	Developer services expenditure for the 12 months ended 31 March 2022 - water resources and water network plus
Pro forma 4F	Major project capital expenditure by purpose for the 12 months ended 31 March 2022 – wholesale water		Pro forma 4O	Developer services expenditure for the 12 months ended 31 March 2022 - wastewater network plus
Pro forma 4G	Major project capital expenditure by purpose for the 12 months ended 31 March 2022 – wholesale wastewater		Pro forma 4P	Developer services non-price control expenditure for the 12 months ended 31 March 2022
Pro forma 4H	Financial metrics		Pro forma 4Q	Developer services - new connections, properties and mains
Pro forma 4I	Financial derivatives		Pro forma 4R	Non-financial information - Properties, customers and population

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 2022

Line	Line Description	Volume	Operating Costs	Revenue	Comments
	Units	Ml	£m	£m	
	DPs	3	3	3	
26	Total bulk supply exports	110,551.012	1.564	7.887	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[1]		401.729	85.317	Finance lease inflation swaps are included in the calculated values which is the same treatment as in table 1E.
808	Indicative weighted average nominal interest rate	9.59%			
809	Indicative weighted average cash interest rate	2.04%			

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.
4L has been prepared to reflect only derivatives held by Welsh Water and does not include those that have been on-lent from the financing arm as combined instruments, and therefore it is not possible to reconcile between the two figures.

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

[1] This has changed following inclusion of finance lease swaps
Version2 update 24 January 2023

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

Line	Line description	Units	DPs	12 months ended 31 March 2022					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	3.027	4.765	6.800	0.661	15.253	Disallowable costs are costs for which it is inappropriate to share any over (or under) spend with customers. This line includes £1.429m for compensation claims, fines and investigation costs. We have also included £13.824m of 'return of value' (discretionary expenditure to benefit customers), as a result of our not-for-shareholder model) in disallowable costs to remove this from the cost sharing mechanism.

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

Line	Line description	Units	DPs	12 months ended 31 March 2022					Comments
				Water resources	Water network+	Wastewater network+	Bioresources	Total	
Totex (net of business rates, abstraction licence fees and grants and contributions)									
6	Variance	£m	3	(20.720)	9.903	(20.732)	(1.119)	(32.667)	This section compares our actual wholesale expenditure for the year to the PR19 Final Determination. Our capital programme has been rephased from the Final Determination, it includes undertaking additional investigations and feasibility studies and the impact of Covid-19 on the programme.

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

<table>
<tr><th rowspan="2">Line</th><th rowspan="2">Line description</th><th rowspan="2">Units</th><th rowspan="2">DPs</th><th colspan="5">12 months ended 31 March 2022</th><th rowspan="2">Comments</th></tr>
<tr><th>Water resources</th><th>Water network+</th><th>Wastewater network+</th><th>Bioresources</th><th>Total</th></tr>
<tr><td colspan="10">Totex (net of business rates, abstraction licence fees and grants and contributions)</td></tr>
<tr><td>7</td><td>Variance due to timing of expenditure</td><td>£m</td><td>3</td><td>(1.749)</td><td>(17.122)</td><td>(29.876)</td><td>0.340</td><td>(48.407)</td><td>Water: Our capital programme has been rephased from the Final Determination and it has also been impacted by Covid-19. We have delays to our manganese removal schemes, lead pipe replacement programme and customer meters.

Wastewater: Our capital programme has been rephased from the Final Determination due to undertaking additional investigations and feasibility studies on our EDM programme, continuous and intermittent discharges and our quality programme.

For Event and Duration Monitoring we will be developing £13m of projects on coastal discharges which impact bathing and shellfish water. These schemes have been developed throughout Year 2 and 3 to ensure investment was targeted and schemes prioritised appropriately for delivery into year 4 and 5.

For Continuous and Intermittent Discharges, we will be developing a £11m scheme throughout Year3 for delivery into year 4 and 5 to improve the shellfish waters in the Menai.

We plan to deliver projects between year 3 and 5 for the NEP Quality programme after feasibility and investigations were carried out in Years 1 to 2 to help deliver the most cost beneficial schemes. Majority of projects are planned to be in construction in Year 4. This will ensure we deliver the planned outputs. Major investment will be at Eign and Rotherwas and Leominster.</td></tr>
</table>

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

Line	Line description	Units	DPs	12 months ended 31 March 2022/Price control period to date					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	(18.971)	27.025	9.144	(1.459)	15.740	**Water Resources:** After adjusting for timing differences in the capital programme, actual expenditure is lower than the Final Determination allowance. This includes £6.5m of Grants and Contributions for section 20 reservoir agreements which were allocated to the Water Network Plus price control in the Final Determination. Power generation from hydropower was materially higher than forecast in the business plan. **Water Network+:** After adjusting for the timing difference in the capital programme, actual expenditure is £27m greater than the Final Determination allowance. The additional expenditure is due to the material increase in energy prices and higher water consumption. We have incurred additional expenditure to reduce leakage. We have continued to see a higher than usual level of tourism in West Wales and increased mains bursts which has resulted in a material increase in tankering costs. **Wastewater:** After adjusting for timing differences in the capital programme, we have incurred additional expenditure of £7.7m for wastewater. Additional expenditure has been incurred as a result of increased energy prices in Wastewater Network+ which has been partly offset by the additional income generated in Bioresources.

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

Line	Line description	Units	DPs	12 months ended 31 March 2022					Comments
				Water resources	Water network+	Wastewater network+	Bioresources	Total	
Totex not subject to cost sharing									
24	Variance - 100% company allocation	£m	3	(3.331)	(5.424)	(0.895)	-	(9.650)	This line compares the actual costs not subject to cost sharing to the Final Determination. Third party costs for water resources were lower than forecast as a result of lower expenditure on our section 20 reservoirs. The variance for water network+ is negative, which is mostly due to income offset which has not shown here 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.11 (water) and 2E.22 (wastewater) is net of an income offset of £5.331m (Water), £1.037m (Wastewater).

Table 4D – Totex analysis for the 12 months ended 31 March 2022 – Water resources and water network+

<table>
<tr><th rowspan="3">Line</th><th rowspan="3">Line description</th><th rowspan="3">Units</th><th rowspan="3">DPs</th><th colspan="6">Expenditure in report year</th><th rowspan="3">Comments</th></tr>
<tr><th rowspan="2">Water resources</th><th colspan="4">Water network+</th><th rowspan="2">Total</th></tr>
<tr><th>Raw water transport</th><th>Raw water storage</th><th>Water treatment</th><th>Treated water distribution</th></tr>
<tr><td colspan="11">Operating expenditure</td></tr>
<tr><td>1</td><td>Base operating expenditure</td><td>£m</td><td>3</td><td>21.897</td><td>4.465</td><td>0.961</td><td>42.367</td><td>105.492</td><td>175.182</td><td>Atypical costs impact the figures as follows:<table><tr><th>Area</th><th>£m</th></tr><tr><td>Water resources</td><td>(0.107)</td></tr><tr><td>Raw water transport</td><td>(0.009)</td></tr><tr><td>Raw water storage</td><td>(0.005)</td></tr><tr><td>Water treatment</td><td>(0.877)</td></tr><tr><td>Treated water distribution</td><td>(0.057)</td></tr><tr><td>Total</td><td>(1.055)</td></tr></table></td></tr>
</table>

Table 4E – Totex analysis for the 12 months ended 31 March 2022 – Wastewater network+ and bioresources

<table>
<tr><th rowspan="3">Line</th><th rowspan="3">Line description</th><th rowspan="3">Units</th><th rowspan="3">DPs</th><th colspan="9">Expenditure in report year</th><th rowspan="3">Comments</th></tr>
<tr><th colspan="3">Network+ sewerage collection</th><th colspan="2">Network+ sewerage treatment</th><th colspan="3">Bioresources</th><th rowspan="2">Total</th></tr>
<tr><th>Foul</th><th>Surface water drainage</th><th>Highway drainage</th><th>Sewerage treatment and disposal</th><th>Imported sludge liquor treatment</th><th>Sludge transport</th><th>Sludge treatment</th><th>Sludge disposal</th></tr>
<tr><td colspan="14">Operating expenditure</td></tr>
<tr><td>1</td><td>Base operating expenditure</td><td>£m</td><td>3</td><td>32.358</td><td>14.049</td><td>7.293</td><td>71.179</td><td>5.562</td><td>5.818</td><td>3.061</td><td>4.380</td><td>143.700</td><td>Atypical costs impact the figures as follows:
<table><tr><th>Area</th><th>£m</th></tr><tr><td>Foul</td><td>0.293</td></tr><tr><td>Surface WD</td><td>(0.136)</td></tr><tr><td>Highway drainage</td><td>(0.075)</td></tr><tr><td>Sewerage TD</td><td>(0.899)</td></tr><tr><td>Imported Sludge LT</td><td>(0.002)</td></tr><tr><td>Sludge transport</td><td>(0.058)</td></tr><tr><td>Sludge treatment</td><td>(0.222)</td></tr><tr><td>Sludge disposal</td><td>(0.047)</td></tr><tr><td>Total</td><td>(1.146)</td></tr></table></td></tr>
</table>

Table 4H – Financial Metrics for the 12 months ended 31 March 2022

Line	Line description	Units	DPs	Current year	AMP to date	Comments
Financial indicators						
15	Interest cover (cash)	dec	2	3.48		This is calculated as Funds from operation (£291.465m) plus interest paid on borrowings (£117.471m) divided by interest paid on borrowings. (£117.471m) Interest paid on borrowings excluded any non -cash accretion of index-linked debt. Interest paid on borrowings consists of: Interest on external borrowings £ 16.6m Interest on intra group borrowings £ 62.3m Interest on finance leases £ 38.6m £117.5m
16	Adjusted interest cover (cash)	dec	2	1.17		This is calculated as Funds from operation (£291.465m) plus interest paid on borrowings (£117.471m) less RCV run off (£271.273m) divided by interest paid on borrowings. (£117.471m) Interest paid on borrowings excluded any non -cash accretion of index-linked debt.

Table 4I – Financial derivatives

<table>
<tr><th rowspan="3">Line</th><th rowspan="3">Line description</th><th rowspan="3">Units</th><th rowspan="3">DPs</th><th colspan="5">Expenditure in report year</th><th rowspan="3">Comments</th></tr>
<tr><th colspan="3">Nominal value by maturity (net)</th><th colspan="2">Total value at 31 March</th></tr>
<tr><th>1 – 2 years</th><th>2 - 5 years</th><th>Over 5 years</th><th>Nominal value (net)</th><th>Mark to Market</th></tr>
<tr><td colspan="10">Other financial derivatives</td></tr>
<tr><td>27</td><td>Other financial derivatives</td><td>£m</td><td>3</td><td>6.655</td><td>4.876</td><td>-</td><td>11.532</td><td>(39.089)</td><td>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.</td></tr>
<tr><td>28</td><td>Total financial derivatives</td><td>£m</td><td>3</td><td>28.756</td><td>4.876</td><td>638.277</td><td>671.910</td><td>182.083</td><td>Reconciliation to table 1C £m
Non-current assets
Financial instruments 10.468
Current assets
Financial instruments 31.476
Current liabilities
Financial instruments (46.840)
Non-current liabilities
Financial instruments (177.187)

Total financial instruments (182.083)

These derivatives will not reconcile back to 4B as this table has been prepared to reflect the derivatives held by Welsh Water whereas 4B 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.</td></tr>
<tr><td colspan="10">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.</td></tr>
</table>

Table 4J – Base expenditure analysis for the 12 months ended 31 March 2022 – Water resources and water network+

<table>
<tr><th rowspan="3">Line</th><th rowspan="3">Line description</th><th rowspan="3">Units</th><th rowspan="3">DPs</th><th colspan="6">Expenditure in report year</th><th rowspan="3">Comments</th></tr>
<tr><th rowspan="2">Water resources</th><th colspan="4">Water network+</th><th rowspan="2">Total</th></tr>
<tr><th>Raw water transport</th><th>Raw water storage</th><th>Water treatment</th><th>Treated water distribution</th></tr>
<tr><td colspan="11">Operating expenditure</td></tr>
<tr><td>6</td><td>Other operating expenditure</td><td>£m</td><td>3</td><td>9.111</td><td>1.029</td><td>0.735</td><td>31.894</td><td>39.430</td><td>82.199</td><td>Atypical costs impact the figures as follows:<table><tr><th>Area</th><th>£m</th></tr><tr><td>Water resources</td><td>(0.107)</td></tr><tr><td>Raw water transport</td><td>(0.009)</td></tr><tr><td>Raw water storage</td><td>(0.005)</td></tr><tr><td>Water treatment</td><td>(0.877)</td></tr><tr><td>Treated water distribution</td><td>(0.057)</td></tr><tr><td>Total</td><td>(1.055)</td></tr></table></td></tr>
</table>

Table 4K – Base expenditure analysis for the 12 months ended 31 March 2022 – 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	16.037	6.470	3.463	31.004	2.553	4.961	11.909	4.365	80.762	Atypical costs impact the figures as follows:

Area	£m
Foul	0.293
Surface WD	(0.136)
Highway drainage	(0.075)
Sewerage TD	(0.899)
Imported Sludge LT	(0.002)
Sludge transport	(0.058)
Sludge treatment	(0.222)
Sludge disposal	(0.047)
Total	**(1.146)**

Table 4L - Enhancement expenditure for the 12 months ended 31 March 2022 – Water resources and water network+

Line	Line description		Units	DPs	Expenditure in report year						Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25	Comments
						Water network+								
					Water resources	Raw water transport	Raw water storage	Water treatment	Treated water distribution	Total	Total	Total	Total	
EA/NRW environment programme (WINEP/NEP)														
3	Ecological Improvements at abstractions	Totex	£m	3	0.961	-	-	-	-	0.961	8.542	0.114	0.246	This year we have Capex expenditure of £0.948m which is primarily due to the completion of the Prioress Mill Habitat screen. This scheme has over-run with cost increases in the project because of additional costs to the original proposals and delays to the scheme. This scheme has been completed in this report year.

Table 4L - Enhancement expenditure for the 12 months ended 31 March 2022 – Water resources and water network+ (continued)

Line	Line description		Units	DPs	Expenditure in report year						Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25	Comments
					Water resources	Water network+				Total	Total	Total	Total	
						Raw water transport	Raw water storage	Water treatment	Treated water distribution					
EA/NRW environment programme (WINEP/NEP)														
12	Drinking Water Protected Areas (schemes)	Totex	£m	3	1.138	-	-	-	-	1.138	1.909	6.129	13.276	See Comments below.

There are 17 small schemes to address Drinking water protected areas with a total capex cost in the year of £1.138m. These schemes are part of an ongoing programme of works that will deliver improvements by the end of the AMP. However, because of Covid-19 the work in this area has been impacted due to the inability to engage with key stakeholders and landowners as well as the impact of staff being furloughed at our key consultants and contractors where trials and research had to be delayed. We are therefore behind target, spending £1.909m over the two years against an FD allowance of £6.129m.

Our investment has been reprofiled over the remaining years of the AMP and we expect to recover the programme by the end of the AMP.

Table 4L - Enhancement expenditure for the 12 months ended 31 March 2022 – Water resources and water network+ (continued)

Line	Line description		Units	DPs	Expenditure in report year						Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25	Comments
					Water resources	Water network+				Total	Total	Total	Total	
						Raw water transport	Raw water storage	Water treatment	Treated water distribution					
Supply-demand balance														
38	Total supply demand expenditure	Totex	£m	3	0.790	1.722	-	-	1.455	3.967	6.697	24.545	53.166	Commentary on the position of the capital schemes can be found below.

Capital Schemes

Within our Water Resources Management Plan 2019 (WRMP19) we identified three capital schemes to be delivered during AMP7 to improve our drought resilience and resolve the forecast supply demand imbalances. We also have one scheme carried over from AMP6. Work is underway on all four as described below.

Pembrokeshire

Feasibility studies have identified several potential options to enable minimisation of the difference between the daily peak and average rates of abstraction at Canaston Bridge. We have been investigating the potential to retro-fit variable speed drives to pumps at Canaston Bridge Raw Water Pumping Station (RWPS) to deliver a lower carbon and capital cost solution, whilst increasing reliability. This will be delivered alongside whole system optimisation and a final decision on the preferred option will be made in 2022.

The Llys-y frân to Preseli pump back scheme, which was carried over from AMP6, is nearing completion with final commissioning due by July 2022. This will enable us to increase the amount of water that can be provided from Llys-y frân reservoir to Preseli treatment works, ensuring the output can be maintained as storage declines in Rosebush reservoir.

Vowchurch

Works have been completed to reinforce sections of the Herefordshire network to support delivery of this scheme and consultants have been commissioned to undertake hydraulic modelling and pipeline pressure testing which will inform the design of the remaining network upgrades. The overall programme for this scheme has slipped due to the pressure testing taking longer than expected and so completion is now expected by the end of Year 5 which is later than that anticipated in our WRMP19. We are confident this does not introduce any additional risk to customer supplies as existing supply from the boreholes is still available and our ability to tanker water into the zone.

Tywyn Aberdyfi

To resolve the forecast supply demand imbalance and improve our long-term drought resilience we proposed in our Final WRMP19 to develop a scheme to deliver a new source of water from the Afon Dysynni to our Penybont treatment works. We are preparing to undertake detailed hydrological investigations during the summer of 2022 to confirm our modelled inflows of the existing Afon Fathew source and provide us with greater confidence of the need for the scheme. We are also continuing to take routine water quality samples from the Afon Dysynni to identify the best location for any new intake.

Cartref

Project Cartref is an initiative to tackle private leakage and reduce Per Capita Consumption (PCC). It aims to help deliver private leak repairs to achieve an AMP7 target reduction of 7.2 Ml/d. Our water efficiency strategy for Cartref has been to both undertake retrofitting as part of our home visits, as well as promoting our Get Water Fit platform to our customers within the project Cartref Area. Over the past year, we have also delivered a number of community scale engagements, working with local stakeholders and the wider community to promote water efficiency best practice and awareness of our offering, this ranges from events with local clubs (i.e. gardening groups), banners outside community halls, to school visits and retrofitting.

Cumulative actual expenditure against cumulative allowed expenditure to reporting year end

Actual expenditure for year 1 and 2 is £17.848m behind the allowed expenditure of £24.545m. Reasons include scheme delays due to a reassessment of scheme deliverables (£5m), Cartref programme delays (£10m) due to restricted access to customer premises as a result of Covid -19 and additional modelling at our Vowchurch scheme (£3m). We are expecting accelerated expenditure in the remaining AMP period.

Table 4L - Enhancement expenditure for the 12 months ended 31 March 2022 – Water resources and water network+ (continued)

Line	Line description		Units	DPs	Expenditure in report year						Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25	Comments
					Water resources	Water network+				Total	Total	Total	Total	
						Raw water transport	Raw water storage	Water treatment	Treated water distribution					
Other enhancement														
57	Improvements to taste, odour and colour	Totex	£m	3	-	-	-	1.583	11.600	13.183	30.062	43.710	105.138	See Comments below.
In the year we saw Capital expenditure of £13.131m which relates to several ongoing schemes. However, the FD allowance for this line shows a cumulative allowed expenditure on all schemes to reporting year end of £43.710 against a cumulative expenditure of all schemes to reporting year of £30.062m. The delivery of manganese schemes have been delayed due to the impact of Covid-19. All schemes remain in the programme and will be delivered before the end of the AMP.														

Table 4L - Enhancement expenditure for the 12 months ended 31 March 2022 – Water resources and water network+ (continued)

Line	Line description		Units	DPs	Expenditure in report year						Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25	Comments
					Water resources	Water network+ Raw water transport	Water network+ Raw water storage	Water network+ Water treatment	Water network+ Treated water distribution	Total	Total	Total	Total	
Other enhancement														
60	Meeting Lead Standards	Totex	£m	3	-	-	-	-	1.617	1.617	3.442	6.317	15.196	Expenditure for the year of £1.617 and for the two years amounting to £3.442 is £2.875 lower than our FD allowance of £6.317. The Covid-19 Pandemic along with limited access to customer properties have had detrimental impact on our progress to date but we are confident that the programme will recover by the end of the AMP.

Table 4L - Enhancement expenditure for the 12 months ended 31 March 2022 – Water resources and water network+ (continued)

Line	Line description		Units	DPs	Expenditure in report year						Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25	Comments
					Water resources	Water network+				Total	Total	Total	Total	
						Raw water transport	Raw water storage	Water treatment	Treated water distribution					
Other enhancement														
76	Visitor Centre	Capex	£m	3	0.475	-	-	-	-	0.475	3.800	2.571	5.568	The costs on this line relate to the Visitor Centre at Llys-y-Fran of £0.475m. The total cost of the AMP to date is £3.8m with an FD Allowance of £2.571m. We are ahead of the programme by £1.2m as we have accelerated the programme to deliver the scheme ahead of the planned date.

Table 4L - Enhancement expenditure for the 12 months ended 31 March 2022 – Water resources and water network+ (continued)

Line	**Line description**		**Units**	**DPs**	**Expenditure in report year**						**Cumulative expenditure on all schemes to reporting year end**	**Cumulative allowed expenditure on all schemes to reporting year end**	**Cumulative allowed expenditure on all schemes 2020-25**	**Comments**
					Water resources	**Water network+**				**Total**	**Total**	**Total**	**Total**	
						Raw water transport	**Raw water storage**	**Water treatment**	**Treated water distribution**					
Other enhancement														
78	Impounding Reservoirs	Capex	£m	3	21.299	-	-	-	-	21.299	38.954	37.848	81.984	We have numerous schemes at Impounding reservoirs where we have 26 commitment outputs to meet by the end of AMP7. We have currently completed eight of these, which is in line with our expectations. Our cumulative spend for years 1 and 2 was £1.106m ahead of our forecast – this has been spent on enabling works for outputs that will be delivered in years 3 and 4.

Table 4L - Enhancement expenditure for the 12 months ended 31 March 2022 – Water resources and water network+ (continued)

Line	Line description		Units	DPs	Expenditure in report year						Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25	Comments
					Water resources	Water network+				Total	Total	Total	Total	
						Raw water transport	Raw water storage	Water treatment	Treated water distribution					
Other enhancement														
80	Cwm Taf Water Supply	Capex	£m	3	-	-	-	5.809	-	5.809	6.676	6.120	14.721	See comments below.

To date we have capital expenditure of £5.809m in year two, with a cumulative expenditure of £6.676m. This cost includes:
Year 2 Actuals

- Production on the Outline Business Case completing Stage 3 of the Ofwat DPC process – now due October 2022
- Development of tender documentation – Procurement start November 2022
- Undertake detailed stakeholder engagements and reaching agreement on major principle permissions
- Substantially complete enabling survey work
- Negotiate and secure land purchase requirements

Proportional allocation
The costs that have been proportionally allocated between enhancement and base expenditure amount to £22.1m for both water and waste schemes: split £1.9m base maintenance and £20.2m enhancement. The splits are based on the cost driver of the schemes and whether there are any maintenance related activities within the schemes.
The schemes within 4L that have been proportionally allocated between the various enhancement lines amount to £15m and these splits are based on the nature of the scheme and business plan information.

Table 4M - Enhancement expenditure for the 12 months ended 31 March 2022 – Wastewater network+ and bioresources

Line	Line description		Units	DPs	Expenditure in report year								
					Wastewater network+					Bioresources			Total
					Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal	
EA/NRW environmental programme (WINEP/NEP)													
9	Flow monitoring at sewage treatment works	Totex	£m	3	-	-	-	10.762	-	-	-	-	10.762

Cumulative Expenditure on schemes completed in report year									Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25	Comment
Wastewater network+					Bioresources			Total				
Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal		Total	Total	Total	
-	-	-	-	-	-	-	-	-	13.467	11.375	25.250	See Comments Below.
We have incurred capital expenditure of £10.762m in the year with total costs for years 1-2 of £13.467m against a FD allowance of £11.375m. We are ahead of the FD allowance as schemes have been re-programmed with delivery between years 1,2,3 with acceleration of programme on Pass Forward Flows (PFF) Monitor Projects.												

Table 4M - Enhancement expenditure for the 12 months ended 31 March 2022 – Wastewater network+ and bioresources (continued)

Line	Line description		Units	DPs	Expenditure in report year								
					Wastewater network+					Bioresources			Total
					Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal	
EA/NRW environmental programme (WINEP/NEP)													
18	Storage schemes to reduce spill frequency at CSO's, Storm tanks, etc	Totex	£m	3	0.066	0.022	0.013	1.448	-	-	-	-	1.549

Cumulative Expenditure on schemes completed in report year									Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25	Comment
Wastewater network+					Bioresources			Total				
Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal		Total	Total	Total	
0.124	0.046	0.026	3.430	-	-	-	-	3.626	3.671	23.157	51.401	See comments below.

During the year we have had totex of £1.549m and year to date expenditure of £3.671m against an FD allowance of £23.157m. Original resource, scale up and implementation of the novel Storm Overflow Assessment Framework (SOAF) framework was disadvantaged by initial Covid-19 lockdown. Resource availability later in year 1, and early year 2, was further impacted by Covid-19 restrictions. Schemes have therefore been re-profiled with feasibility and investigations in Years 1-2 - with design and construction for Years 3-5. Two schemes have been completed in the year which are West Shore Sewage Pumping Station (SPS) £0.330m and Tywyn SPS £2.557m along with associated overhead costs.

Table 4M - Enhancement expenditure for the 12 months ended 31 March 2022 – Wastewater network+ and bioresources –(continued)

Line	Line description		Units	DPs	Expenditure in report year								
					Wastewater network+					Bioresources			Total
					Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal	
EA/NRW environmental programme (WINEP/NEP)													
30	Phosphorus removal	Totex	£m	3	0.157	0.064	0.036	9.910	-	-	-	-	10.167

Cumulative Expenditure on schemes completed in report year									Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25	Comment
Wastewater network+					Bioresources			Total	Total	Total	Total	
Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal					
2.373	0.973	0.545	15.429	-	-	-	-	19.320	22.681	35.885	79.715	See comments below.

Capital expenditure in the year was £9.158m with expenditure for the years 1-2 amounted to £22.681m against an FD allowance of £35.885m. Schemes have been re-profiled with feasibility, investigations, and design. The only AMP 7 schemes that were on site in years 1-2 were Norton and Prestigne - with design and construction for Years 3-5 for other projects. There have been more up-front investigations carried out to ensure right solutions going forward. In addition, we have completed in the year several schemes including Norton £1.985m and Prestigne £3.790m along with Denbigh Eglwyswen £5.092m and Weycock Cross £4.287m and other smaller schemes.

Table 4M - Enhancement expenditure for the 12 months ended 31 March 2022 – Wastewater network plus and bioresources –(continued)

Line	Line description		Units	DPs	Expenditure in report year								
					Wastewater network+					Bioresources			Total
					Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal	
EA/NRW environmental programme (WINEP/NEP)													
33	Reduction of sanitary parameters	Totex	£m	3	-	-	-	1.335	-	-	-	-	1.335

Cumulative Expenditure on schemes completed in report year									Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25	Comment
Wastewater network+					Bioresources			Total	Total	Total	Total	
Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal					
-	-	-	0.836	-	-	-	-	0.836	2.466	6.354	14.103	See comments below.
We have incurred expenditure of £1.335m during the year with expenditure of £2.466m for years 1-2 against the FD Allowance of £6.354m. We are undertaking more detailed root cause analysis before proceeding with 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.												

Table 4M - Enhancement expenditure for the 12 months ended 31 March 2022 – Wastewater network+ plus and bioresources–(continued)

Line	Line description		Units	DPs	Expenditure in report year								
					Wastewater network+					Bioresources			Total
					Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transpor t	Sludge Treatment	Sludge Disposal	
EA/NRW environmental programme (WINEP/NEP)													
39	Investigations	Totex	£m	3	2.341	0.959	0.537	0.758	-	-	-	-	4.595

Cumulative Expenditure on schemes completed in report year									Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25	Comment
Wastewater network+					Bioresources			Total				
Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal		Total	Total	Total	
-	-	-	-	-	-	-	-		6.442	2.931	6.506	In the year we have had expenditure of £4.595m and a total expenditure for the AMP to date of £6.442m against the FD allowance of £2.931m. We are ahead of the FD allowance which is largely due to more upfront investigations ahead of delivery of schemes along with Water Framework Directive (WFD) Investigations being reprofiled.

Table 4M - Enhancement expenditure for the 12 months ended 31 March 2022 – Wastewater network+ and bioresources

Line	Line description		Units	DPs	Expenditure in report year								
					Wastewater network+					Bioresources			Total
					Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal	
Other enhancement													
58	Odour	Totex	£m	3	-	-	-	1.731	-	-	-	-	1.731

Cumulative Expenditure on schemes completed in report year									Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25	Comment
Wastewater network+					Bioresources							
Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal	Total	Total	Total	Total	
-	-	-	-	-	-	-	-	-	2.359	1.453	3.323	Capital schemes have been reprofiled across the AMP.

Table 4M - Enhancement expenditure for the 12 months ended 31 March 2022 – Wastewater network+ and bioresources - (continued)

Line	Line description		Units	DPs	Expenditure in report year								
					Wastewater network+					Bioresources			Total
					Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal	
Other enhancement													
68	DWMPs	Capex	£m	3	1.075	0.441	0.247	0.007	-	-	-	-	1.770

Cumulative Expenditure on schemes completed in report year									Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25	Comment
Wastewater network+					Bioresources			Total	Total	Total	Total	
Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal					
-	-	-	-	-	-	-	-	-	3.636	3.472	7.706	See comments below.
In the year we have capital expenditure of £1.770m with a total expenditure for years 1 and 2 of £3.636m against a FD Allowance of £3.472m. The Drainage and Wastewater Management Plan (DWMP) estimated programme at PR19 has undergone several additional requirements to the main DWMP framework. The additional requirements from the Enactment of the Environment Bill, the New DWMP Guiding principles, the level of additional stakeholder engagement required, all have altered our original programme of work. These alterations are being incorporated into our process over the AMP period therefore an increased spend has been seen this year and planned for future years.												

Table 4M - Enhancement expenditure for the 12 months ended 31 March 2022 – Wastewater network+ and bioresources – (continued)

Line	Line description		Units	DPS	Expenditure in report year								Total	Comment
					Wastewater network+					Bioresources				
					Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal		
Other enhancement														
70	Loughor	Capex	£m	3	0.773	0.317	0.177	1.189	-	-	(0.008)	-	2.448	The expenditure on this line are costs relating to schemes closures and land issues.

Cumulative Expenditure on schemes completed in report year									Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25
Wastewater network+					Bioresources			Total	Total	Total	Total
Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal				
-	-	-	-	-	-	-	-	-	17.991	16.073	35.677

Table 4M - Enhancement expenditure for the 12 months ended 31 March 2022 – Wastewater network+ and bioresources – (continued)

Line	Line description		Units	DPs	Expenditure in report year								
					Wastewater network+					Bioresources			Total
					Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal	
Other enhancement													
72	Gowerton /Llanelli UWWTD	Capex	£m	3	0.865	0.354	0.198	-	-	-	-	-	1.417

Cumulative Expenditure on schemes completed in report year									Cumulative expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes to reporting year end	Cumulative allowed expenditure on all schemes 2020-25	Comment
Wastewater network+					Bioresources			Total	Total	Total	Total	
Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge Liquor Treatment	Sludge Transport	Sludge Treatment	Sludge Disposal					
-	-	-	-	-	-	-	-	-	1.981	-	-	The capital expenditure on this line for both years relates to issues on Land closures. The schemes under this line have all been completed.

Proportional allocation

The costs that have been proportionally allocated between enhancement and base expenditure amount to £22.1m for both water and waste schemes: split £1.9m base maintenance and £20.2m enhancement. The splits are based on the cost driver of the schemes and whether there are any maintenance related activities.

The schemes within 4M that have been proportionally allocated between the various enhancement lines amount to £24m and these splits are based on the nature of the scheme, population equivalents for growth and business plan information.

Table 4R - Connected properties, customers and population

Line	Line Description	Units	DPs	Water	Wastewater	Commentary
Population data						
28	Resident population	000s	3	3104.753	3107.907	The resident population for Water and Wastewater represents the annual average resident population served and includes both households and businesses. It is based upon the 2020 Mid-Year Estimate (MYE) of population at the postcode level which is mapped to our water and waste boundaries. Growth is added to MYE to bring the estimates up to the annual average reporting year and non-connected population excluded to provide an estimate of the population served / connected. Growth for water is based on / consistent with our Water Resource Management Plan (WRMP) Resident population growth. Non-household population - Communal population estimates from the Census 2011. This is rolled forward using growth from the WRMP19 to provide a mid-reporting year estimate.
29	Non-resident population (wastewater)	000s	3		195.522	Non-Resident Population for Waste is based on a study undertaken by GTS Ltd using the STEAM model. This is updated every 3 years and was updated in January 2019. This figure has been adjusted for 2021-22 to account for increased tourism experienced across the company supply area due to the continuing impacts of the Covid-19 pandemic on international travel.

Annual Performance Report 2021/22

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 2022
Pro forma 5B	Water resources operating cost analysis for the 12 months ended 31 March 2022

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 2022

Line	Line description	Units	DPs	Input	Comments
Water resources					
18	Total number of water reservoirs	Nr	0	74	An increase of one from last year for Llyn Eiddew Mawr, a natural lake always used but was omitted from 5A.18 in previous years. Three reservoirs are reported in APR 6A.1 as they are balancing reservoirs and are not included within the 74 reported in 5A.18. The restated 2020-21 figure is 74 (previously submitted as 73).
19	Total volumetric capacity of water reservoirs	Ml	0	459362	See line 5A.18 - An increase of 134 Ml for Llyn Eiddew Mawr reservoir.
27	Total number of raw water abstraction exports	Nr	0	1	This relates to the abstraction of raw water from Elan Valley to Severn Trent Water.

Line	Line description	Units	DPs	Input	Comments
23	Average pumping head – raw water abstraction	m.hd	2	31.70	See comments below.

In preparing our 2021-22 APH data we have identified that our 2020-21 cost allocation across price controls (raw water abstraction, raw water transport, water treatment and treated water distribution) was incorrectly allocated. In addition, further work has been undertaken on APH at boreholes resulting in data improvements. The restated 2020-21 figure is 36.73 m.hd (previously submitted as 39.44 m.hd).

Further validation exercises have been carried out this year following the external process review carried out by Water Research Centre (WRc) and Turner and Townsend (T&T) in December 2021.
These include the exploration of additional measured data, identifying further sites that contain live data (subsequently not using static head values for these assets), recognising sites with multiple interchangeable pumps, and consolidating the associated data values.

2021-22 WPS Data Analysis	% Schemes	% Flow * Lift	2020-21 % Scheme Variance	2020-21 % Flow * Lift Variance
Live Pressure readings and live flow data [1]	62.68%	45.22%	+11.97%	+24.95%
Live Pressure readings and estimated flow data [2]	1.41%	0.00%	-0.54%	-0.01%
WOMs Pressure data and live flow data [3]	11.80%	15.98%	-5.52%	-7.73%
WOMs Pressure data and estimated flow data [4]	0.00%	0.00%	-0.35%	0.00%
Average Lift Pressure data and live flow data [5]	7.92%	9.62%	-1.79%	-4.54%
Average Lift Pressure data and estimated flow data [6]	0.18%	0.00%	-0.35%	0.01%
Historical Pressure data and live flow data [7]	15.85%	29.18%	-2.53%	-5.76%
Historical Pressure data and estimated flow data [8]	0.18%	0.00%	-0.88%	-6.90%
Total	**100.00%**	**100.00%**	**0.00%**	**0.00%**

Source Data	Description
[1]	Live flow and pressure data from Prism and Libra
[2]	Estimated flow data and live pressure data from Prism and Libra
[3]	Pressure data gathered from corporate systems and live flow data
[4]	Pressure data gathered from corporate systems and estimated flow data
[5]	Average lift of live sites with similar flow applied and live flow data
[6]	Average lift of live sites with similar flow applied and estimated flow data
[7]	Historical lift values used and live flow data
[8]	Historical lift values used and estimated flow data

Breakdown of raw data inputs used to calculate average pumping head and comparison against 2020-21.

There are several assets contributing a substantial proportion of the average pumping head number whereby a historical pressure value (taken manually on site) has been used due to the unavailability of live data. Further exploration will be carried out at these sites to determine the complexities of attaining live data.
The number of treatment works used in this calculation is the same as in 2020-21 and matches the number of WTW reported by the asset management team for this measure.
Bulk supply exports have been excluded in line with the RAG 2.09 reporting guidance on the definition of average pumping head.

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 six 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 2022.
Pro forma 6B	Treated water distribution - assets and operations for the 12 months ended 31 March 2022.
Pro forma 6C	Water network plus - Mains, communication pipes and other data for the 12 months ended 31 March 2022.
Pro forma 6D	Demand management - Metering and leakage activities for the 12 months ended 31 March 2022.
Pro forma 6E	Leakage activity detailed analysis.
Pro forma 6F	WRMP annual reporting on delivery – non-leakage activities.

Table 6A - Raw water transport, raw water storage and water treatment data for the 12 months ended 31 March 2022

Line	Line description	Units	DPs	Input	Comments
Raw water transport and storage					
6	Average pumping head - raw water transport	m.hd	2	19.38	See comments below.

In preparing our 2021-22 APH data we have identified that our previous 2020-21 cost allocation across price controls (raw water abstraction, raw water transport, water treatment and treated water distribution) was incorrectly allocated. The restated 2020-21 figure is 21.12 m.hd (previously submitted as 17.15 m.hd).

Further validation exercises have been carried out this year following the external process review carried out by Water Research Centre (WRc) and Turner and Townsend (T&T) in December 2021.

These include the exploration of additional measured data, identifying further sites that contain live data (subsequently not using static head values for these assets), recognising sites with multiple interchangeable pumps, and consolidating the associated data values.

2021-22 WPS Data Analysis	% Schemes	% Flow * Lift	2020-21 % Scheme Variance	2020-21 % Flow * Lift Variance
Live Pressure readings and live flow data [1]	62.68%	45.22%	+11.97%	+24.95%
Live Pressure readings and estimated flow data [2]	1.41%	0.00%	-0.54%	-0.01%
WOMs Pressure data and live flow data [3]	11.80%	15.98%	-5.52%	-7.73%
WOMs Pressure data and estimated flow data [4]	0.00%	0.00%	-0.35%	0.00%
Average Lift Pressure data and live flow data [5]	7.92%	9.62%	-1.79%	-4.54%
Average Lift Pressure data and estimated flow data [6]	0.18%	0.00%	-0.35%	0.01%
Historical Pressure data and live flow data [7]	15.85%	29.18%	-2.53%	-5.76%
Historical Pressure data and estimated flow data [8]	0.18%	0.00%	-0.88%	-6.90%
Total	**100.00%**	**100.00%**	**0.00%**	**0.00%**

Source Data	Description
[1]	Live flow and pressure data from Prism and Libra
[2]	Estimated flow data and live pressure data from Prism and Libra
[3]	Pressure data gathered from corporate systems and live flow data
[4]	Pressure data gathered from corporate systems and estimated flow data
[5]	Average lift of live sites with similar flow applied and live flow data
[6]	Average lift of live sites with similar flow applied and estimated flow data
[7]	Historical lift values used and live flow data
[8]	Historical lift values used and estimated flow data

Breakdown of raw data inputs used to calculate average pumping head and comparison against 2020-21.

There are several assets contributing a substantial proportion of the average pumping head number whereby a historical pressure value (taken manually on site) has been used due to the unavailability of live data. Further exploration will be carried out at these sites to determine the complexities of attaining live data. The number of treatment works used in this calculation is the same as in 2020-21 and matches the number of WTW reported by the asset management team for this measure.

Bulk supply exports have been excluded in line with the RAG 2.09 reporting guidance on the definition of average pumping head.

Table 6A - Raw water transport, raw water storage and water treatment data for the 12 months ended 31 March 2022 (continued)

Line	Line description	Units	DPs	Input	Comments
Raw water transport and storage					
8	Import from United Utilities Heronbridge.	Nr	0	1	Import from United Utilities Heronbridge.

Line	Water treatment – treatment type analysis	Surface water		Ground water		Commentary
		Water treated	Number of works	Water treated	Number of works	
	Units	Ml/d	nr	Ml/d	nr	
	DPs	2	0	2	0	
16	W3 works	188.18	19	0.00	0	One Water Treatment Works (WTW) was taken offline for operational efficiency (Carno). This asset is a surface water WTW which was taken offline by choice to reduce operational activity. The water is still available when required.

Table 6A - Raw water transport, raw water storage and water treatment data for the 12 months ended 31 March 2022 (continued)

Line	Water treatment – works size	% of total	Number of works	Commentary
	Units	**DI**	**Nr**	
	DPs	**1**	**0**	
20	WTWs in size band 1	0.2	7	The Maximum Production Capacity of the works is in line with the Peak Week Production Capacity (PWPC) used for the Unplanned Outage Performance Commitment.
21	WTWs in size band 2	3.0	16	See 6A.20.
22	WTWs in size band 3	2.8	8	See 6A.20.
23	WTWs in size band 4	9.4	11	See 6A.20.
24	WTWs in size band 5	12.6	9	See 6A.20.
25	WTWs in size band 6	28.0	10	See 6A.20.
26	WTWs in size band 7	17.0	2	See 6A.20.
27	WTWs in size band 8	27.0	2	See 6A.20.

Table 6A - Raw water transport, raw water storage and water treatment data for the 12 months ended 31 March 2022 (continued)

Line	Line description	Units	DPs	Input	Comments
Water treatment – other information					
31	Average pumping head – water treatment	m.hd	2	15.53	See comments below

In preparing our 2021-22 APH data we have identified that our previous 2020-21 cost allocation across price controls (raw water abstraction, raw water transport, water treatment and treated water distribution) was incorrectly allocated. The restated 2020-21 figure is 15.34 m.hd (previously submitted as 41.58 m.hd).

Further validation exercises have been carried out this year following the external process review carried out by Water Research Centre (WRc) and Turner and Townsend (T&T) in December 2021.

These include the exploration of additional measured data, identifying further sites that contain live data (subsequently not using static head values for these assets), recognising sites with multiple interchangeable pumps, and consolidating the associated data values.

2021-22 WPS Data Analysis	% Schemes	% Flow * Lift	2020-21 % Scheme Variance	2020-21 % Flow * Lift Variance
Live Pressure readings and live flow data [1]	62.68%	45.22%	+11.97%	+24.95%
Live Pressure readings and estimated flow data [2]	1.41%	0.00%	-0.54%	-0.01%
WOMs Pressure data and live flow data [3]	11.80%	15.98%	-5.52%	-7.73%
WOMs Pressure data and estimated flow data [4]	0.00%	0.00%	-0.35%	0.00%
Average Lift Pressure data and live flow data [5]	7.92%	9.62%	-1.79%	-4.54%
Average Lift Pressure data and estimated flow data [6]	0.18%	0.00%	-0.35%	0.01%
Historical Pressure data and live flow data [7]	15.85%	29.18%	-2.53%	-5.76%
Historical Pressure data and estimated flow data [8]	0.18%	0.00%	-0.88%	-6.90%
Total	**100.00%**	**100.00%**	**0.00%**	**0.00%**

Source Data	Description
[1]	Live flow and pressure data from Prism and Libra
[2]	Estimated flow data and live pressure data from Prism and Libra
[3]	Pressure data gathered from corporate systems and live flow data
[4]	Pressure data gathered from corporate systems and estimated flow data
[5]	Average lift of live sites with similar flow applied and live flow data
[6]	Average lift of live sites with similar flow applied and estimated flow data
[7]	Historical lift values used and live flow data
[8]	Historical lift values used and estimated flow data

Breakdown of raw data inputs used to calculate average pumping head and comparison against 2020-21.

There are several assets contributing a substantial proportion of the average pumping head number whereby a historical pressure value (taken manually on site) has been used due to the unavailability of live data. Further exploration will be carried out at these sites to determine the complexities of attaining live data.

The number of treatment works used in this calculation is the same as in 2020-21 and matches the number of WTW reported by the asset management team for this measure.

Bulk supply exports have been excluded in line with the RAG 2.09 reporting guidance on the definition of average pumping head.

Table 6B – Treated water distribution – assets and operations for the 12 months ended 31 March 2022

Line	Line description	Units	DPs	Input	Comments
Assets and operations					
9	Total annual leakage	Ml/d	2	157.41	See APR part 3 (En4 Leakage).
22	Number of potable water pumping stations delivering surface water into the treated water distribution system	Nr	0	34	A decrease of one as a result of a site being decommissioned in the year.
23	Number of potable water pumping stations that re-pump water already within the treated water distribution system	Nr	0	532	A decrease of six as a result of five water pumping stations being decommissioned in the year and one water pumping station being identified as a common treated source and therefore should not have been included last year. The restated 2020-21 figure is 537 (previously submitted as 538).
25	Total number of service reservoirs	Nr	0	446	A decrease of one as a result of an SRV being decommissioned in the year.

Line	Line description	Units	DPs	Input	Comments
28	Average pumping head – treated water distribution	m.hd	2	73.64	See comments below.

In preparing our 2021-22 APH data we have identified that our previous 2020-21 cost allocation across price controls (raw water abstraction, raw water transport, water treatment and treated water distribution) was incorrectly allocated. In addition, further work has been undertaken on APH at boreholes resulting in data improvements. The restated 2020-21 figure is 72.57 m.hd (previously submitted as 46.83 m.hd).

Further validation exercises have been carried out this year following the external process review carried out by Water Research Centre (WRc) and Turner and Townsend (T&T) in December 2021.
These include the exploration of additional measured data, identifying further sites that contain live data (subsequently not using static head values for these assets), recognising sites with multiple interchangeable pumps, and consolidating the associated data values.

2021-22 WPS Data Analysis	% Schemes	% Flow * Lift	2020-21 % Scheme Variance	2020-21 % Flow * Lift Variance
Live Pressure readings and live flow data [1]	62.68%	45.22%	+11.97%	+24.95%
Live Pressure readings and estimated flow data [2]	1.41%	0.00%	-0.54%	-0.01%
WOMs Pressure data and live flow data [3]	11.80%	15.98%	-5.52%	-7.73%
WOMs Pressure data and estimated flow data [4]	0.00%	0.00%	-0.35%	0.00%
Average Lift Pressure data and live flow data [5]	7.92%	9.62%	-1.79%	-4.54%
Average Lift Pressure data and estimated flow data [6]	0.18%	0.00%	-0.35%	0.01%
Historical Pressure data and live flow data [7]	15.85%	29.18%	-2.53%	-5.76%
Historical Pressure data and estimated flow data [8]	0.18%	0.00%	-0.88%	-6.90%
Total	**100.00%**	**100.00%**	**0.00%**	**0.00%**

Source Data	Description
[1]	Live flow and pressure data from Prism and Libra
[2]	Estimated flow data and live pressure data from Prism and Libra
[3]	Pressure data gathered from corporate systems and live flow data
[4]	Pressure data gathered from corporate systems and estimated flow data
[5]	Average lift of live sites with similar flow applied and live flow data
[6]	Average lift of live sites with similar flow applied and estimated flow data
[7]	Historical lift values used and live flow data
[8]	Historical lift values used and estimated flow data

Breakdown of raw data inputs used to calculate average pumping head and comparison against 2020-21.

There are several assets contributing a substantial proportion of the average pumping head number whereby a historical pressure value (taken manually on site) has been used due to the unavailability of live data. Further exploration will be carried out at these sites to determine the complexities of attaining live data.

The number of treatment works used in this calculation is the same as in 2020-21 and matches the number of WTW reported by the asset management team for this measure. Bulk supply exports have been excluded in line with the RAG 2.09 reporting guidance on the definition of average pumping head.

Table 6C – Water network plus - Mains, communication pipes and other data for the 12 months ended 31 March 2022

Line	Line description	Units	DPs	Input	Comments
Communication pipes					
9	Number of lead communication pipes	Nr	0	205258	The method for estimating the number of lead communication pipes has changed for this year with a new lead predictor model.
Treated water distribution - mains age profile					
12	Total length of potable mains laid or structurally refurbished pre-1880	km	1	128.0	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.
13	Total length of potable mains laid or structurally refurbished between 1881 and 1900	km	1	738.4	See 6C.12
14	Total length of potable mains laid or structurally refurbished between 1901 and 1920	km	1	2493.6	See 6C.12
15	Total length of potable mains laid or structurally refurbished between 1921 and 1940	km	1	1919.3	See 6C.12
16	Total length of potable mains laid or structurally refurbished between 1941 and 1960	km	1	4499.9	See 6C.12
17	Total length of potable mains laid or structurally refurbished between 1961 and 1980	km	1	6105.1	See 6C.12
18	Total length of potable mains laid or structurally refurbished between 1981 and 2000	km	1	6684.2	See 6C.12
19	Total length of potable mains laid or structurally refurbished post 2001	km	1	5263.9	See 6C.12 - Potable mains laid or structurally refurbished in 2001 have been included within this line.
Other					
20	Company area	km2	0	20082	The 20,082 km^2 excludes 2 km^2 of Inset Appointment areas.
22	Compliance Risk Index	nr	2	9.77	Published DWI figure
23	Event Risk Index	nr	0	355	Published DWI figure

Version 2 18 January 2023

Table 6D - Demand management – Metering and leakage activities for the 12 months ended 31 March 2022

Line	Line description	Units	DPs	Basic meter	AMR meter	AMI meter	Comments
Metering activities – Totex expenditure							
1	New optant meter installation for existing customers	£m	3	3.019	0.008	0.000	The total allowed expenditure for years 1 and 2 amounts to £7.8m and our cumulative actual spend is £4.1m. The reason for the underspend relates to access issues during Covid.
3	New business meter installation for existing customers	£m	3	0.009	0.000	0.000	

Line	Line description	Units	DPs	Basic meter	AMR meter	AMI meter	Comments
Metering activities – Explanatory variables							
6	New optant meters installed for existing customers	000s	3	10.442	0.037	0.002	Basic meters are predominately used for meter optants, unless there is a potential risk to the meter reader i.e., hazardous location, difficulty gaining access to the property in the future then we would install an AMR/AMI meter instead. AMI meters are predominately installed on new connections where there is a fire sprinkler system. The Kamstrup meter which is AMI capable is used for these installations as they provide the correct pressure and flow required in the event of a fire.

Metering

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. For 2021-22 total household meter optants were forecast at 12,451 or 1.8% of the prior years unmeasured households. The number quoted in 6D.6 is lower due to the ongoing impacts of Covid-19 which resulted in a drop in meter optants during 2020-21 and a recovery in 2021-22 but not to pre-covid level. Replacements do not have any bearing to the WRMP.

Smart metering

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.

Leakage

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.

Table 6F WRMP annual reporting – non leakage activities

Line Description	Classification	Delivery year (in use)	Capital expenditure						Opex costs						Benefits						Complete for internal interconnectors only				
			2020-21	2021-22	2022-23	2023-24	2024-25	After 2024-25	2020-21	2021-22	2022-23	2023-24	2024-25	After 2024-25	2020-21	2021-22	2022-23	2023-24	2024-25	After 2024-25	Length	Diameter	Pipe material	Pumping capacity installed	Storage capacity installed
Units	Text	Year	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	Ml/d	Ml/d	Ml/d	Ml/d	Ml/d	Ml/d	km	mm	Text	kW	m3
DPs	0	0	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	1	1	0	0	3
Activity																									
Afon Dysyni Abstraction	Supply-side improvements delivering benefits in 2020-2025	2024-25	0.008	(0.003)	0.393	1.760	2.231	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	2.00	0.00	-	-	-	-	-
Canaston[1] Bridge	Supply-side improvements delivering benefits in 2020-2025	2022-23	0.669	2.233	1.956	0.000	0.366	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.00	14.00	14.00	14.00	14.00	-	-	-	-	-
Llysyfran[1] Reservoir to Preseli WTW Raw W	Supply-side improvements delivering benefits in 2020-2025	2022-23	0.199	0.189	1.012	0.000	0.000	0.000	0.000	0.000	0.018	0.031	0.031	0.031	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-	-
WRMP Vowchurch	Internal interconnectors delivering benefits in 2020-2025	2024-25	0.000	0.164	1.807	3.943	0.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	3.00	3.00	-	-	-	-	-
Cartref	Demand-side improvements delivering benefits in 2020-2025 (excl leakage and metering)	2020-21	1.408	1.385	1.445	1.445	1.445	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.44	0.44	0.44	0.44	0.44	-	-	-	-	-

[1] Canaston Bridge/Llys-y-fran - The combination of Canaston Bridge and Llys-y-Fran schemes improves Pembrokeshire capacity available to deliver an overall 14 Ml/d SDB benefit, allocated to the Canaston line.

Table 6F WRMP annual reporting – non leakage activities (continued)

1. **WRMP Schemes excluding interconnectors (Vowchurch)**

For 2021-22 we are reporting a value of 0 Ml/d for supply side improvements to the supply demand balance under both the dry year annual average and/or critical period planning scenarios. We also reported 0 Ml/d for 2020-21.

In AMP7 we have a number of planned schemes underway, such as the increased Llysyfran pump-back transfer and the upgrade to Canaston Bridge pumping station in our Pembrokeshire water resource zone, and a new abstraction from the Afon Dysynni in the Tywyn Aberdyfi WRZ, which when completed will all deliver supply side benefits to our supply demand balances.

2. **Interconnectors only: WRMP Vowchurch**

For 2021-22, we are reporting a value of 0 Ml/d for the supply demand benefits derived from the delivery of internal interconnections.

Our understanding of the Ofwat RAG 4.10 guidelines is that we are only reporting on those potable water network transfer schemes that have been identified within our Final Water Resources Management Plan 2019. In AMP7 we have only one such scheme planned for delivery, which is an upgraded network connection to enhance the connectivity between our Hereford and Vowchurch water resource zones and deliver increased supply resilience.

3. **Cost allocation**

Overhead and supporting scheme costs have been apportioned over the main schemes. Total supply demand expenditure in Table 4L.38 agrees to Table 6F.51 for the report year 2021-22. The costs in 2020-21 are stated at 2021-22 prices and also does not include private leakage of £0.4m which was included last year in 4L.38.

Actual costs against the business plan are reported in the commentary in table 4L.

Annual Performance Report 2021/22

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 2022.
Pro forma 7B	Wastewater network plus - Large sewage treatment works for the 12 months ended 31 March 2022.
Pro forma 7C	Wastewater network plus - Sewer and volume data for the 12 months ended 31 March 2022.
Pro forma 7D	Wastewater network plus - Sewage treatment works data for the 12 months ended 31 March 2022.
Pro forma 7E	Wastewater network plus - Energy consumption and other data for the 12 months ended 31 March 2022.
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 2022

Line	Line description	Units	DPs	Input (total)	Comments
Sewage treatment works - Explanatory variables					
1	Works name (existing works)	Text	0		The increase of one is due to the reclassification of Rotherwas (Hereford). There is a shared flow for Rotherwas and Hereford Eign as there is a connector between the two separate sites (over a river) and the actual amount treated at each site means both sites should be treated as Large WWTW. Previously Rotherwas has been reported as a Band 3 site based on the catchment that is naturally serves. Hereford as named in the table is Hereford Eign.
3	Population equivalent of total load received	000s	2	3,089.84	Hereford (Eign) has a reduction in population equivalent compared to previous years due to the inclusion of Rotherwas (Hereford) - see 7B.1 commentary.
5	BOD5 consent	mg/l	0	549	Consistent with previous years we have reported the tighter consent of the UWWTD or WRA permits.

Table 7C – Wastewater network+ - Sewer and volume data for the 12 months ended 31 March 2022

Line	Line description	Units	DPs	Input (total)	Comments
Wastewater network					
1	Connectable properties served by s101A schemes completed in the report year	Nr	0	3	There was one s101A scheme at Treuddyn, Denbighshire delivered in 2021-22 to serve three properties.
2	Number of s101A schemes delivered in the report year	Nr	0	1	See 7C.1.
4	Number of network pumping stations	Nr	0	2,477	There have been 19 network pumping stations added this year (8 adopted Private stations, 2 newly built, 9 identified through data improvements) with 2 being removed giving a net increase of 17.
5	Total number of sewer blockages	Nr	0	22,450	We have not made any exclusions for third party incidents.
6	Total number of gravity sewer collapses	Nr	0	162	See APR Part 3 Rt3 - Sewer collapses.
11	Sewer age profile (constructed post 2001)	Km	0	2,187	The total length of Private Sewer Transfer (PST) sewers currently held within GIS represents approximately 26% 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 in order to maintain consistency with previous years reported figures.
14	Length of gravity sewers rehabilitated	km	0	0	Our reported performance has been impacted because CCTV surveys were suspended during the pandemic and to date, have not started again.
15	Length of rising mains replaced or structurally refurbished	km	0	2	We have captured the length of reactive repairs following rising main bursts – these are largely standard 2-metre section replacements, and cumulatively total 202.4m. We have also delivered one rising main rehabilitation scheme in the year, replacing twin rising mains at Nant Talwg, Barry (830m each, total of 1,660m).
22	Length of formerly private sewers and lateral drains (s105A sewers)	Km	0	17,175	Modelled length of sewers based on the WRC model.

Table 7D – Wastewater network+ - Sewage treatment works data for the 12 months ended 31 March 2022

Line	Line Description	Comments
Load received at sewage treatment works		
1	Load received by STWs in size band 1	It has been identified that the treatment categories for Activated sludge and Biological were transposed incorrectly in the APR 2020-21 return. The data for Biological was input into the Activated sludge column for all seven lines and vice versa. This is shown in the table below.
2	Load received by STWs in size band 2	
3	Load received by STWs in size band 3	
4	Load received by STWs in size band 4	
5	Load received by STWs in size band 5	
6	Load received by STWs above size band 5	
7	Total load received	

APR line	Actual APR 2020-21 data submitted to Ofwat Treatment categories		Correct APR 2020-21 data Treatment categories	
	Activated Sludge	**Biological**	**Activated Sludge**	**Biological**
Load received by STWs in size band 1 (KgBOD5/day)	1,719	224	224	1,719
Load received by STWs in size band 2 (KgBOD5/day)	1,721	320	320	1,721
Load received by STWs in size band 3 (KgBOD5/day)	4,900	1,348	1,348	4,900
Load received by STWs in size band 4 (KgBOD5/day)	7,330	2,979	2,979	7,330
Load received by STWs in size band 5 (KgBOD5/day)	3,904	5,605	5,605	3,904
Load received by STWs above size band 5 (KgBOD5/day)	4,593	116,057	116,057	4,593
Total load received	24,167	126,533	126,533	24,167

Table 7D – Wastewater network+ - Sewage treatment works data for the 12 months ended 31 March 2022 (continued)

Line	Line description	Input	Comments
Number of sewage treatment works			
15	Total number of works	828	During the year we have discontinued two wastewater treatment works and added one new works, therefore a net reduction of one works compared to last year.

Line	Line Description	Units	DPS	Input	Comments
Population equivalent					
17	Current population equivalent served by STWs with tightened/new P consents	000s	3	14.729	During the year we have completed two Schemes (Ruthin and Denbigh).
21	Population equivalent treatment capacity enhancement	000s	3	4.685	We have completed three schemes in the year (Denbigh, Tregaron and East Bonvilston).

Table 7E – Wastewater network+ - Energy consumption and other data for the 12 months ended 31 March 2022

Line	Line Description	Units	DPS	Input	Comments
Other					
1	Total sewerage catchment area	km2	0	1,174	Private and Inset Area Catchments have been removed.
2	Designated coastal bathing waters	nr	0	104	There are 105 designated Bathing Waters but one of these is inland, therefore is not considered as a coastal Bathing Water.

Line	Line Description	Units	DPS	Input	Comments
Energy consumption					
7	Energy consumption - sewage treatment	MWh	3	199,338.496	In preparing our 2021-22 Energy consumption data and the Ofwat additional data request we have identified that our interpretation of the Ofwat guidance was incorrectly applied in our 2020-21 submitted data. The restated 2020-21 figure is 191,645.046 MWh (previously submitted as 194,356.566 MWh).
8	Energy consumption - wastewater network +	MWh	3	241,382.115	In preparing our 2021-22 Energy consumption data and the Ofwat additional data request we have identified that our interpretation of the Ofwat guidance was incorrectly applied in our 2020-21 submitted data. The restated 2020-21 figure is 239,341.921 MWh (previously submitted as 242,053.441 MWh).

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

			Capital expenditure							Operating expenditure							Cost driver 1	Cost driver 2	Cost driver 3	Cost driver 4
	Units	DPs	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	After 2024-25	2019-20	2020-21	2021-22	2022-23	2023-24	2024-225	After 2024-25	Site population equivalent (000's)	Historical consent for phosphorus (mg/L)	Enhanced consent for phosphorus (mg/L)	
Eglwysbach (7CDC1117)	£m	3	1.071	0.051	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.412	0	2.5	0
Rhiwlas (7CDC1116)	£m	3	2.132	(0.137)	(0.004)	0.000	0.000	0.000	0.000	0.000	0.040	0.072	0.070	0.070	0.070	0.070	0.683	0	2.2	0
Dyserth (6DC002871)	£m	3	2.849	1.463	(0.053)	0.000	0.000	0.000	0.000	0.000	0.116	0.096	0.100	0.100	0.100	0.100	2.590	0	0.5	0
Ruthin (7CDC1130)	£m	3	3.065	0.814	(0.033)	0.000	0.000	0.000	0.000	0.000	0.141	0.141	0.140	0.140	0.140	0.140	5.948	0	0.5	0
Llandrindod wells STW (7CDC0603)	£m	3	0.000	0.000	0.000	0.120	0.850	0.293	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.359	1.25	0.3	0
Cowbridge (6DC002873)	£m	3	0.378	0.672	0.014	0.000	0.000	0.000	0.000	0.000	0.068	0.068	0.070	0.070	0.070	0.070	6.838	0	1	0
Weycock (6DC002881)	£m	3	2.864	0.935	0.263	0.000	0.000	0.000	0.000	0.000	0.000	(0.014)	(0.010)	(0.010)	(0.010)	(0.010)	0	0	0	0
Brynmawr (6DC002876)	£m	3	1.826	0.261	(0.047)	0.000	0.000	0.000	0.000	0.000	0.087	0.087	0.090	0.090	0.090	0.090	5.493	0	1	0
Raglan (6DC002880)	£m	3	1.343	0.144	(0.025)	0.000	0.000	0.000	0.000	0.000	0.118	0.060	0.060	0.060	0.060	0.060	1.135	0	1	0
Crosshands SWK (6DC002869)	£m	3	0.035	0.010	0.084	0.365	1.639	1.173	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.260	4.582	6	1	0
Spittal STW (7CDC0956)	£m	3	0.000	0.000	0.000	0.100	0.791	0.682	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.313	0	1	0
St Nicholas (7CDC0977)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.54	0	0	0
Lletty Brongu (6DC002882)	£m	3	5.217	0.769	0.079	0.000	0.000	0.000	0.000	0.000	0.175	0.224	0.300	0.300	0.300	0.300	20.781	0	0.5	0
Denbigh (7CDC1118)	£m	3	0.595	4.279	1.315	0.015	0.000	0.000	0.000	0.000	0.071	0.224	0.220	0.220	0.220	0.220	8.779	0	1	0

			Capital expenditure							Operating expenditure							Cost driver 1	Cost driver 2	Cost driver 3	Cost driver 4
	Units	DPs	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	After 2024-25	2019-20	2020-21	2021-22	2022-23	2023-24	2024-225	After 2024-25	Site population equivalent (000's)	Historical consent for phosphorus (mg/L)	Enhanced consent for phosphorus (mg/L)	
Rotherwas STW (7DC200055)	£m	3	0.030	0.342	0.321	1.749	9.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	67.115	1	0.4	0
Norton (7CDC0794)	£m	3	0.147	0.433	1.762	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.050	0.100	0.100	0.100	0	0	0	0
Presteigne(7CDC0873)	£m	3	0.133	0.931	3.428	(0.124)	0.000	0.003	0.000	0.000	0.000	0.000	0.090	0.100	0.100	0.100	2.280	0	1	0
Eign STW (7DC200048)	£m	3	0.030	0.342	0.321	1.749	9.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.710	0.710	49.546	1	0.4	0
Kingstone and Madley STW (7DC200050)	£m	3	0.022	0.142	0.142	1.327	1.171	0.000	0.000	0.000	0.000	0.000	0.000	0.090	0.090	0.090	3.279	0	2	0
Weobley STW (7DC200058)	£m	3	0.017	0.192	0.332	2.844	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.040	0.040	0.040	1.136	0	1.5	0
Whitchurch WwTW (7DC200033)	£m	3	0.009	0.420	0.000	0.100	1.100	1.520	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.050	11.784	1	0.3	0
Leominster STW (7DC200051)	£m	3	0.000	0.304	0.574	2.160	9.469	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.510	0.510	11.726	1	0.5	0
Builth Wells STW (7CDCO238)	£m	3	0.000	0.182	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.704	0	2.5	0
Clyro (6DC002875)	£m	3	0.000	0.160	0.209	0.000	3.544	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.040	0.5	0	1.7	0
Rhayader - (7CDC0900)	£m	3	0.000	0.162	0.163	0.454	1.663	4.510	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.090	2.211	0	0.7	0
Pontrilas - STW (7DC3000080)	£m	3	0.000	0.000	0.033	0.136	0.489	2.204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.030	1.488	0	1.8	0
Malpas WWTW (7DC200029)	£m	3	0.000	0.000	0.000	0.361	2.872	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.162	1	0.4	0

			Capital expenditure							Operating expenditure							Cost driver 1	Cost driver 2	Cost driver 3	Cost driver 4
	Units	DPs	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	After 2024-25	2019-20	2020-21	2021-22	2022-23	2023-24	2024-225	After 2024-25	Site population equivalent (000's)	Historical consent for phosphorus (mg/L)	Enhanced consent for phosphorus (mg/L)	
No Man's Heath - WWTW (7DC200030)	£m	3	0.000	0.000	0.177	0.768	1.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.611	0	0	0
Gwili / Gwendraeth Feasibility and WFD /	£m	3	1.005	0.105	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0	0
Newlands WWTW	£m	3	0.101	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.049	0.052	0.050	0.050	0.050	0.050	0	0	0	0
Total	£m	3	22.869	12.977	9.157	12.124	43.618	10.385	0.000	0.000	0.865	1.010	1.230	1.420	2.640	3.120				

This table reports the completion and forecast of required schemes in each year over the AMP period with delivery dates recorded to 2025, as per the latest WINEP/NEP programme published by DEFRA and NRW regarding Phosphorus removal. Only obligations within the WINEP/NEP with a 'Green' certainty status have been included.

Key points to note:

- Cwmgwilli ((6DC002870) – Is currently included on the NEPV4.2 although NRW have agreed removal through change protocol and administration activity needs to be carried out upon issue of V4.3 by NRW.
- No Man's Heath - WWTW (7DC200030) – No enhanced P permit is entered into the table as the most effective scheme solution was to transfer flows to an alternative catchment rather than onsite Treatment.
- Norton (7CDC0794) - No enhanced P permit is entered into the table as the most effective scheme solution was to transfer flows to an alternative catchment rather than onsite Treatment.
- Crosshands SWK (6DC002869) – the Permit on the current NEPV4.2 is inaccurate, NRW have agreed limit as reported in this table through change protocol and administration activity needs to be carried out upon issue of V4.3 by NRW.
- Rhiwlas (7CDC1116) and Eglwysbach (7CDC1117) - have been delivered and reported, the certainty status within the current NEP V4.2 is Amber and the permit enhancement figure is reflective of scheme performance although the Permit limits on the NEP are different due to ongoing discussions with NRW.
- ST NICHOLAS (7CDC0977) – no P permit limit is present on the NEP and thus reported in this table, this is under review with NRW.
- Weycock (6DC002881) - No enhanced P permit is entered into the table as the most effective scheme solution was to transfer flows to an alternative catchment rather than onsite Treatment.

Annual Performance Report 2021/22

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 2022.
Pro forma 8B	Bioresources operating expenditure analysis for the 12 months ended 31 March 2022.
Pro forma 8C	Bioresources energy and liquors analysis for the 12 months ended 31 March 2022.
Pro forma 8D	Bioresources sludge treatment and disposal data for the 12 months ended 31 March 2022.

Table 8A – Bioresources sludge data for the 12 months ended 31 March 2022

Line	Line Description	Units	DPS	Input	Comments
2	Total sewage sludge produced, treated by 3rd party sludge service provider	ttds/ year	1	0.7	Due to issues at Queensferry with conventional digestion, we utilised a third party Biosolids Assurance Scheme (BAS) approved contractor to lime treat sludge.
4	Total sewage sludge produced from non-appointed liquid waste treatment	ttds/ year	1	1.9	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.
6	Total sewage sludge disposed by incumbents	ttds/ year	1	35.9	Increase in sludge to land proportional to increase in sludge produced.
7	Total sewage sludge disposed by 3rd party sludge service provider	ttds/ year	1	1.0	See 8A.2
9	Total measure of intersiting 'work' done by pipeline	ttds*km/year	0	3	This is the value transported between Rotherwas and Herford (Eign) WwTWs.
11	Total measure of intersiting 'work' done by truck	ttds*km/year	0	2,548	An increase this year as a result of a digester being taken offline at Afan in January 2022 for refurbishment and all sludge was diverted to Cog Moors and Cardiff with surplus sludge being hauled to Moreton in Hereford.
13	Total measure of intersiting 'work' done by tanker (by volume transported)	m^3*km/yr	0	9,257,824	An increase this year due to a growth in tourism to rural locations giving an increase in tankering.

Table 8C – Bioresources energy and liquors analysis for the 12 months ended 31 March 2022

Energy	RAG 4 reference
Energy consumption - bioresources	8C. 1
Energy generated by and used in bioresources control	8C. 2
Energy generated by bioresources and used in network plus control	8C. 3
Energy generated by bioresources and exported to the grid or third party	8C. 4
Energy bought from grid or third party and used in bioresources control	8C. 6

In preparing our 2021-22 Energy consumption data and the Ofwat additional data request we have identified that our interpretation of the Ofwat guidance was incorrectly applied in our 2020-21 submitted data. The following table shows our submitted data for 2020-21 alongside our revised figures based on our new understanding of the guidance.

2020-21	As previously reported				Revised values				
Line description	Electricity MWh (0 DPs)	Total* MWh (0 DPs)	Electricity £m (3 DPs)	Total* £m (3 DPs)	Electricity MWh (0 DPs)	Total* MWh (0 DPs)	Electricity £m (3 DPs)	Total* £m (3 DPs)	RAG 4 reference
Energy consumption - bioresources				5.341				6.239	8C.1
Energy generated by and used in bioresources control	13,734	33,414	1.812	1.812	14,787	34,467	1.951	1.951	8C.2
Energy generated by bioresources and used in network plus control	25,324	25,324	3.34	3.340	17,595	17,595	2.321	2.321	8C.3
Energy generated by bioresources and exported to the grid or third party	7,494	43,630	0.322	0.728	3549	39,685	0.152	0.558	8C.4
Energy bought from grid or third party and used in bioresources control	28,772	76,211	3.795	4.257	29004	76,443	3.826	4.288	8C.6

Line	Bioresources liquors treated by network plus (shadow reported)	Unit	DPs	Value	Comments
17	Recharge to Bioresources by network plus for costs of handling and treating bioresources liquors	£m	3	5.241	In preparing our 2021-22 data we have identified that our submitted 2020-21 figure did not include capital recharge costs. The restated 2020-21 figure is £4.780m (previously submitted as £1.213m).

Table 8D – Bioresources sludge treatment and disposal data for the 12 months ended 31 March 2022

Line	Line description	Units	DPs	By incumbent	By 3rd party sludge service providers	Comments
Sludge treatment process						
2	% Sludge treatment process - raw sludge liming	%	1	0.0%	0.8%	Due to issues at Queensferry with conventional digestion, we utilised a third party Biosolids Assurance Scheme (BAS) approved contractor to lime treat sludge.
(Un-incinerated) sludge disposal and recycling route						
11	% Sludge disposal route - sludge recycled to farmland	%	1	97.2%	2.8%	All sludge recycled to agriculture. For some sludge we have utilised a Biosolids Assurance Scheme (BAS) approved contractor to lime treat sludge and disposal due to issues at Queensferry with conventional digestion.

Annual Performance Report 2021/22

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	Operational greenhouse gas emissions reporting.

Line	Line description	DPs	Water	Wastewater	Total	Comments
			tCO_2e	tCO_2e	tCO_2e	
Scope two emissions						
9	Purchased electricity - market based	3	-	-	-	Zero, as directed by Ofwat.

Line	Line description	DPs	Water	Wastewater	Total	Comments
			tCO_2e	tCO_2e	tCO_2e	
Scope three emissions						
20	Purchased electricity; transmission and distribution - market based	3	-	-	-	Zero, as directed by Ofwat.

Line	Line description	DPs	Water	Wastewater	Total	Comments
			tCO_2e	tCO_2e	tCO_2e	
Net annual emissions						
35	Net annual emissions	3	-	-		Zero, as directed by Ofwat.

Line	Line description	DPs	Water	Wastewater	Comments
			kgCO2e/Ml	kgCO2e/Ml	
GHG intensity ratios (location based)					
36	Emissions per Ml of treated water	3	138.123		Location based intensity ratios; we reported market-based numbers in Discover Water
37	Emissions per Ml of sewage treated (flow to full treatment)	3		169.606	Location based intensity ratios; we reported market-based numbers in Discover Water
38	Emissions per Ml of sewage treated (water distribution input)	3		445.392	Location based intensity ratios; we reported market-based numbers in Discover Water

Appendix 1 – Ring Fencing Certificate 2021/22

The regulatory ring-fence provides an important protection for companies and their customers. Its purpose is to ensure that the regulated company maintains sufficient financial and management resources to enable it to carry out its water and sewerage services in a sustainable manner, and it protects the regulated company from the activities of other entities such as other group companies.

The Ring-Fencing Certificate ("RFC") is a certificate stating that in the opinion of the Board the Company has sufficient resources to enable it to carry out its Regulated Activities, for at least the twelve month period following the date on which the Certificate is submitted to Ofwat. Although it is a condition of our Licence to produce a RFC, we consider that it is also the right thing to do and helps us to achieve our Vision of earning the trust of our customers every day.

Information Notice 20/01 published by the Water Services Regulation Authority in February 2020 sets out guidance for water and wastewater companies in England and Wales in preparing their RFC. The reliability and accuracy of data is a matter of great importance to us. Within the business we have well-established governance and accountability processes. To confirm that we have followed this guidance, the information contained within our RFC has been subject to checks by the Regulatory and Compliance Teams, scrutiny at Director level, review by the Audit Committee, and audited by our independent External Auditors.

The Directors have resolved that a Certificate required under Condition P30 of our Licence and prepared in accordance with the latest guidance be issued to the Water Services Regulation Authority confirming that in the opinion of the Directors:

a) the Company will have available to it sufficient financial resources and facilities to enable it to carry out the Regulated Activities, for at least the twelve month period following the date on which the Certificate is submitted;
b) the Company will have available to it sufficient management resources and systems of planning and internal control to enable it to carry out the Regulated Activities, for at least the twelve month period following the date on which the Certificate is submitted; and
c) the Company has available to it sufficient rights and resources other than financial resources; and
d) all contracts entered into between the Company and any Associated Company include the necessary provisions and requirements in respect of the standard of service to be supplied to the Company, to ensure that it is able to carry out the Regulated Activities.

A statement of the main factors that have led to the conclusion that resources are sufficient can be found at Appendix A.

RING-FENCING CERTIFICATE (continued)

The Company has in accordance with the Regulatory Reporting Guidelines and/or our Licence prepared this Ring-Fencing Certificate, which was approved at the joint Board meeting of Glas Cymru Cyfyngedig and Dŵr Cymru Cyfyngedig, held on 7 July 2022, as evidenced by the Directors' signatures below.

Approved on behalf of the Board of Dŵr Cymru Cyfyngedig,

Alastair Lyons Chair of the Board	Peter Perry Chief Executive Officer
Mike Davis Chief Financial Officer	Graham Edwards Senior Independent Non-Executive Director
Debra Bowen Rees Non-Executive Director	Tom Crick Non-Executive Director
Jane Hanson Non-Executive Director	Joanne Kenrick Non-Executive Director

7 July 2022

Section P35 of Licence Condition P requires our independent auditors to produce a report that sets out whether they are aware of any inconsistencies between the Ring-Fencing Certificate and either the regulatory accounting statements or any information which the Auditors obtained in the course of their work as the Company's Auditors and, if so, what they are.

A copy of the auditor's report can be found in our 2021-22 Annual Performance Report (Part 1).

RING-FENCING CERTIFICATE (continued)

APPENDIX A

A statement of the main factors that have led to the conclusion that resources are sufficient.

AREA	MAIN FACTORS
Financial resources and facilities	
• Financial details	The liquidity position as at 31 March 2022 was very strong with cash on deposit and loan facilities totalling £715 million. The Group is in a strong financial position as at 31 March 2022 with gearing remaining on track at 58%.
• Performance against Final Determinations (FDs) set at the last price review	The 2021-22 FD targets for the majority of our performance measures have been met. However, a net penalty of £8.797m (excluding D-MeX) has been reported for 2021-22 with the Company missing FD target on some measures such as Water quality compliance (CRI), Customer Acceptability, Reliability of Supply and External Sewer flooding.
• Credit related factors	As at 31 March 2022, the Group had committed undrawn borrowing facilities of £200m and cash and cash equivalents (excluding debt service payments account) of £515m. There is also a £10m overdraft facility renewable on an annual basis. As at 31 March 2022 there was also a special liquidity facility of £135m. Glas Cymru has amongst the strongest credit ratings in the UK water sector, reflecting the Group's high level of creditworthiness. A low level of commercial activity is undertaken outside of our regulated water and sewerage business, being organic energy and waste processing activities, which are complementary to our core operations. These activities make up less than 1% of the Group's annual turnover and are peripheral to the core business, and as such have no material impact on our overall long-term viability.
• Business plans, long-term viability statements etc.	The five-year business plan has been developed on the strong foundation of effective operational strategies and a clear

AREA	MAIN FACTORS
	investment programme, both aimed at achieving improved performance and cost efficiency. Ofwat's guidance in relation to preparing a statement on long-term financial viability (IN 19/07) has been followed. This resulted in the Board concluding that it has a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period to March 2030. The Company has a Licence to operate as a water and sewerage undertaker, which is in place on a rolling 25 year basis.
• Relevant reports	The independent External Auditors review the regulatory reporting information to Ofwat in the Annual Performance Report. Independent Auditor's report and the Reporter's letter of assurance are published within our Annual Performance Report available on our website. The Audit Committee review financial performance in detail at the half year and year end and receive regular reports from the Group's External Auditors, KPMG LLP. The Audit Committee reviews the External Auditor's independence policy, which is included in its half yearly report to the Committee, which sets out the procedures by which the Committee satisfies itself that there are no factors which may, or may be seen to, impinge upon the independence and objectivity of the external audit process, particularly the level of fees relating to non-audit work. The Audit Committee reviewed and approved its policy on non-audit services in September 2019 and was satisfied that it was aligned with current regulatory guidance. The level of non-audit fees in respect of the year-ended 31 March 2022 was confirmed to be in compliance with the EU Audit Regulation.
Management resources	
• Management skills, experience and relevant qualifications	The challenging PR19 Final Determination means that the CEO'S priority is to shape the executive team in order to implement the plan for 2020-2025. This means being tough with efficiency – the potential for big changes is in the world of innovation and working

AREA	MAIN FACTORS
	smartly – ensuring the Company delivers the best services possible, efficiently and at an affordable price for the customer. To help achieve this, new members have been appointed to the Executive Team who can drive this forward and devise new ways of providing high-quality services in an efficient way. During the year a Director of Quality Policy and Compliance has joined the executive committee bringing increased focus on water and wastewater quality and compliance with permits.
• Recruitment process, staff engagement	In response to future challenges identified in Welsh Water 2050 a need to attract, develop and inspire people from a diverse range of backgrounds, to deliver an excellent service for our customers was identified. This is set out as Strategic Response 11: becoming an 'Employer of Choice'. During 2021-22 the employee engagement survey was conducted by a new provider following the exit from the market of the previous company. The overall employee engagement score was 69%. Employee Engagement Champions work with the business to respond to local feedback given in the annual Employee Engagement Survey – various Non-Executive Directors meet with them quarterly. The Chief Executive and members of the Executive team hold monthly briefing using Microsoft Teams that all colleagues can join to hear updates on business performance and key developments and to ask questions. The Chair of the Board and Non-Executive Directors undertake regular operational site visits and meet teams across the business for informal meetings and lunches/dinners.
• Succession planning for key management/staff	An annual Talent & Resource Review is carried out which includes a review of succession planning, career discussions during performance reviews, promoting training opportunities for colleagues and ensuring development plans are in place.
• Quality of management/staff	All operational roles within the business have a dedicated training plan which incorporates a combination of e-learning modules and

AREA	MAIN FACTORS
induction and other training and development	training courses. Employees' training performance is continually monitored and an overall percentage of employees that have completed their training is reported annually for the financial year. The average number of people employed by the Group (including Executive Directors) during 2021-22 was 3,547. The Company's success is fundamentally dependent upon highly engaged and motivated people and the Company are committed to developing its people to meet the challenges of operating the business in the future and to encourage a diverse workforce that fully reflects the communities that served. There are a number of different development routes offered to those choosing to join our business including, graduates, degree apprenticeships, higher apprenticeships, and apprenticeships. The Company is investing in skills development, competency training, customer service and leadership training. The Company is working to define clearer career paths through the business for colleagues in the contact centre and there is a focus on supporting every individual to reach their full potential. An annual Leadership Conference is held which provides an opportunity for senior managers to consider in detail, and provide feedback on, the Company's business plan. Regular employee "roadshows" take place. "Future Focus" groups of senior leaders across the business have been established to work on key initiatives.
• Process for ensuring diversity of perspectives	By engaging with diverse talent, the Company is able to improve access to skills that are in short supply, creating a larger talent pool, and also enhance our reputation as Employer of Choice. It is the policy of the Group that the training, career development and promotion of a disabled person should, as far as possible, be identical to that of a person who does not suffer from a disability. We achieved accreditation as a Disability Confident Employer in 2019-20. Our equality, diversity and inclusivity policies are supported from the top of the organisation. The Board, CEO and Executive team

AREA	MAIN FACTORS
	have all engaged directly with our network of Diversity Ambassadors during the year. We published a revised Board Diversity Statement on our website in February 2022 following Board approval, and this includes an aim to appoint at least one Non-Executive Director from a BAME background by 2025.We are striving to improve our metrics on protected characteristics in our workforce, encouraging colleagues to provide data that we can use as a baseline to measure improvements in diversity and to consider reporting data on our ethnicity pay gap.
• Board or management activities, reports or statements	During the year the Board reviewed succession for senior management roles, and for Board members. The Board also reviewed compliance with the UK Corporate Governance Code, in particular the workforce engagement provisions, in the context of developing the Board's engagement strategy.
• Independence of Board	The Board comprises a majority of independent non-executive directors. As a Group owned by a company limited by guarantee, there are no shareholders, instead Membership is made up of individuals drawn from across the Company's supply area (or who have a strong connection with it) who carry out a vital governance role. Membership is personal, unpaid and Members have no financial stake in the business. This independence allows Members to hold the Board to account for the stewardship of Company assets and for providing an essential public service in a manner which will be sustainable for future generations. The independence of Non-Executive Directors is considered on an ongoing basis and formally on an annual basis. All Non-Executive Directors are deemed to be independent in accordance with the UK Corporate Governance Code and free from any relationship which would compromise their independent judgement. All Committees are chaired by an independent Non-Executive Director, except the Nomination Committee which is chaired by the

AREA	MAIN FACTORS
	Chair of the Board and comprised of a majority of independent Non-Executive Directors.
Systems of planning and internal control • Governance procedures, risk management frameworks, oversight procedures	The Board is responsible for promoting the long-term, sustainable success of the Glas Cymru Group for the benefit of its stakeholders and is the principal decision-making forum for the Group, providing inspirational leadership, both directly and through its Committees, and delegating authority to the Executive team. The results from the ongoing monitoring of financial, operational and compliance controls and the risk management process are reported to the Board via seven formal committees; the Audit Committee; the Remuneration Committee; the Nomination Committee; the Quality and Environment Committee; the Technology Committee; the Finance Committee and the Environment, Social and Governance Committee. The Group's internal audit function has carried out a programme of work, which incorporates a review of the control environment. The Executive Team comprises individuals representing all of the key functions of the business, and is closely supported by its risk management and internal audit functions. Supporting the Executive team there is a clearly defined organisational management structure and governance framework, consisting of subcommittees and project specific steering groups, which operate within defined terms of reference and in accordance with group policies. By maintaining this structure of management control, the Board gains its assurance that Welsh Water's operations are being run effectively and that decisions are made in line with our commitment to our values to always do the right thing. The Board maintains oversight of the framework of internal control and risk management and ensures that the Company has the necessary financial resources and human resources to function effectively.

AREA	MAIN FACTORS
	The Board has overall responsibility for the operation and effectiveness of the Group's system of internal controls and risk management, and consider risk appetite and progress to target for identified strategic risks in detail every six months, with interim updates every board meeting. These processes involve all areas of the business to identify risks, including new and emerging areas of concern, consider the potential impact and likelihood of the risk manifesting, and manage mitigating controls accordingly. Throughout the year the Board reviews risk management processes and discusses and agrees mitigation strategies, for the principal and emerging risks across the business. There is an annual review of the effectiveness of internal controls in compliance with the requirements of the UK Corporate Governance Code.
• Internal and/or external audit policies, processes, activities and/or reports	The effectiveness of the internal audit function is monitored using a variety of inputs including the Audit Committee's review of the audit reports produced, the Audit Committee's interaction with the Head of Internal Audit, updates at each meeting on progress against the internal audit plan, as well as other periodic quality reporting. The Internal Audit function conducts audits of 1st and 2nd line systems of internal control, which consider the adequacy and effectiveness of risk management, compliance and control activities. All internal audits are conducted in accordance with the standards promulgated by the Chartered Institute of Internal Auditors. The Head of Internal Audit provides an annual opinion on the effectiveness of the internal control framework. Our External Auditors and our Reporter review the Company's approach to risk and request evidence of risk review in the business.
• Systems for maintaining supply/business continuity, stated action plans	During the year the Audit Committee received regular reports on systems of internal control and risk management, in particular on data protection, business continuity, disaster recovery and

AREA	MAIN FACTORS
	cybersecurity, and on the progress of programmes to improve compliance and internal controls across the business.
• Policies to prevent fraud and other unethical behaviour; whistleblowing policy	The Company's Code of Conduct sets out our focus on "doing the right thing" to Earn the Trust of our Customers and includes reference to the Company's Whistleblowing Policy, which is widely publicised among colleagues and key contractors and provides an opportunity for colleagues to "speak up" on any issues of concern. All colleagues are trained in the Code of Conduct on joining the Company and complete refresher training periodically. The Code is supported by several Group policies, as well as associated procedures and guidance, including: Anti-bribery and corruption; Anti-fraud, Conflict of Interests; Gifts and Hospitality, and Anti-bullying and Harassment. Since April 2015 the Company has subscribed to a confidential and independent whistleblowing helpline operated by Safecall – an independent company that specialises in handling concerns at work. Safecall are available 24 hours a day and can be contacted by phone or by email. The Audit Committee receives Whistleblowing reports in private meetings with the Head of Internal Audit on a regular basis. Matters are investigated and reported back to the Committee at its next meeting. The Company also has a comprehensive suite of Employment Policies.
• Risk, compliance other assurance statements	During the year the Audit Committee scrutinised the following key regulatory submissions: Annual Performance Report; Risk and Compliance Statement; Data Assurance Summary, as evidence that the data provided is accurate; Ring-Fencing Certificate; and the Charges Schemes for 2022-2023.

AREA	MAIN FACTORS
Rights and resources other than financial resources	
• Corporate missions and/or values	The Company strives for continuous improvement in its services to “Earn the Trust of our Customers Every Day” and this focus on doing the right thing for customers underpins the whole approach to service and everything the Company does. In December 2019 an Extraordinary General Meeting of members was held to consider and subsequently approve the writing of Glas Cymru’s Purpose Statement into our Articles of Association in order to formalise our commitment to public service and our singular customer focus whilst recognising the long-term nature of the business: *To provide high quality and better value drinking water and environmental services, so as to enhance the wellbeing of our customers and the communities we serve, both now and for generations to come.*
• Technology and other systems for ensuring checks and balances	Fundamental to the next five years the Company will continue to innovate in terms of technology and new ways of working. There are partnerships with over thirty organisations and academic institutions each aligned to projects focused on Company priorities for improved performance and reduced cost. The Board Technology Committee maintains oversight of cyber and information security risk and opportunity in the business and ensures increased awareness at Board level. The Company continues to work to well-documented operational strategies in the clean and waste water businesses, including an Operational Technology cyber risk mitigation programme. Since appointing a new Chief Technology Officer our focus on cyber-security issues continued over the year. We are actively managing the external cyber security threats. We have increased our systems of monitoring during the year and have reviewed our cyber security policies following various high profile cyber attacks globally, and an increased prevalence of cyberfraud activity.

AREA	MAIN FACTORS
• Policies to encourage an integrated approach and 'systems thinking'	The Company has an Integrated Management System that is governed, controlled and continually improved. This includes overarching policies and procedures that help promote cross team working for an integrated approach within all business areas. Frameworks and governance groups have been established for open table discussions. All management system policies are reviewed and approved annually by the Chief Executive and promoted within the business.
• Planning systems	Recognising the vital role of planning systems, the company has established a new Asset Planning Directorate and produced a Strategic Asset Management Plan which will be refined and implemented over AMP7 and through to 2050. In March 2018 the company published Welsh Water 2050, our long-term plan. The plan is set within the policy context of the Wellbeing of Future Generations Act (Wales) 2015 and Environment Act (Wales) 2016. Welsh Water 2050 detailed our 18 strategic responses to these challenges. As we start to plan in detail for PR24 we have reviewed these strategic responses and published an update to Welsh Water 2050 in May 2022. Our five year investment plans represent the first five years of this long term plan. The plan for AMP8 will be developed through the Welsh Government led PR24 Forum, to help ensure that we achieve a balance, reached on a collaborative basis, between the affordability of customer bills and required investment. External assurance has been received on the financing model used to generate the business plan and stress scenarios via an "agreed-upon procedures" exercise, with no exceptions noted.
• Assets maintenance/insurance factors	Record levels of capital investment have been implemented (over £6bn since 2001). The new Asset Planning function is examining how the condition of our assets is likely to change over time. This includes assessing the impact of a changing external environment on the performance of our assets, and in evaluating the optimal investment pathways and

AREA	MAIN FACTORS
	options needed to sustain and improve performance, while effectively managing risk. The five year business plan has been developed on the strong foundation of effective operational strategies and a clear investment programme, both aimed at achieving improved performance and cost efficiency. The five-year programme involves more than £1.8 billion in capital investment. The company holds property insurance to protect the company and customers from expenditure related to extreme events beyond management control.
Contracting • Position/status of key contracts in place	We work with key suppliers, such as our Capital Alliance and Water Network partners, to find innovative ways of improving efficiency while maintaining standards of service. The Board engages with the leaders of the alliance partners when appropriate. Not only do teams understand fully the part they have to play in delivering the Company's plans but these have also been built with input and commitment to improved performance from the main supply chain partners. Achieving tougher service and efficiency targets will also require further flexibility from colleagues. A comprehensive programme of change has been agreed with trade unions, covered in a progressive new five year 'Working Together Agreement'.
• Contracts between the Appointee and all Associated Companies	All contracts between the Appointee and all Associated Companies were checked for compliance with licence requirements on standards of performance.
• Transactions between the Appointee and any Associated Company	A detailed Note on transactions between the Appointee and any Associated Company is provided in the Risk and Compliance Statement.

AREA	MAIN FACTORS
• Compliance with licence provision on cross-subsidies between the Appointee and any Associated Company (Condition I) • Guarantees or Cross-Default Obligations	Confirmation of compliance with licence provision on cross-subsidies between the Appointee and any Associated Company is contained within the Risk and Compliance Statement. No Guarantees or Cross-Default Obligations have been given without Ofwat’s written consent.
Material issues or circumstances	The appropriateness of adopting the going concern basis of preparation for the accounts was considered in detail in light of risk factors including the COVID-19 pandemic and high inflation. The Audit Committee concluded the risks were not such that they amounted to a material uncertainty that cast significant doubt about the Company's ability to continue as a going concern.

Appendix 2 – Company Direction and Performance Statement 2021/22

We have a clear commitment to our customers, communities, and wider stakeholders, for the long term.

This Direction and Performance Statement explains our purpose and Longer Term Strategy, how the Company sets it aspirations, and how it has performed for all those it serves.

It explains the importance of our ongoing engagement with customers and stakeholders to ensure we continue to understand and meet their changing needs and tailor our services to match those needs.

There are 6 sections to this Statement:

1. The importance of our Company purpose and how this informs our ambitions
2. Our Longer Term Strategy and Goals and how this informs our business plans
3. How we set our ambitions
4. Ongoing Evaluation – how we monitor performance and make decisions
5. How we have performed in 2021-22
6. How we balance the relationship between delivering our services and rewarding Executives

1. The importance of our Company purpose and how this informs our ambitions

The Boards of Glas Cymru and Dŵr Cymru Welsh Water have established the Company's purpose, strategy, and values, and is satisfied that these and its culture reflect the needs of all those it serves.

The Boards of Glas Cymru Holdings Cyfyngedig and Dŵr Cymru Cyfyngedig, the statutory appointee providing essential water and wastewater services to 3.1 million people across our supply area of most of Wales and Hereford, Deeside, and Chester, are unified Boards with identical Directors. The entire focus of our organisation is in fulfilling the Group's purpose:

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

At an Extraordinary General Meeting on Friday 6th December 2019, the Members of Glas Cymru voted to approve the incorporation of the Company's purpose in the Articles of Association. This followed extensive consultation with our customers and other stakeholders on our long term strategy, Welsh Water 2050, and our business plan for the period 2020-25.

Our purpose is central to everything we do and guides all of our decision making.

Our Company vision is To Earn the Trust of Our Customers Every Day. We set ourselves as a company, and as individuals working to meet our customers' needs, a high bar in terms of providing the highest levels of customer service.

We have deliberately limited our non-regulated activities, so that these constitute less than 1% of our turnover, and our strategy for commercial activities is to work towards generating a surplus that can be reapplied back into our business for the benefit of our customers.

2. Our Longer Term Strategy and Goals and how this informs our business plans

When we created our long term strategy, Welsh Water 2050, in 2017, we undertook an extensive process of consultation with our customers and wider stakeholder groups, giving everyone who has an interest in the Company and the essential services we provide, an opportunity to comment and feedback on our draft document addressing the future challenges and our response to them. Our aim in Welsh Water 2050 was to set out our plan "to become a truly world class, resilient and sustainable water service for the benefit of future generations". We received:

- Over 20,000 customer responses to our survey, through an innovative variety of digital and face to face methods;

- Detailed and ongoing input from customers through our online community, a range of customer focus groups, and our Youth Board;
- A very successful Stakeholder launch event, and another event involving around 50 of the Members of Glas Cymru; and
- 17 detailed responses from Stakeholder Groups and other interested parties.

Welsh Water 2050 sets out the key trends and challenges that we face over the long term, informed by experts, academics and partners. In order to address these long-term trends and challenges we set out 18 Strategic Responses, and committed to update our strategy on a five-yearly basis. The first five-yearly review was undertaken over the last 18 months, and was aimed at updating Welsh Water 2050 and ensuring that our long-term strategy is optimised given the latest view of the world as it is now and as we expect it to be in the future. Reviews such as this will keep the strategy current and feed into the preparations of our long-term delivery strategy. Since 2018, we have seen several dramatic and unexpected ‘shocks’, including EU Exit, extreme weather events, war in Ukraine, rising inflation, and of course the Covid-19 pandemic. These have emphasised the importance of being adaptable and resilient as a business, and of keeping a close eye on current and future trends. In light of this we re-evaluated the Strategic Responses and confirmed that they remain sound as the best way of ensuring we can continue to provide a resilient and sustainable service over the long term. We amended the emphasis in Strategic Response 18 to recognise the evolution in the Company’s ambitions around achieving net zero carbon emissions.

We will use Welsh Water 2050 and the recent review as the basis of completing Ofwat’s new requirement for companies to submit a long-term delivery strategy as part of the PR24 price review process. This will set out in detail the outcomes that we are aiming to achieve by 2050, and the key investments that will be required.

The Board established the Environment, Social and Governance (ESG) Committee in June 2021 to develop the Company’s ESG Strategy which is derived from, and entirely consistent with, our long term strategy set out in Welsh Water 2050, and includes our roadmap to deliver full Net Zero Carbon by 2040. Our Board, led by the ESG Committee, has tested the reality of the various elements of our Net Zero strategy, and has found them challenging but credible.

Since 2010-11 we have already achieved a 65% reduction in total emissions, comprising operational and embedded carbon. The reduction is underpinned by an electricity supply 24% of which is self-sufficient (either renewables we self-generate or from private wire agreements with local generators) with the remainder REGO-backed using offshore wind. This makes Welsh Water one of the lowest emitters of carbon dioxide per Ml of water or wastewater treated in the UK water industry. We aim to be 35% energy self-sufficient by 2025 and to achieve a 90% reduction in total carbon emissions by 2030.

We also very clearly recognise public concern over river water quality and will continue with our approach of transparency of performance and proactive improvement in this important area. We have already shown that we are more than willing to go the extra mile by helping other sectors, such as agriculture, with expertise and practical support to tackle pollution, and we plan to build on this approach. We have committed to investing £833 million to improve our wastewater assets, particularly Combined Storm Overflows on sensitive rivers, over the five years 2020-25. Working collaboratively with a wide range of organisations will enable us to play our part in addressing these issues most effectively.

We will always seek to invest as efficiently as we can given our investment, whether in capital or media, comes at a cost to our customers. We are, therefore, very open to adopting new ways of structuring the investment we require such as Direct Procurement for Customers (‘DPC’) introduced by Ofwat as part of PR19. This new delivery model involves a company competitively tendering for the financing and delivery of large infrastructure projects, resulting in the selection of a third-party competitively appointed provider. The aim is to achieve significant benefits for customers through innovation and lower whole-life costs of the project. We will apply this DPC delivery model to achieve our plan to replace three ageing water treatment works that together meet a large part of the demand for drinking water from south Wales, including Cardiff, by Cwm Taf, a single new works sited in the area of Merthyr Tydfil. This major and highly complex project which will produce up to 180Ml per day of treated water (12% of our total production) is not anticipated to start operating until 2030 but will absorb considerable management focus between now and then.

We will also be running our bi-annual virtual Innovation Conference in September 2022, celebrating our innovation successes to date, and looking forward to AMP8 in terms of establishing stronger partnerships (e.g. through the new industry body, Spring) to deliver improvements and efficiencies for our customers.

3. How we set our ambitions

Working on our Welsh Water 2050 Strategy for the next 30 year period allowed us to examine the role we play in the communities we serve and to have a meaningful dialogue with our customers about how we will meet the external challenges over time. The outputs from this dialogue with customers heavily influenced our business plan submitted to Ofwat as part of the PR19 price review process. We hold a Board Strategy Day every year enabling the Board to spend time debating a number of strategic and long-term business priorities, including reviewing our vision for Welsh Water 2050. A particular focus for the 2021-22 Strategy Day was our preparations for the next five-year price review, PR24, understanding the challenges and opportunities for Welsh Water, together with an update on achieving a more collaborative approach to PR24 in Wales through the PR24 Forum, which will bring us together with Welsh Government, Ofwat and other key stakeholders to agree the right plans for the future.

Our detailed business plan for the five year period 2020-25 seeks to balance ensuring the affordability of the essential services we provide with the investment needed to maintain a resilient infrastructure. As a result of our not-for-shareholder-dividend corporate structure, all gains eventually go to our customers, so that the interests of the Company and of customers are aligned, and the strategic direction of the Company takes this into account.

Our reporting of progress against our key Outcome Delivery Incentives (ODIs) during AMP7 (2020-25) is framed around our customer and colleague promises. The regulatory targets are supplemented by our internal business and financial planning processes. Every year targets are proposed by the Executive Team and agreed by the Board of Directors. The Executive Team is held to account by our Non-Executive Directors to ensure that the targets are sufficiently challenging and to monitor performance in accordance with those targets.

Our Company Vision to Earn the Trust of our Customers Every Day underpins our approach to delivering services, and the Board is conscious of the need to set targets which maintain and build on that trust, to promote the long term success of the Company in accordance with Section 172 of the Companies Act 2006. The ethos and culture of the Company is very much focused on end-delivery for our customers in order to earn their trust.

The Executive Team proposes the Annual Business Plans for the Company and these are signed off by the combined Board of Glas Cymru Holdings Cyfyngedig and Dŵr Cymru Cyfyngedig. The Annual Business Plans take into account the five yearly regulatory settlement from Ofwat as our economic regulator. For 2021-22, the Annual Business Plan was based on the second year of the Final Determination of business plans by Ofwat for the AMP7 period 2020-25. In some cases, our internal business plan targets for the year were more stretching than the Ofwat Final Determination targets from the PR19 process, and in other cases, particularly where Ofwat applied standard targets across the sector, the internal business plan targets are lower than those set out in the Final Determination but are as challenging as the Board considers realistic.

In approving the targets proposed by the Executive Team, the Board takes into account the views of our stakeholders. Alongside the regulatory reporting framework, the Board has approved initiatives to address the specific needs and interests of these stakeholder groups:

- **Our Customers** - we continue to engage with our customers directly and seek feedback on the strategic goals that particularly matter to them. We also engage regularly with the Consumer Council for Water and act on feedback we receive from them and from our own Customer Challenge Group, which is independently chaired by Peter Davies OBE and which is comprised of organisations which represent our wider customer base.

- **Our Communities** - following the success of our pilot Water Resilient Community project in the Rhondda Fach, we have launched two further projects in Rhyl (north Wales) and Rhymney-Bargoed (south east Wales).

  The projects challenge the business to work with and involve customers in a way not done before - to co-create and co-deliver more resilient services within the area. From helping people struggling with their bills, providing water-saving devices, heading to schools with fun lessons and supporting local community projects, we target sections of the community to deliver real and tangible value. Due to the impact of the pandemic, we have had to adapt ways of working to continue to offer community benefits. Projects involving our Vulnerable Customer team, water efficiency audits, proactive sewer investigations, collaborations with partners such as The Princes Trust, and our Education team, will continue in 2021-22.

- **Our People** - during 2021-22 we employed an average of 3,547 people, making us one of the biggest employers in Wales. Our success is fundamentally dependent upon our highly engaged and motivated people, and despite the challenges of the Covid restrictions during 2021-22, we remain committed to developing our people to meet the challenges of operating our business in the future and to encourage a diverse workforce that fully reflects the communities we serve.

- **Our Suppliers** - we work with over 2,000 supply partners to ensure we can deliver our essential services to customers. Our suppliers play an essential part in enabling us to deliver services. Our Supplier Management Frameworks help us to develop close working relationships which are focused on working in partnership to ensure we deliver excellent service to our customers.

- **Our Environment** - we work with a range of organisations and academic institutions to carry our research and develop innovative methods to minimise our impact on the environment and improve the sustainability of our operations. In 2020-25 we are continuing to develop our approach to catchment management, working with local landowners and other organisations to improve water quality in our catchments and reduce the need for chemical treatment. We are progressing well with the development of new Drainage and Wastewater Management Plans, which will set out our proposals for future investment prioritised according to environmental evidence on the impact of our wastewater operations, so that we can plan for improvement and agree with customers, investors, and regulators the priorities and pace at which this will take place.

- **Glas Members** - as a Group owned by a company limited by guarantee, we do not have shareholders, but our Membership is made up of individuals drawn from across our supply area (or who have a strong connection with it) who carry out a vital governance role. Members hold the Board to account for the stewardship of our assets and for providing an essential public service in a manner which will be sustainable for future generations.

For further information on our relationships with stakeholders, how we have set out ambitions with reference to their interests and how we are delivering for them, please see pages 54 – 57 of our Annual Report and Accounts 2021-22.

Our Section 172(1) Statement on pages 54-57 of the Annual Report and Accounts sets out how the Board balances the needs and interests of different stakeholders in its decision-making. Examples of where the interests of different stakeholders have had to be weighed include: our Combined Storm Overflow Strategy; how to structure our charges; the new Cwm Taf Water Treatment Works; Metering and Per Capita Consumption Strategies; and agreeing the target and pace of the Group's Net Zero Carbon Strategy. The Customer Challenge Group ensures that the voice of customers is taken into account, through the input of the customer representative organisations who are members of it. The views of the Independent Environmental Advisory Panel, an advisory panel consisting of representatives from front-line environmental organisations and leading academics in specialist areas, are also taken into account by the Quality and Environment Committee of the Board.

4. Ongoing Evaluation – how we monitor performance and make decisions

The Board met on 14 occasions during 2021-22, including three additional meetings which were held to discuss the Company's responses to Ofwat on Pass Forward Flow. At each scheduled Board meeting, and on a monthly basis between Board meetings, the Board receives detailed information on Health & Safety lagging and leading indicators and current issues, operational performance and current operational issues, financial performance and bad debt, people and recruitment updates, and regulatory/legal developments. This information is reviewed in detail at each Board meeting and the Quality and Environment Committee of the Board also met on 7 occasions in 2021-22 to review operational and regulatory performance issues in more detail.

The Board also meets both formally and informally with members of the Executive Team and senior managers across the business and individual Non-Executive directors have the opportunity to learn about operational issues and visit sites on a regular basis. A number of site visits took place during 2021-22 and meetings with senior management and employee engagement champions drawn from across the business continued to take place regularly via video-conference.

During 2021-22, the Board has challenged the Executive Team on matters including the following:

- environmental performance;
- measures taken to ensure the Health, Safety & Wellbeing of employees and contractors during the Covid-19 pandemic;
- the speed and delivery of internal business review costs saving plans across the business;
- the setting of a challenging but deliverable target for net zero carbon emissions;
- progress of capital projects;
- delivery of dam safety "pipes in dams" projects in a safe manner;
- recruitment of a new Chief Risk Officer and development of the Enterprise Risk Management Framework;
- the take-up of our social tariff support for customers struggling to pay their bills and communication with customers in debt; and
- progress of the Direct Procurement for Customers project to fund and construct a new Cwm Taf Water Treatment Works.

Where Monthly Management Reports show that performance is lagging behind in a particular area of the business, the reasons for this and the possible actions that can be/are being taken to address it are discussed at meetings of the main Board or the Quality and Environment Committee, as appropriate, and action plans put in place to assist in monitoring improvement.

5. How we have performed in 2021-22

Overall, we have delivered high-quality services to our customers in 2021-22 against our challenging AMP7 nonfinancial targets. In our clean water business for the second year in succession we saw improvement in our water network quality measure, which traditionally has eluded us. We remain an industry outlier for these water distribution parameters, especially for discolouration, as a result of the combination of a high pressure distribution system and the prevalence of iron mains as a feature of our industrial heritage. However, we can now see an improvement as our water quality zonal improvement plans are taking effect.

We are, however, disappointed that our broader water quality performance measure (Drinking Water Inspectorate – Compliance Risk Index, or CRI), has been impacted by an increased number of low level bacteriological failures at our treatment works and service reservoirs. Prior to 2021 we consistently delivered upper quartile performance for both of the elements of CRI and view this regression very much as a dip in performance rather than a potential trend. We have a strong recovery plan in place for 2022.

We also struggled last year to meet our supply interruption target which was linked to two or three large diameter trunk main incidents rather than poor underlying performance. The pandemic has also seen per capita water consumption remain at an elevated level and we will need support from customers in reducing consumption if we are to achieve our targeted level of reduction by 2025.

We are currently undertaking an extensive review of the components that feed into the leakage and per capita consumption reporting process which will take several months to complete. We have reported our 2021-22 performance on a like for like basis with that followed in the 2020-21 APR. Ofwat are aware of the review and we will be providing regular progress updates. As a result of this review, we have not claimed the Outcome Delivery Incentives which would be applicable based on our 2021-22 performance.

Turning to our waste water business, we have achieved the majority of our annual targets, including our internal flooding target, which is particularly important given the impact on those customers affected. We have also improved our record on pollution incidents which is important given the degree of regulatory and public scrutiny of river water quality this year.

The capital programme in Year 2 of AMP7 has invested £334 million as we deliver against our regulatory and stakeholder commitments and maintain our asset base. All our regulatory output targets have been met for 2021-22.

We are making good progress on enhancing our visitor and recreational attractions with the reopening of a newly refurbished visitor centre at Llys-y-Frân, in Pembrokeshire - a £5 million investment. In addition to this we have started construction of the new visitor centre at Llanishen and Lisvane reservoirs in Cardiff which will open in 2023. While our water and sewerage business has been stretched due to increased staycation demand during the pandemic, more people have enjoyed the facilities at our visitor centres and partner sites. In 2021 we saw over 843,000 visitors to our visitor centres and partner sites

Despite the financial uncertainty faced by our customers over the last 12 months, it is notable that this hasn't yet translated into any significant increase in households struggling to pay their bill, applications for financial assistance, or overall debt levels. However, the impact of the increase in the energy price cap, the introduction of the Health and Social Care Levy, and the general cost of living rises, particularly in light of recent events in Eastern Europe, will present a more challenging environment for customers than the pandemic has done to date.

Customer expectations of water companies have grown exponentially, and Welsh Water recognises it needs to rise to this challenge. We have seen the impact of this in the Ofwat 'C-MeX' survey results, where there was a downward trend in satisfaction levels since the second half of 2020. This was driven by the increase in household usage (and therefore bills) as a result of the pandemic and working from home. Overall customer satisfaction measured under the Ofwat C-MeX index, saw us achieve fifth place in 2021-22. We have done a lot to improve our communication with customers and the way in which we train our people, however we have put in place further improvement plans for 2022-23 and hope to improve from our overall position this year.

In terms of other key service measures, we achieved an improvement in our score for reducing Internal Flooding events and maintained our B-MeX score. Overall, our final ODI reward/penalty position for 2021-22 is expected to result in a penalty of £8.8 million (2020-21 £5.8 million).

Full details of our performance are set out on pages 46 – 53 of our Annual Report and Accounts and in this Annual Performance Report.

6. How we balance the relationship between delivering our services and rewarding Executives

The Remuneration Committee sets the Executive Remuneration policy in the context of the approach to pay for the workforce as a whole.

Our pay structure for Executive Directors and members of the Executive team is intended to be simple and transparent and clearly links pay to performance. Remuneration includes a significant element of variable pay, with targets that are stretching, and focused on achieving improved operational performance and excellent customer service. The elements of remuneration are as follows:

Fixed Pay

- Base salary
- Pension cash allowance
- Benefits (mainly health insurance)

Variable Pay

- Annual Variable Pay Scheme (AVPS) – an annual variable pay scheme, where awards are based on a range of measure relating to Customer Service, Operational Performance, and Strategic Goals. For AMP7, the scheme has been amended to focus on the key performance objectives of the business plan. Personal objectives have been replaced with a suite of Strategic Goals which are selected by the Remuneration Committee each year.
- Long Term Variable Pay Scheme (LTVS) – a five year scheme, to incentivise achievement of the Company's long-term strategy, 50% based on Totex performance and 50% based on overall reward/penalty outcomes for a range of performance development measures relevant to achieving the Company's long-term goals as set out in Welsh Water 2050.

This year, the Committee has continued to focus on implementing the Remuneration Policy approved by Members at the 2020 AGM. This included reviewing how targets are set for Annual Variable Pay awards consistent with incentivising the delivery of the principal performance commitments set by Ofwat in the Final Determination of the PR19 regulatory price review, and taking into account the guidance received from Ofwat on ensuring that performance related executive pay should demonstrate a substantial link to stretching performance delivery for customers including environmental commitments and obligations (letter from David Black to all companies' Remuneration Committee Chairs dated 18 February 2022).

Having reviewed the outcomes for the first year of the scheme, it became clear that the approach of using the cumulative ODI performance for customer, strategic and operational performance meant that over or under-performance in relation to a single metric would have a disproportionate impact on the AVPS outcome in a way that had not been anticipated and was not intended when the scheme was introduced. Accordingly, the Remuneration Committee considered proposals for amending how AVPS targets are set for 2021-22 and future awards to simplify them and to make it more likely to produce a balanced outcome which reflected performance across all relevant measures.

For 2021-22 AVPS awards, as the measures and approach had already been communicated to employees and Members, the Committee agreed to retain the overall framework but to limit the impact of any single measure within a range of threshold to maximum ODI performance for that measure. This outcome would then be subject to a discretionary assessment by the Committee to make sure that the 2021-22 outcomes are consistent with the overall performance delivered to customers in the period, including consideration of environmental measures. Based on this approach, the initial formulaic AVPS outcome was higher than expected. However, the Committee noted that this outcome would be an increase compared to the 2020-21 AVPS despite performance in a number of key metrics being at threshold level. The Committee therefore applied its discretion to reduce the outcome for the operational element from 24% to 12% of maximum, and to reduce the customer element to produce an overall outcome of 40% of maximum. The Committee agreed that this reduced outcome was more closely aligned to performance in the period and the experience of customers.

The LTVPS outcome for 2021-22 was 31.9% of maximum with the totex element being met just above target level, and the performance development threshold targets not being met. In accordance with the LTVPS rules the award is capped at 30%.

Further details of our Directors' pay policy and implementation are set out in the Directors' Remuneration Report (see pages 146 – 166 of the Annual Report and Accounts). This includes details of the proposed Executive Pay Policy for AMP7, which was approved by Glas Members at the 2020 AGM. In setting policy, the Committee was mindful of the objectives of Ofwat's Guidance on Board Leadership, Transparency and Governance and the UK Corporate Governance Code. All awards are subject to malus and clawback provisions (see page 150 of the Annual Report and Accounts for further details).

Statement Approval

The Company has in accordance with its Licence prepared this Company Direction and Performance Statement, which was approved at the joint Board meeting of Glas Cymru Cyfyngedig and Dŵr Cymru Cyfyngedig, held on 7 July 2022, as evidenced by the Directors' signatures below.

Approved on behalf of the Board of Dŵr Cymru Cyfyngedig,

Alastair Lyons Chair of the Board	Peter Perry Chief Executive Officer
Mike Davis Chief Financial Officer	Graham Edwards Senior Independent Non-Executive Director
Debra Bowen Rees Non-Executive Director	Tom Crick Non-Executive Director
Jane Hanson Non-Executive Director	Joanne Kenrick Non-Executive Director

7 July 2022

Appendix 3 – Board Statement on the Accuracy and Completeness of Data and Information 2021/22.

The Company is required by the terms of the Instrument of Appointment to meet the obligations outlined in the Water Services Regulation Authority's Regulatory Accounting Guidelines. One of these obligations, outlined in Regulatory Accounting Guideline 3.13 published in March 2022, is for the Board to prepare a Statement on the accuracy and completeness of data and information.

The Company's overall aim is to ensure that the data and information it publishes is accurate and reliable. The Board understands the importance of providing the Water Services Regulation Authority with high quality information. By high quality we mean data and information that is reliable, accurate and complete within the bounds specified.

It is also important that the Company provides information to customers and stakeholders that is customer-led, accessible, clear, accurate, transparent and timely. Our ongoing objective therefore is to make available information that is easy to follow and navigate and which enables customers and stakeholders to understand how we are performing. We also recognise that this helps build trust and confidence in the business. Although it is a condition of the Company's Instrument of Appointment to produce this Statement, we consider that it also helps us to achieve our Vision of earning the trust of our customers every day.

Information Notice 22/01 published by the Water Services Regulation Authority in March 2022 sets out additional guidance for water and wastewater companies in England and Wales in preparing their Statement. Within the business we have well-established governance and accountability processes to produce high quality information. To confirm that the Company has followed guidance issued by the Water Services Regulation Authority the information contained within our Annual Performance Report is subject to checks by the Regulatory and Compliance Teams, scrutiny at Director level, review by the Audit Committee, and audit by our independent External Auditors.

Having made reasonable and relevant enquiries, the Board considers that the Company has in place an assurance framework and adequate systems of control appropriate for a Water and Sewerage Undertaker acting diligently, to allow the Board to discharge its responsibilities under Condition F6.2 of the Instrument of Appointment and Regulatory Accounting Guideline 3.13 and to confirm that in the opinion of the Board the data and information which the Company has provided to the Water Services Regulation Authority in the reporting year and/or which it has published in its role as water and sewerage undertaker was accurate and complete. A description of the activities which the Board has considered to allow it to make this Statement can be found at Appendix i.

The Company has in accordance with the Regulatory Reporting Guidelines and/or our Licence prepared this Board statement on the Accuracy and Completeness of Data and Information, which was approved at the joint Board meeting of Glas Cymru Cyfyngedig and Dŵr Cymru Cyfyngedig, held on 7 July 2022, as evidenced by the Directors' signatures below.

Approved on behalf of the Board of Dŵr Cymru Cyfyngedig,

Alastair Lyons Chair of the Board	Peter Perry Chief Executive Officer
Mike Davis Chief Financial Officer	Graham Edwards Senior Independent Non-Executive Director
Debra Bowen Rees Non-Executive Director	Tom Crick Non-Executive Director
Jane Hanson Non-Executive Director	Joanne Kenrick Non-Executive Director

7 July 2022

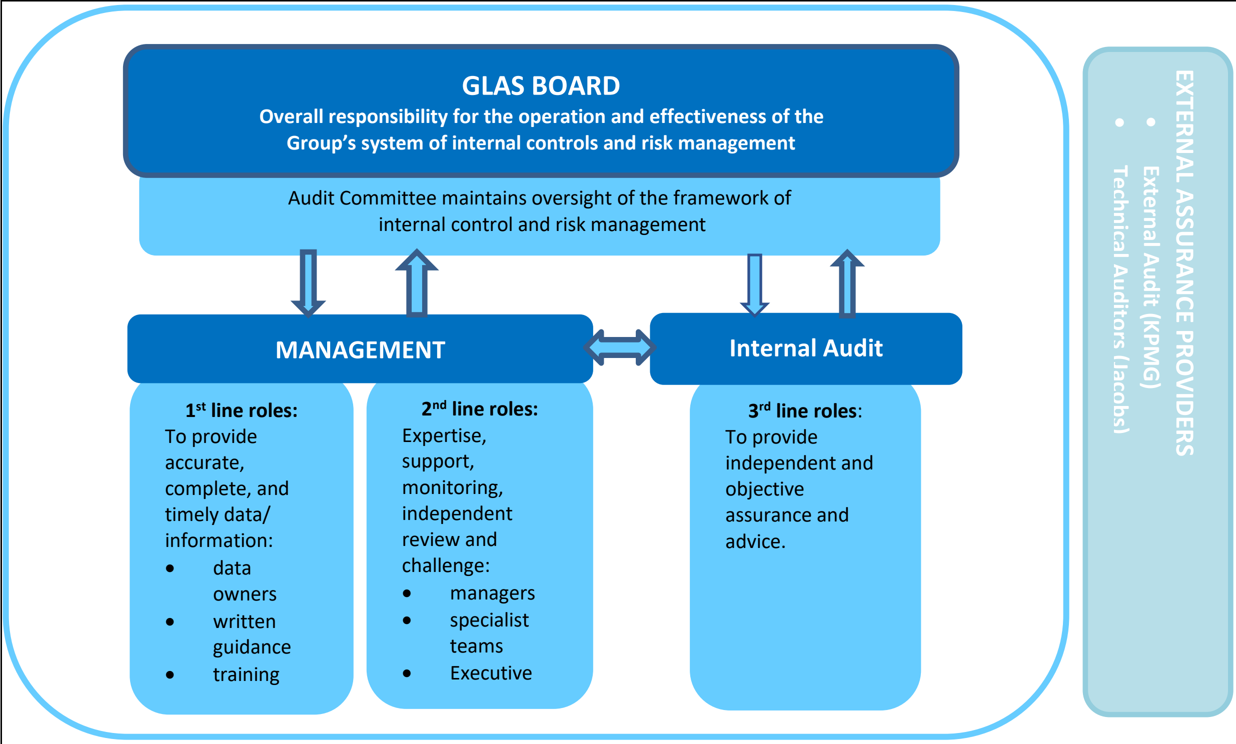
Appendix i

A description of the activities which the Board has considered to allow it to make the Board Statement on the Accuracy and Completeness of Data and Information.

To produce the Statement on the accuracy and completeness of data and information the Board addressed four key areas and considered the Board's main activities in these areas:

1. How the Board has engaged and challenged on the assurance approaches which have been taken.
2. How the Board has taken action to ensure that any exceptions and weaknesses in the assurance approaches have been addressed.
3. How the Board has satisfied itself that the approaches have appropriately identified and addressed any risks to the provision of accurate and complete data and information in particular areas.
4. How the Board has utilised individual directors and committees in carrying out its activities in this area.

Main Activities
Overview of the Assurance Approach The Company has in place an audit and assurance framework which allows for the systematic monitoring and evaluation of performance. This involves having appropriate governance arrangements, close involvement by the Board in the assurance process, and the right level of independent review and challenge. It helps ensure that statutory and regulatory reporting requirements are met in full with a high level of assurance.



KEY: ⇧ Accountability, Reporting ⇩ Delegation, Direction, Resources, Oversight ⇔ Alignment, Communication Coordination, Collaboration

The data assurance framework is underpinned by five key cornerstones:
1. **Robust assurance principles** – the Company operates a "three-lines of assurance" model, targeted at areas of greatest risk.
2. **Clear ownership and accountability** – the Company has clear lines of ownership and accountability for both the delivery of performance and the accuracy and reliability of the data provided.

- Strong personal and collective ownership is critical for ensuring the accuracy of the data and information produced, driving improvements.
- Regular internal performance reporting to the Executive monthly and Board (at every meeting), and updates on performance to the Customer Challenge Group and CCW, reinforces this culture of ownership and accountability.
- Every year, the compliance framework is refreshed to ensure that individual accountabilities are linked to regulatory and statutory obligations.
- There is also a rigorous process of sign-off for regulatory data contained within the Annual Performance Report, including sign-off by the data owner, the responsible senior manager (where appropriate) and the accountable director. This is in addition to our Board governance arrangements.
- The 'three lines of defence model' ensures that there is clear separation of accountabilities between those responsible for delivery of a performance commitment or a regulatory/statutory obligation and those responsible for ensuring the integrity of that data. This delineation is mirrored in the governance arrangements.

3. **Effective governance** – the Company's Assurance Plan provides for governance of all performance commitments and other external reporting with a clear delineation of accountabilities and has the following key features:

- the Board's role is to meet its obligations to the Company's stakeholders. It reviews performance in the light of the Company's strategic objectives and business plan commitments – ensuring that any necessary corrective action is taken;
- the Board's Audit Committee assists the Board in discharging its responsibilities for the integrity of the Company's financial statements, the assessment and effectiveness of internal controls for both financial and non-financial data and the effectiveness of internal and external auditors; and
- the Customer Challenge Group provides independent external challenge of both our performance against our commitments and any supporting information we provide on it. Our Regulators, DWI, EA and NRW, and the consumer watchdog CCWater, also provide independent scrutiny and challenge.

4. **Transparency and accountability** – the Company publicly reports on its performance and hold itself to account where it does not meet its commitments.

5. **Company culture** –the Company's culture is a cornerstone of the data assurance process and is based on shared values and beliefs. It helps shape the way the Company conducts its everyday business and ensures it strives to "do the right thing". Because of its importance, company culture is sometimes described as a layer of control even preceding the first line of defence against inaccurate information. Maintaining a positive culture is important to the Board because:

- everyone is aware of the expectations regarding high quality information;
- other controls will focus on checking and correcting errors, but in a positive corporate culture, errors are less likely to arise because individuals create, record and transmit information completely and accurately as part of the way they work;
- other controls are laid over the top of the information-reporting process, but cultural controls are embedded within it;
- other controls might be occasional or periodic, but culture is ongoing and permanent; and
- everyone knows that they can be honest about data errors.

Risk Based Approach to the provision of accurate and complete data and information in particular areas

The risk based assurance approach in operation examines the Company's end-to-end reporting processes to identify the risks, strengths and weaknesses associated with providing information that is of a high quality and which customers and stakeholders can trust. It also examines the probability of these risks materialising and the potential impact that they may have. This ensures that the Company focuses on the areas which would have the greatest impact and allows it to take action to monitor and actively manage any relevant risks.

The approach followed is based on the methodology set out by Ofgem, which was developed to provide guidance on best practice for conducting and reporting risk assessment and data assurance activities in order to ensure complete, accurate and timely data is submitted.

This approach was independently reviewed and endorsed by KPMG.

Even though the Company was promoted to the self-assurance (highest) category in the last and final Company Monitoring Framework assessment carried out by Ofwat January 2019, the Company continues to follow similar robust and transparent assurance processes that have served it so well over recent years.

The Company has again undertaken a reporting risk assessment for all relevant data that will be contained in the Annual Performance Report (and other key documents). This was an important exercise and formed the basis of the Company's Data Assurance Summary.

As in previous years, the Data Assurance Summary includes a wide variety of controls and mitigating actions designed to ensure that customers and stakeholders can trust the information the Company publishes.

Data Assurance and the culture and governance framework

In terms of data assurance, the Board considers that the following features of our culture and governance framework are key strengths:

- Colleagues in the business understand and appreciate the value attached to data quality and the processes used to generate the data. The Regulation Department provides an annual update to data owners and guidance in the form of an information pack on the process and timeline for the Annual Performance Report;
- The Company's Corporate Behaviours Framework and Code of Conduct actively encourages colleagues to 'have the confidence to raise any concerns' and 'speak up' about inaccurate information or suggest improvements to existing processes that will improve data quality. The options available to colleagues wishing to raise any concerns are detailed in the 'Whistle Blowing' procedure;
- Reviews of performance are conducted regularly throughout the Company from Board level to individuals. This includes those carried out by the Board, the Audit Committee, the Chief Executive Officer, the Quality and Environment Committee and the Executive team;
- The Technical Auditor (Jacobs) carries out a formal review and certification of 54 of the current 56 Performance Commitments (the other 2 are audited by KPMG) and a selection of other regulatory data and provides a detailed report commenting on compliance with procedures and relevant regulatory reporting requirements and highlights any issues with the reported figures. This includes checking the source of data, compilation of the data including the process of any extrapolation and assessing the adequacy of reported data. In addition, the Technical Auditor reviews and if required scores the Methodology Statements where they exist for all of our key measures and other relevant regulatory data;
- Ahead of the publication of the Annual Performance Report, the Internal Audit team carry out a high level audit and evaluation of the systems in place on the reporting framework within the Company and review the effectiveness of the system of risk management, control and governance;
- A programme of internal audits is approved and overseen by the Audit Committee to assess the adequacy of control, governance and risk management processes. The results of these audits are reported to the Audit Committee, which ensures that actions arising from internal audits are completed on a timely basis;
- The Company has a well embedded risk management process that identifies, assesses, and manages our risks. All colleagues play a part in risk management. Individual teams within the business take responsibility for managing risks within their areas of responsibility. The Business Area Risk Registers are reviewed quarterly by the Executive. The Executive update on strategic risks affecting the business is reviewed at every Board meeting;

- Robust financial control monitoring processes provide assurance that the Company's key financial controls are operating effectively and that the financial information produced by our accounting system can be trusted; and
- The Company's Integrated Management System, which has certification to various ISO Standards, has been established to reinforce the management of risks and opportunities associated with many areas of the business and compliance with regulatory and legislative obligations. Audits of compliance with this system are conducted both internally and by our third party certifiers (SGS).

Key assurance activities during 2021/2022

Data providers, their managers and business unit directors

During the year nominated data providers, their managers and business unit directors produce and approve data, commentaries and methodologies and audit trails to support the reported performance and demonstrate the control checks that have been applied.

Methodology Statements

Comprehensive Methodology Statements are in place for all performance commitments. They are updated to reflect comments received from the Regulation Team and the Technical Auditor and changes in process or obligations which may have occurred in the year.

The Regulation Team

The Regulation team undertake their own reviews, and this includes a rigorous process of internal due diligence to test: the application of the appropriate Methodology Statements and reporting requirements; challenge information, judgements and assumptions associated with both financial and non-financial data; and to ensure compliance with the relevant guidance. This provides a good opportunity to highlight to management areas where judgements were required, or assumptions needed to be tested.

Information packs containing all relevant information are provided to all data owners. This is supplemented with several group question and answer training sessions.

Independent Technical Auditors

Jacobs (the Company's Technical Auditor) undertake a full data review in accordance with an agreed Audit Plan. This involves:

a) A review of documentation including Methodology Statements already in place for individual data items;
b) A process review which involved face to face discussion via Teams with the data owner; and
c) A year-end audit involving document review and face to face discussions via Teams with data owners covering: - adherence to internal processes; - tracing to source data; - sample checks; - confidence grade reviews; - calculation of rewards/penalties (where appropriate); and - commentaries.

Jacobs prepare reports for each audit and the risks are scored. Jacobs also produce a letter to the Board summarising their findings and attend both the Audit Committee meeting in June and the Board meeting in July to report their conclusions and to answer any questions.

Financial Auditors

The independent financial auditors (KPMG) undertake their audit and assurance procedures and substantially complete them by the time of the Audit Committee meeting on 29 June 2022. KPMG attends the Board meeting in July and provide their assurance confirmations and audit opinion.

Internal Audit

The Internal Audit Team undertook a high-level review of governance processes put in place to ensure the accuracy and completeness of non- financial data reported in the Annual Performance Report for 2021-22. The report concluded that there was an effective governance framework for the completion, review and approval of Data Tables and assigned an overall rating of “Full Assurance”.

Customer Challenge Group

Updates on our performance are shared with the Chair of the CCG.

The Executive Team

The Executive Team review all data reported in the Annual Performance Report during two review meetings on 24 May and 14 June. This is also attended by Jacobs and the Internal Audit team. Members of the Regulation team and selected data owners (and/or their managers) are also present. For each performance commitment and data table, a summary containing current year’s performance, historical performance and data owners’ and Jacob’s/KPMG’s issues is produced and forms the basis of discussions. Key judgements and material assumptions are reviewed.

The Audit Committee

During 2021/2022 the Audit Committee received and reviewed the Company’s key regulatory submissions and assurance processes relating to:

- the Annual Performance Report, and Assurance Reports from Jacobs and KPMG. At the same time the Committee received the Company’s annual Risk and Compliance Statement (and associated Ring-Fencing Certificate), and Assurance Report from Jacobs, together with the Internal Controls paper from the Executive, and
- the publication of our Charging Schemes for 2022/2023

The Board received feedback from the Audit Committee on the assurance processes followed for the 2021/22 Annual Performance Report, together with the updates from Jacobs and KPMG, in advance of the Board’s formal approval of the Annual Performance Report prior to publication in July 2022.

The Audit Committee applied a similar process in reviewing the assurance process that underpinned the Board’s approval of the Company’s Charging Schemes for 2021/22 in December 2020.

The Audit Committee reviewed financial performance in detail at the half year and year end (financial statements) and received regular reports from the Group’s external auditors, KPMG and the Company’s Group Financial Director in relation to accounting treatments.

The Audit Committee recommended that the financial statements be approved by the Board, it also confirmed, in respect of the 2021-22 Annual Report and Accounts, that it was fair, balanced and understandable.

Both the Audit Committee and the Board review the overall process, the operation of the systems of internal and external controls and reviewed the key judgements required in compiling the Annual Performance Report.

The Audit Committee and the Board make appropriate enquiries of the Executive Team and the relevant experienced colleagues involved, in particular the Director of Strategy and Regulation and also the Technical Auditor and the independent financial auditor.

Appendix 4 - Risk and Compliance Statement 2021/22

Scope of the Risk and Compliance Statement

The Water Services Regulation Authority (Ofwat) requires all water companies to provide a statement setting out how they have complied with their relevant statutory, licence, and regulatory obligations for which Ofwat is the relevant enforcement authority, or failing that, to explain why they are unable to do so. The Risk and Compliance Statement is one of Ofwat's key regulatory tools and allows companies to evidence their accountability to their customers and demonstrate to Ofwat that they are complying with their obligations.

The Risk and Compliance Statement

We recognise the importance of demonstrating to our customers, stakeholders, and regulators that we are meeting the statutory, licence, and regulatory obligations that apply to our activities. We have set out in this Statement and our Annual Performance Report our compliance with and performance against certain key performance measures, legal requirements, and regulatory outputs. We have also identified the risks that we are facing and the steps we are taking to manage and mitigate those risks.

In preparing this Statement we have considered our compliance with those legal, licence, and regulatory obligations for which Ofwat is the enforcement authority. In respect of these obligations, subject to the matters set out in this Statement, we confirm that:

- We have a full understanding of, and are meeting, our statutory and regulatory obligations.
- We have taken steps to understand and meet our customers' expectations.
- We are satisfied that we have sufficient processes and internal systems of control fully to meet our obligations.
- We have appropriate systems and processes in place to allow us to identify, manage, mitigate, and review our risks.

In this Statement we also:

- explain links between the standards of performance we achieve, and directors' and senior executives' pay (s35A Water Industry Act Statement);
- confirm that the auditors have been made aware of all relevant information (Companies Act 2006);
- explain our dividend policy (Licence Condition P29 and Regulatory Accounting Guideline 3.13);
- confirm that we have sufficient financial resources and facilities, management resources and systems of planning and internal control available to us for at least the next 12 months to meet our obligations as a water and sewerage undertaker and outline the main factors taken into account when making this statement (Licence Condition P12);
- confirm that a report has been prepared by the companies' auditors and addressed to Ofwat, stating whether they are aware of any inconsistencies between the P30 Ring-fencing Certificate and the financial statements or any information obtained in the course of their work (Licence Condition P35);
- confirm we will be able to continue in operation and meet our liabilities as they fall due over the period to March 2030 (UK Corporate Governance Code and Ofwat requirement);
- confirm that we have maintained an issuer credit rating which is classed as an Investor rating (Licence Condition P26);
- confirm that if a special administration order were to be made, we would have available sufficient non-financial resources to enable a special administrator to manage the affairs, business, and property of our regulated activities (Licence Condition P14); and
- confirm that transactions with associated companies are at arm's length (except where agreed by Ofwat) with no cross subsidy occurring (Licence Condition P19).

The Individual Statements

Dŵr Cymru fully recognises its accountability to its customers, its regulators and its other stakeholders and is pleased to provide the following Statements to demonstrate that it complies with its obligations and is managing its risk in an appropriate manner.

1. The Company considers it has a full understanding of, and is meeting, its obligations.

Our primary obligations and duties as a Water and Sewerage Undertaker are set out in the Water Industry Act 1991, the Water Resources Act 1991, and our Licence.

We keep our assurance processes continually under review to ensure they remain appropriate. A key emphasis is on ensuring the Company has sufficient processes and internal systems to fully meet its obligations. Our Legal Team works with colleagues throughout the business to identify new legal obligations and amendments to existing legislation. Colleagues in the Regulation Team keep abreast of developments or changes to our regulatory and Licence obligations. The Compliance Team provides advice, guidance, and support to the whole business on understanding the extent of any regulatory or Licence obligation and implementing an appropriate internal control framework to ensure compliance with those obligations.

During 2021-22 Ofwat made no modifications to our Licence Conditions.

It is essential that all concerned in ensuring Licence Condition compliance continue to understand their individual responsibilities and appropriate checks and controls are in place to meet our obligations. To achieve this, it was important to build upon the existing knowledge of the Licence Owners and to discuss the application of any new modifications with them. Consequently, and building on the processes we have developed over the last few years to ensure “ownership” of Licence conditions and legal/regulatory obligations, for each individual Licence Condition covered within the Risk and Compliance Statement we have now:

- Established who the Licence Condition “owner” is;
- Established the relevant Dŵr Cymru Executive (DCE) Member;
- Produced a PowerPoint Guide outlining the purpose of the Condition and our obligations;
- Developed a proforma that:
    - Reviews the Licence Condition in detail to establish all requirements;
    - Establishes how compliance with the individual requirement is achieved;
    - Contains a “compliance statement” which is signed by the Licence Condition Owner; and
    - Contains a “compliance declaration” signed by the relevant DCE Member.

For the 2021-22 Risk and Compliance Statement we mapped Company processes against our statutory obligations. This was a desk exercise combined with consultation with operational managers. In each case the outcome of the process followed demonstrated that the obligation in question was recognised and that there were processes in place likely to ensure compliance. We continue to use a common reporting format which includes:

- responsible Member of the DCE Team;
- formal description of the obligation, including hyperlinks to the actual legislation referred to;
- description of the obligation in plain English;
- details of policies, procedures and responsible Departments;
- internal governance and assurance arrangements;
- external assurance arrangements; and
- any material performance departures in the report year.

Each individual legal obligation has a Compliance Proforma (similar to the Licence Condition Proforma) that evidences how compliance is achieved.

Ofwat required our Board to provide assurance that the Company's PR19 Business Plan would enable it to meet its statutory and licence obligations and that we had taken into account the Welsh Government's Strategic Priorities and Objectives Statement.

In their 2019 (most recent) price review methodology statement Ofwat specifically mentioned two areas of compliance:

1. The Environment Agency and Natural England's water industry strategic environmental requirements (WISER) document; and
2. Natural Resources Wales's "PR19 expectations and obligations" document.

The Compliance Team assisted colleagues on this aspect of the PR19 process and reviewed both documents in detail and listed all the statutory obligations mentioned. These obligations were then mapped against the statutory obligations already identified in the Company's Risk and Compliance Statement to reinforce the assurance that we have a full understanding of, and are meeting, our statutory obligations.

We liaise with colleagues throughout the business to discuss the obligations they contribute to deliver as part of our focus on continuing to embed compliance within "business as usual" processes.

2. The Company has taken steps to understand and meet customer expectations.

Our Company Vision to "Earn the Trust of our Customers every day" helps to foster a "customer-led success" approach which aims to build trusted relationships with customers, raising our visibility in the communities we serve as well as encouraging ongoing customer involvement in the decisions we need to make as a business.

Our company values include being open and honest and this helps foster a culture where we challenge each other and acknowledge where we need to improve or change to meet customer expectations. We know that customers want us to do more to protect the environment and our approach to dealing with the focus on Combined Storm Overflows (CSOs) and river water quality is driven by our social purpose and our vision to earn the trust of customers.

Customer expectations are changing and developing including the desire for rapid problem resolution and environmental responsibility and we need to ensure that we meet these expectations whilst also focusing on the path to achieving the long-term goals we have set in Welsh Water 2050. We engage with our customers on a regular and long-term basis, through research and focus groups, our Community Fund grants, and Water Resilient Communities programmes. Our customer engagement programme ensures that we are listening to the views of customers and understanding their expectations and needs.

We engage with our customers in many different ways, from day-to-day customer enquiries relating to their accounts or an issue with their water supply or wastewater service through to commissioned customer research to help inform our work and business planning; from creating new content to engage with customers on social media to help inform and educate them, to using geo-targeted text messaging and social media advertising to target messages at affected customers during incidents. During 2021-22 we introduced and trialled a number of new engagement methods, including:

- Customer Contact: Building on the success of our 'Track My Job' service that allows customers to be kept informed as to where their engineer is, we have rolled the service out to more of our business including some of our main contract partners. For example, we have started rolling out the ability for

customers to video call and share videos with us in order for us to resolve problems quickly without the need to visit the property.
- Customer Research: Our customer research programme in 2021-22 looked at a variety of subject areas including a monthly 'Trust Tracker' that asks for customers' views relating to a number of issues including trust, overall customer satisfaction, and perception of value for money as well as other factors such as care for the environment. We have commissioned research to look at drainage and wastewater management plans, customer priorities for our PR24 Business Plan, and research to inform our behavioural change campaigns. As part of our PR24 research, and in response to a challenge from our Customer Challenge Group, we have created a Longitudinal Customer Panel, which will allow us to reconvene a group of customers over the course of the development of our business plan to test customers' views and opinions.
- Customer Engagement: We work with communities of interested individuals and groups on projects such as the Brecon Beacons Mega-Catchment and PestSmart programmes where, by working together, we can achieve greater outcomes than we could individually. We also work with third party organisations on projects such as the Water Resilient Communities project and our vulnerable customer strategy community outreach work, where their networks can reach people that would not historically have engaged with us. Through our Capital Investment programme, we engage with customers to inform them of our work and to work with them on any issues that may occur. Again, over the past 12 months we've developed a number of virtual public consultation rooms and exhibitions allowing us to engage with a wider audience than a traditional public drop-in session.

Welsh Water 2050

One of the key pillars underpinning customers' trust is their faith that we are planning and preparing to meet those challenges in future. In 2018 we published our Welsh Water 2050 vision setting out 18 "strategic responses" to trends which we, our key stakeholders, and our customers believed would help us meet those challenges head on. The first five-yearly review was undertaken over the last 18 months aimed at updating Welsh Water 2050 and ensuring that our long term strategy is optimised given the latest view of the world as it is now and as we expect it to be in the future.

In this update we identify the latest evidence underlying the need for our strategic responses and review the response we are making, including how each response is likely to be addressed in PR24. It also identifies where our, and society's, priorities may have changed since the document was first drafted, such as the greater urgency with which environmental issues are being addressed.

Customer Challenge Group

The Customer Challenge Group comprises customer and environment advocates from a broad variety of backgrounds. It meets regularly to review and comment on customer research, strategy, policy and initiatives. The Group was originally set up in AMP6 to represent customer views in the price review process. Whilst Ofwat is no longer mandating a Challenge Group of this nature, the independent challenge and opportunity for review provided by this Group is valued by the Board.

The Wellbeing of our Customers and our Communities

The nature of the services we provide, and our clear purpose to support our communities and the environment, as set out in our Articles of Association since 2019, means that Environmental, Social and Governance issues are at the heart of what we do.

In July 2021 the Customer Challenge Group provided our Board with their first annual review of the progress we have made against the Wellbeing Commitments to 2025 that we launched in March 2020 to contribute to the seven national Wellbeing Goals as set out in the Wellbeing of Future Generations (Wales) Act. A six month update was subsequently published in November 2021. The Customer Challenge

Group concluded that overall the Company had made good progress against the commitments and was largely on track, despite the challenges of the pandemic.

We have followed up our original Water Resilient Communities projects in Maerdy/Porth with additional programmes in Rhyl and Rhymney-Bargoed. We have now partnered with over 50 local organisations in these areas to help us engage with local people, including providing advice on eligibility for social tariffs and other financial assistance. Since the launch of the Community Fund in 2017 we have supported over 700 local community projects to help them deliver a wide range of community benefits.

Vulnerable Customers

In our Strategy for Supporting Customers in Vulnerable Circumstances, we highlighted the need to provide a more holistic service for customers, dealing with financial and non-financial vulnerability at the same time and making it easier for people facing difficult life events to access our services. To achieve this, we established our Specialist Support Team in April 2020, bringing together our affordability support with Priority Services, which ensures that those customers who are vulnerable receive assistance with all aspects of our service. This team of specialist advisors is trained to deal with the most complex situations facing our customers and ensure that they get all the support we can provide. We are now supporting over 116,000 customers through our Priority Services Register.

We regularly review our Vulnerable Customer Strategy to ensure that the needs of elderly and vulnerable customers are being met. We are reviewing the implications of the major tourism influx to Wales that we saw last summer on water demand and waste water processing, to ensure provision is sufficient over the long term.

We are very conscious of the impact of the cost of living challenge on many of our customers who are financially vulnerable, and we have maintained our levels of support with advice on how to monitor water usage and better control water bills, and providing financial assistance to help with bill payments for industry leading numbers of customers. We currently provide financial assistance to over 144,000 customers who struggle to pay their water bills.

Business Customers

We have dedicated teams that support all our business customers, large and small. This includes around 110 customers who are participants in the competitive retail services for water (for water companies based wholly or mainly in Wales, only customers who use more than 50Ml per year at a single site can choose their water retailer). There are, therefore, around 110,000 business customers for whom we remain the monopoly provider. We provide a tailored service to those business customers who request our expert knowledge and support to ensure we meet their expectations and help them manage their water and wastewater processes. We also offer business customers a range of additional services that complement our core service provision, such as leak detection and network optimisation, and we offer advice on issues such as water quality and cold weather preparations. Over each of the last three years we have achieved an excellent business customer satisfaction rating of 88% in our independently run random customer surveys.

Developer Services

One of Dŵr Cymru's key priorities is to provide the essential water and wastewater infrastructure and services to support and promote economic growth and development across our supply area. Our dedicated expert team supports our developer customers, whether concerned with providing new housing, commercial or industrial premises. The customer service experience of our developer services customers is measured by D-MeX, a new mechanism introduced by Ofwat in 2020-21. We estimate that we will be rated 11th in the sector for D-MeX in 2021-22 (2020-21: 12th) and although we recognise that some of our developer customer responses are impacted by additional regulation affecting these customers operating in Wales, we remain keen to further improve our D-MeX rating. The team also supports the many major infrastructure projects being undertaken in our area, such as those relating to new highways and rail, that typically require investments in water and wastewater infrastructure totalling around £50 million in committed works on a rolling annual basis.

3. We have satisfied ourselves that we have sufficient processes and internal systems of control fully to meet our Obligations.

The Board has overall responsibility for the operation and effectiveness of the Group's system of internal control and risk management. The Audit Committee reviews the integrity, adequacy, and effectiveness of the Group's system of internal control and risk management and related compliance activities on behalf of the Board.

The system of internal control is designed to ensure compliance with our obligations and manage the risk of failure to achieve business objectives. The operational policies and procedures which set out these controls are housed in the Integrated Management System or similar repositories and achieve international quality standards for Asset Management, Environmental Management, Occupational Health and Safety, and Quality Management. Our three lines of defence work together to provide confidence to the Board and its Committees, senior management, and our stakeholders over the adequacy of the design and operation of the controls.

During the year the Audit Committee has:

- maintained oversight of the operation of the Company's systems of internal controls and assurance of regulatory reporting;
- received reports from the Head of Business Assurance on the outcomes of internal audit investigations and whistleblower investigations;
- received and reviewed Risk Reports made available to the Committee and Board;
- received a detailed assurance report from the Executive on the internal controls and risk management process in place and any recommended changes thereto;
- critically reviewed the responses from management on internal audit investigations and closely monitored the status of overdue management actions;
- monitored the effectiveness of the internal audit function using a variety of inputs including the Committee's review of the audit reports produced, the Committee's interaction with the Head of Business Assurance, and updates at each meeting on progress against the internal audit plan, which includes the quality audits undertaken and reported on at meetings of the Quality and Environment Committee;
- approved the Internal Audit Charter and was satisfied that the internal audit function continued to operate on an independent basis; and
- reviewed progress of the rollout of the Enterprise Risk Management Framework prior to this being presented to the Board.

On behalf of the Board, the Quality and Environment Committee monitors the operational performance of the Company on a quarterly basis and provides oversight of the management and mitigation of risks to the business arising from operational, environmental and health and safety related issues. This Committee also reviews the Company's operational systems and quality assurance audit programme and receives the findings of audit reports relating to water and wastewater service provision.

The Audit Committee reports the results of its review of regulatory reporting to the Board which then draws its collective conclusion on the effectiveness of the system of internal controls. In fulfilling this responsibility, the Board considers regular reports from the Audit Committee, the Quality and

Environment Committee and from management, and relies on its routine monitoring of key performance indicators and monthly reports of financial and operational performance. The Board receives independent assurance both from internal audit, and where relevant, external specialist consultants, and also from Dŵr Cymru's technical advisor on regulatory reporting issues (Jacobs Engineering Group).

Taken as a whole, these processes enable the Board to review the effectiveness of the internal control system during the course of the year.

Our culture is also a cornerstone of the internal control framework and is based on shared values and beliefs. It helps shape the way we conduct our everyday business and ensures we strive to "do the right thing". Because of its importance, company culture is sometimes described as a layer of control against inaccurate information, even preceding the first line of defence. Maintaining a positive culture is important to us because other controls might be occasional or periodic, but culture is ongoing and permanent.

The culture of our Company is defined by the values we adopt and the knowledge, skills, and attitudes of our employees. We have made it our Vision to earn the trust of our customers every day. It is vitally important that we act responsibly as individuals and as a company at all times - not only when we are required to do so by law, but also generally, in our working lives.

4. We have appropriate systems and processes in place to allow us to identify, manage, mitigate and review our risks.

During the year, the Board approved an enhanced Enterprise Risk Management (ERM) Framework and after the year end appointed a Chief Risk Officer. The ERM process describes how risks are identified, evaluated, mitigated, monitored, and governed across Dŵr Cymru. We have introduced this within the business during the second half of 2021-22 and we are now monitoring its impact on the Company's risk management and reporting.

The Glas Board oversees the system of governance in operation throughout the Group. This includes a robust system of internal controls and a sound Risk Management Framework which includes risk identification, assessment, mitigation, and monitoring throughout Dŵr Cymru at an asset, project, function, and strategic level. It is also responsible for ensuring that Group policies which address specific risk areas are aligned to the Group's risk appetite and clearly inform the business as to how it should conduct its activities to remain within risk appetite.

Dŵr Cymru operates the Three Lines of Defence model. Under this model:

First Line
Operational management has ownership, responsibility, and accountability for directly assessing, managing, and mitigating risks.

Second Line
Specialist control functions and internal governance bodies provide the frameworks for, and monitor and support, effective risk management by the first line and ensure the flow of information on risk up and down the organisation, including risk escalation protocols.

Third Line
Independent assurance over the adequacy of design, effectiveness of operation and sustainability of the systems of internal control.

The Board and Audit Committee sit outside the Three Lines of Defence and receive reports and assurance from the three lines.

It is the responsibility of every colleague to identify the risks associated with their own area of operation and robustly to operate/comply with any controls designed to mitigate those risks. Risks which cannot be managed at an individual level should be escalated. Each risk has a risk owner who is accountable. The risk management framework supports Dŵr Cymru's commitment to earn the trust of our customers every day through delivering excellent customer service. The effectiveness of risk management depends on this integration in the governance and decision-making of the organisation.

Risk management is integrated into organisational activities and governance, with responsibilities and accountabilities assigned at appropriate levels within Dŵr Cymru.

Board

- Define and agree risk appetite
- At each Board meeting, review the Executive team's overview of strategic and any emerging risks affecting the business
- Regularly review the Company's key risks and ensure that they are mitigated and managed in line with risk appetite
- Review and place reliance on the work of the Audit Committee in their review of the effectiveness of the ERM framework and associated processes
- Carry out in-depth review of strategic risks twice a year (May and November Board meetings)

Audit Committee

- Review the effectiveness of the risk management processes and procedures and report to the Board on the reliability of these processes and frameworks
- Oversee risk management processes at the highest level, ensuring that all areas of risk are being overseen, mitigated, and reported on appropriately within the Company
- Receive assurance as to the effectiveness and reliability of management's oversight of the individual areas of the business/other committees that are performing risk oversight, and provide a recommendation to Board that it is satisfied with the governance and oversight being provided
- Receive assurance reports from the Internal Audit function that the risk management framework is effective and reliable including reports from both 1st and 2nd Lines of Defence

Group Chief Executive

- Under delegated authority from the Board, the Group Chief Executive Officer (CEO) has the role of proposing the strategic risk assessments including risk appetite to the Board and Audit Committee which the Board considers, modifies where appropriate, and then approves
- The CEO is responsible for ensuring that a system of risk management and risk governance is maintained at management level to ensure effective internal control of the operations of the business, to inform decisions on financial and operational planning, and to assist in achieving objectives and targets

Executive Team

- To fulfil the role of an Executive Risk Committee by providing 2nd Line of Defence oversight and challenge to enterprise risk management, including:
- To discuss strategic risks before each Board meeting and prepare reports to the Board that highlight key changes
- To review the Risk Register Quarterly Activity Report and consider whether any action is required, reassessing strategic risks in light of this report
- To highlight emerging risks for the attention of the Board
- To oversee the effective operation of the ERM upporting risk management processes
- To recommend risk appetite for Board approval

Each Business Area

- Individual teams within the business are responsible for managing risks within their areas of responsibility
- All teams must record their ERM risks and update their Risk Register and escalate these through their team leader

Risk Owner

- Each risk should have a risk owner who is responsible for assessment, management, and reporting of that risk

Internal Audit

- Ensure that the risk mitigants defined to reduce gross risk to the required risk appetite level are operating effectively
- Satisfy itself that the system of risk management is operating effectively within business operations in order to identify and manage the risks to which the business is exposed

DISCLOSURE OF DEPARTURES FROM THE STATEMENT OF COMPLIANCE WITH OUR OBLIGATIONS

Our Vision is to earn the trust of our customers every day. Strong governance and leadership, with the correct focus on customers at the heart of everything we do, together with properly transparent reporting, can play an important part in helping us achieve this Vision.

The Board notes that the following specific matters have been identified. In all instances of potential non-compliance, a thorough review was undertaken to identify the root cause and to obtain assurance that there were no significant risks to future compliance with the particular obligation. Further details on our performance can be found in our [Annual Performance Report for 2021-22](#).

Environmental Permitting Regulations 2016

- On 18 January 2021 we made an Enforcement Undertaking offer to the Environment Agency in respect of four breaches of the Environmental Permitting Regulations 2016 at Ross-on-Wye and Leominster. As part of the terms of the Enforcement Undertaking put forward, and in addition to the mitigation already undertaken at both sites, Dŵr Cymru has proposed a payment of £50,000 to the Wye and Usk Foundation to support the Courtaulds 2025 Water Ambition Initiative, developed and supported by the Waste & Resources Action Programme (WRAP) and UK Governments.
- During 2021-22 we have received correspondence from Natural Resources Wales requiring responses to questions raised under caution in response to alleged pollution incidents at the following sites:
    - Ty Gwyn WWTW (following audit);
    - Bynea – Gateway Resort Caravan Park (burst rising main);
    - Ruthin WWTW (breaches of storm discharge permit);
    - Llangefni Sewage Pumping Station (following fuel leak); and
    - St Clears (burst sewage main).
- The number of pollution incidents for 2021 was 163 (84 from wastewater assets and 79 from water assets).

  In relation to the pollutions from our assets, during 2021, three serious incidents occurred, all of which were classified as High – Significant (Category 2) incidents. The two from waste water were caused by the failure of the pumped final effluent line causing discharge to drainage ditches, and by a burst rising main discharging into the Loughor Estuary, and the one from water was caused by a burst main permitting a silty discharge to enter a water course via road gullies. In all instances repairs were quickly undertaken and procedures reviewed and amended as appropriate. Our aim is to achieve zero serious pollution incidents. All serious incidents are followed up by a Serious Incident Review which is led by the Chief Executive Officer of Dŵr Cymru, who meets with the relevant Managing Director of Water/Wastewater or the Director of Capital Delivery, as appropriate, to conduct the review and then provides detailed reports on the identified root cause(s), any wider implications of the incident and the action plans to address any ongoing issues. The conclusions of the review are then presented to the Quality and Environment Committee of the Board. The purpose of the incident review is to gather information that in turn may reduce the potential for future incidents. During the reviews the incident is analysed and lessons learnt disseminated, with recommendations, information and process changes instigated. We are also investing in new technology to reduce this risk of serious pollution incidents from burst rising mains. Pressure monitoring and analysis of this data provides early warnings of bursts that would previously have taken time to identify, reducing the volume and duration of any escape of sewage. In addition, we have begun a review of the drainage plans for our high risk water treatment works in order to ensure that any spillages are contained and do not enter surface water drainage.

  Our Pollution Reduction Strategy provides a sustainable approach to long term pollution performance improvement. Based around the themes of Asset Understanding, People, and Data and Systems, the objectives included in the strategy drive a planned approach to achieving zero serious pollution incidents. We continue to participate in the Environment Agency's Joint Workshop On (Pollution) Incidents, to ensure that we are implementing national industry best practices to improve understanding of asset bases in order to drive future improvements in pollution performance.

Discharges of dechlorinated water from water treatment works – known as "run to waste" incidents, are classified by Natural Resources Wales as pollution incidents, even though we consider there is a statutory provision allowing such discharges and that in most cases there is no discernible impact on the environment. We are currently engaged in correspondence with Natural Resources Wales as to whether "run to waste" incidents from water treatment works which do not have permits to discharge should continue to be classified as pollution incidents.

Treating Wastewater

The Urban Waste Water Treatment Regulations and the Environmental Permitting Regulations set standards for sewage treatment. For each of our wastewater and water treatment works there is a permit which regulates the quality of wastewater we are allowed to discharge into rivers and coastal waters.

2021 was another very challenging year for treatment works compliance. This was mainly due to the continued disruption and absence rates due to the COVID pandemic and the variation in loading on our treatment works from the unprecedented population increases on our coastal sites due to staycations over summer and into late September. During the 2021 calendar year we achieved 98.32% compliance with ten non-compliant discharges out of the 596 permitted treatment works discharges. These related to seven waste water treatment works and three water treatment works.

We remain committed to achieving 100% compliance in this area. The Compliance Steering Group provides the governance around this strategy. This Group has broad representation from across the wastewater business and meets monthly. The Group reviews asset performance, the effectiveness of incident management (pre and post) and monitors the progress and impact of the Final Effluent Compliance Strategy and the Action Plan that underpins it.

In 2022 our primary areas of focus will be on People Competency:

- Competent Operator training (roll out delayed due to COVID restrictions);
- Compliance Bulletins – targeted local briefings;
- New Starter induction and fast track training plan covering essential tasks, skills, IMS and Work Manager; and
- IMS Master classes.

Flow Compliance

Last year we noted in the Risk and Compliance Statement that meeting flow compliance on Pass Forward Flow to treatment and storm damage management would be one of our primary areas of focus in improving wastewater treatment works compliance. In November 2021, Ofwat wrote to us requesting information about Pass Forward Flow compliance and our previous disclosures of non-compliances. We provided detailed responses to all of Ofwat's requests for information in December 2021. In March 2022, Ofwat announced it had opened enforcement cases in respect of five other companies, and a sixth company was then added at the end of June, however in common with all Water and Wastewater companies, we understand that Ofwat's investigation is ongoing as it reviews all of the information submitted.

In November 2021 we also received a request from the Environment Agency for data related to Pass Forward Flow compliance in respect of certain of our wastewater treatment works in England. We responded to this. A small number of further English sites have been recently added to this data request. However, we understand that further requests for data are likely to be forthcoming from the Environment Agency, who have indicated that this industry wide investigation is likely to take two years.

Combined Storm Overflows (CSOs)

We operate a network of Combined Storm Overflows (CSOs) that were originally designed to protect properties by diverting storm water (rain water mixed with effluent) away from them when the capacity of these combined sewers is beaten, discharging instead into water courses and relying on dispersal to minimise impact on the environment. We are progressing well with the development of a new Drainage and Wastewater Management Plan, which will be out for consultation at the end of July 2022 and will set out our proposals for future investment prioritised according to environmental evidence on the impact of our wastewater operations, so that we can plan for improvement and agree with customers, investors and regulators the priorities and pace at which this will take place. We have over 2,300 of these CSOs in our operating area and with monitors at 99% of these we have been leading the industry with data that we voluntarily publish on their performance. With the West of the UK being the area that receives the most rainfall, some of these operate more frequently than the majority in the UK. However, given the low population density, the higher rainfall, the greater dilution in our rivers, the impact is lower than in some places in the UK, with more rivers in Wales meeting good ecological status than in England.

On privatisation, we inherited many CSOs that did not have the required Environmental Permit by Natural Resources Wales or the Environment Agency, and some that were permitted but were not in use. We have worked with our environmental regulators over the years to submit unused permits for surrender and to apply for permits for all unpermitted CSOs, and agreed with Natural Resources Wales to carry out a data cleansing exercise from 2015, when we began to install Event and Duration Monitors (EDM) to provide data on the operation of CSOs. Since 2015 we have submitted 152 permit applications for unpermitted CSOs. 132 CSOs have been issued with permits, 12 applications have been withdrawn or returned, and eight remain with Natural Resources Wales and still to be issued. During the same period, over 250 CSO permits have been submitted for surrender as no longer required. It is our intention to work with our regulators to ensure that all CSOs are permitted and to continue to publish data on the frequency and duration of their operation.

Operator Self Monitoring Programme

Our sampling team for both Urban Waste Water Treatment Directive and Environmental Permitting Regulations compliance reports sample outcomes to Natural Resources Wales and the Environment Agency. During 2020 the team encountered some operational difficulties, in part related to an internal reorganisation, and in part related to COVID absences, which meant that around one third of all samples related to the Environmental Permitting Regulations were rescheduled. We kept Natural Resources Wales and the Environment Agency informed of these rescheduled samples. On 10 May 2021 we received a letter from Natural Resources Wales which notified us that they were investigating a number of non-compliances with regard to samples taken during 2020. We submitted our report to Natural Resources Wales on 30 June 2021.

On 7 January 2022 Natural Resources Wales issued a letter asking questions under caution regarding the Environmental Permitting Regulations and breaches of multiple permits under the Operator Self Monitoring programme during 2020. A detailed response was sent on 21 February 2022. Natural Resources Wales has subsequently asked further questions under caution, and a response was submitted at the end of June 2022.

In the meantime, we have submitted our compliance data return to Natural Resources Wales for the 2021 Operator Self Monitoring programme, which demonstrated far fewer issues than for 2020 (around 75%

reduction in the number of descriptive non compliances at water treatment works and wastewater treatment works).

Water Quality

Under Section 68 of the Water Industry Act 1991, water companies are under a statutory duty to supply wholesome water. Regulation 4 of the Water Supply (Water Quality) Regulations 2018 in Wales provides that water is wholesome if it contains concentrations or values in respect of various properties, elements, organisms and substances that do not contravene the prescribed maximum, and in some cases, minimum concentrations or value.

Each year we carry out sampling at water treatment works, service reservoirs, and customer taps to ensure our water meets the European and National Standards. During the 2021 calendar year we carried out 240,653 tests and found 48 had failed the required Standard (0.02%).

An investigation report is completed for each failure and this is shared with the Drinking Water Inspectorate (DWI). Any recommendations or suggestions made by DWI are recorded in action plans with agreed timescales to enable progress to be tracked.

Drinking Water Safety Plans

A continuous supply of safe clean drinking water is vital to maintain public health. Ensuring the quality of that drinking water is fundamental to the service we provide to our customers. We do this by ensuring that the risks to drinking water quality are identified and managed. A Drinking Water Safety Plan (DWSP) is the most effective way of ensuring that a water supply is safe for human consumption and that it meets the health based standards and other regulatory requirements. It is based on a comprehensive risk assessment and risk management approach to all the steps in a water supply chain from catchment to consumer.

All water quality failures trigger a review of the asset specific DWSP to enable the capture of new risks and the review of existing risk scores. If any of our DWSPs identify a potential danger to human health we inform DWI immediately. The DWI may consequently issue a legal Notice, under Regulation 28(4) of the Water Quality (Water Supply) Regulations 2018, requiring the company to complete a programme of remedial actions.

We currently have 20 Improvement Programmes in place and the last Notice received from DWI was in April 2022. All are currently reported as 'on track' against delivery/completion dates for the associated improvement programmes. Seventeen Regulatory Notices require improvement in customer contact rates related to discolouration of water supply (customer acceptability) requiring delivery by the end of AMP7. Of the remaining three: one involves the construction of a new treated water tank (service reservoir) at Pengarnddu (completion due Sept 2022); one is the notice for the construction of Cwm Taf Water Treatment Works with a completion date of April 2031; and the final one is the regulatory notice issued during April 2022 for Treated Water Storage Tanks, that will be in force until the end of AMP7 (March 2025).

We hold quarterly meetings with DWI to discuss progress.

Abstracting Water

We currently hold 151 Licences issued by the Environment Agency/Natural Resources Wales which govern how much water can be taken from reservoirs, rivers, or groundwaters. During 2021 there were six instances of abstraction licence non-compliance. We are currently awaiting the final classification from Natural Resources Wales but have been informed that they will all be Category 3 incidents ("minor impact to the environment") or Category 4 incidents ("no potential environmental impact").

Leakage and Per Capita Consumption

Leakage and Per Capita Consumption outcomes stated throughout our Annual Report and Accounts for 2022 are provisional, and we will also be declaring the reported figures in the Annual Performance Report as provisional. This is on the basis that we have initiated a third party review of our interpretation of Ofwat guidance on reporting methodology for these Performance Commitments, and in particular as regards the way we interpreted the Convergence guidance for AMP7 reporting against these measures. Once the conclusions of the review are known later this year, we will review our published outcomes for 2020-21 and 2021-22 and our baseline data from 2017-18 used for setting targets. This review may result in the restatement of our AMP7 reported performance and consequently a possible change in previously reported Outcome Delivery Incentives. Pending the conclusion of this review we will not take the benefit of any reward applicable to our performance in 2021-22.

Industrial Emissions Directive

Natural Resources Wales and the Environment Agency have recently enforced Industrial Emissions Directive (IED) related permitting for discharges from our six sludge treatment centres. In order to meet permit conditions we are likely to have to invest at these sites and we have been negotiating timescales for the issuing of these permits in order to manage costs. We met the Environmental Agency to discuss a permit for Eign and they have confirmed they will issue the permit for the site by September 2022 with compliance expected by end of 2024 although there may be some opportunity for this to be delayed to meet our timescales. Cog and Five Fords IED permits are in place and we are compliant with conditions. At Afan and Queensferry sites we are progressing applications and improvements at present. Cardiff already has an IED permit for combustion, and we have an improvement notice to improve in other areas such as containment. We are scoping what we need to comply with this and are within the improvement notice timescales, which was submitted in January 2022. NRW wrote to us on 31 May requesting an interview under caution with regard to the permit status of Queensferry which has been subject to recent discussions on the improvements required.

Customer measure of experience

The customer measure of experience (C-MeX) is designed to incentivise water companies to provide an excellent customer experience for residential customers, across both the retail and wholesale parts of the organisation. C-MeX comprises of two surveys, the customer service survey of residential customers who have recently contacted their water company, and the customer experience survey of random members of the public in relation to their experience of their water company.

We notified Ofwat in January 2022 of two errors in supplying data within our contacts database for the customer service survey element of C-MeX, - arising as a result of a change in customer contact codes and a change in online payment mechanisms, where we had failed to apply our change control procedure appropriately. These errors affected the monthly C-MeX customer data sent between October 2020 and September 2021. Remedial actions were immediately taken and a detailed review was undertaken by our Compliance Team. The review concluded that including the additional customer contact information would likely have meant an increase in our overall C-MeX score.

Ofwat were kept informed throughout the process and met with our Compliance Team to discuss how the remedial actions that we put in place are working. Ofwat has since confirmed (June 2022) that it is content with the robustness of the remedial actions and consider the matter closed.

General Data Protection Regulation

We continue to monitor our programme of compliance across the business. We have significant numbers of interactions with our customers and we have experienced a number of technical breaches of our data protection policies. Out of the breaches notified internally during 2021-22, we have not deemed any to be serious and therefore notifiable to the Information Commissioner’s Office (ICO). In each case of a reported suspected breach, we ensure that any lessons learnt are taken into account, that the individual’s training on data protection is up to date, and that the specific circumstances which led to the breach or “near miss” have been addressed with their manager. As regards a small number of customer complaints to the ICO about how we have handled their personal data, we have cooperated fully with the ICO, and where necessary amended our practices and/or updated our policies (including our Privacy Policy) to increase transparency.

Environmental Information Regulations 2004

A complaint was made by a customer to the ICO about the cost charged for the provision of copy maps of our assets. Maps of our assets are deemed to be environmental information for the purposes of the Environmental Information Regulations (EIR), and therefore subject to its charging rules. The ICO upheld our approach to charging, but the customer appealed that decision to the First-tier Tribunal. The Tribunal did not take issue with most of the basis of our charge but found that some limited aspects of it should be reviewed. We published a revised charge for copy maps at the end of June.

STATEMENT OF DIRECTORS' RESPONSIBILITIES FOR REGULATORY INFORMATION

The following confirmations from our Directors are provided to comply with the requirements of Condition F of our Licence, which requires that accounting statements are prepared in accordance with the Regulatory Accounting Guidelines issued by Ofwat and Condition P (Ring Fencing). In particular, Regulatory Accounting Guideline 3.13 issued in March 2022 requires the following Statements to be made by our Directors:

- Statement on executive pay and performance.
- Statement on disclosure of information to auditors.
- Statement on Dividend Policy for the appointed business.
- Statement on sufficiency of resources and systems (Ring-fencing Certificate).
- Statement on Long Term Viability.

Statement on Executive Pay and Performance

The Company is required under s35A of the Water Industry Act 1991 to provide a Statement that the remuneration paid to Executive Directors is linked to standards of performance. This Statement is provided within the Report from the Chair of the Remuneration Committee which can be found in our Annual Report and Accounts for 2021-22.

Statement on disclosure of information to auditors

In the case of each of the persons who are Directors at the time when the Annual Performance Report is approved under Section 418 of the Companies Act 2006 the following applies:

a) so far as the Director is aware, there is no relevant audit information of which the Company's auditors are unaware; and
b) he/she has taken all the steps that he/she ought to have taken as a Director in order to make himself/herself aware of any relevant audit information and to establish that the Company's auditors are aware of the information.

This Statement can be found in our Annual Performance Report for 2021-22.

Statement on Dividend Policy for the appointed business

Licence Condition P29 and Section 3.11 of Regulatory Accounting Guideline 3.13 requires companies to report on the value of any dividend paid and provide a comprehensive explanation of the basis of the dividend.

Dŵr Cymru's ultimate parent undertaking is Glas Cymru Holdings Cyfyngedig, a company formed with the single purpose to manage Dŵr Cymru. As a company limited by guarantee, and having no shareholders, all financial surpluses are retained for the benefit of customers. The reserves built up from retained profits help to insulate Dŵr Cymru and its customers from any unexpected costs and also to improve credit quality to keep the cost of finance as low as possible.

Our 2016 Dividend Policy was revised and approved by the Board in February 2022 and Ofwat confirmed in April 2022 that the Dividend Policy is consistent with the requirements stated in Condition P29. No monies are transferred out of the Glas Cymru group of companies under this Policy and all financial surpluses are retained for the benefit of customers. Our Dividend Policy expressly provides that dividends will not be paid unless the Directors are satisfied that this would not impair Dŵr Cymru's ability to finance its regulatory activities. The Dividend Policy permits up to £100 million of funds to be paid intra-Group, outside the regulatory ring-fence, in order to enable the funding of commercial projects.

During the year to 31 March 2022 no dividends were paid or received by the Company.

This Statement can be found in our Annual Report and Accounts for 2021-22 and in our Annual Performance Report for 2021-22 which are available at www.dwrcymru.com.

Statement on sufficiency of resources and systems (Ring-fencing Certificate)

Information Notice 20/01 published by Ofwat in February 2020 sets out guidance for water and wastewater companies in England and Wales in preparing their Ring-fencing Certificate. The regulatory ring-fencing framework provides an important protection for companies and their customers. The Directors have resolved that a Certificate required under Condition P30 of our Licence and prepared in accordance with the latest guidance be issued to Ofwat confirming that in the opinion of the Directors the Company will have available to it sufficient:

- financial resources;
- management resources; and
- non-financial resources,

to enable it to carry out the Regulated Activities, for at least the next twelve month period.

In providing this Certificate, the Directors have also made a statement of the main factors that have led to the conclusion that resources are sufficient. This can be found at Appendix 1 of the Ring-fencing Certificate.

A copy of the Directors' Certificate together with the supporting main factors can be found in our 2021-22 Annual Performance Report.

This Directors' Certificate also confirms that in the opinion of the Directors all contracts entered into with any associated company include all necessary provisions and requirements concerning the standard of service to the Company, to ensure that it is able to meet all its obligations as a water and sewerage undertaker.

Section P35 of Licence Condition P requires our independent auditors to produce a report that sets out whether they are aware of any inconsistencies between the Ring-fencing Certificate and either the accounting statements or any information which the Auditors obtained in the course of their work as the Company's Auditors and, if so, what they are.

A copy of the auditor's report can be found in our 2021-22 Annual Performance Report.

Under Section 14 of Condition P of the Licence, the Company is at all times required to ensure, so far as is reasonably practicable, that if a special administration order were made, the Company would have available to it sufficient rights and assets (other than financial resources) to enable the special administrator to manage the affairs, business and property of the Company.

The Directors are satisfied that the business has adequate resources to continue in business for the foreseeable future. Accordingly, the Financial Statements for the year ended 31 March 2022 have been prepared on a going concern basis. The Directors also confirm this as part of the Ring-fencing Certificate.

Long-Term Viability Statement

Our customers need to know they can rely on the services we provide over the long term. Ensuring the long-term resilience of our business, including financial resilience, is therefore a key area of focus for us. The Board's consideration of the Group's long-term viability is embedded in our business planning process. This includes robust risk management controls, financial forecasting and sensitivity analysis, as well as regular budget reviews. Risks are identified and assessed through a continuous cycle of bottom-up reporting and review and top down feedback and horizon scanning. The Board has analysed the efficacy and robustness of its internal control framework in managing the likely causes and consequences of each risk. We have stress-tested our business plan forecasts to 2030 against a variety of financial scenarios.

Ofwat expects companies to confirm that they are financially viable over the longer term. Our approach to doing this complies fully with Ofwat's latest guidance contained within Information Notice 19/07 published in April 2019 as well as Provision 31 of the UK Corporate Governance Code.

As a result of their assessment, the Directors have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period to March 2030. The Long-Term Viability Statement is provided at pages 77 – 81 of our Annual Report and Accounts for 2021-22.

Licence Condition P26 – Maintaining an Investment Grade Rating

The Directors confirm that throughout 2021-22 the Company, or an Associated Company as issuer of debt on its behalf, has ensured that it has maintained at all times an issuer credit rating which is an investment grade rating. Dŵr Cymru has amongst the strongest credit ratings in the water sector, reflecting the Company's high level of creditworthiness. Two of our rating agencies have issued rating updates during the year, noting that the pandemic does not have a material impact.

On 5 November 2021, Moody's confirmed our A3 corporate rating, our A3 senior bond rating and our Baa2 junior bond rating; on 11 November 2021, Fitch Ratings confirmed our A senior bond rating and our BBB+ junior bond rating; and the latest Standard Poor's report on 17 May 2022 confirmed our A- senior bond rating and BBB junior bond rating. All rating outlooks are stable.

Licence Condition P19 – Trading with Associate Companies at Arm's Length

We have an Obligation to ensure that every transaction between the Appointed Business and any Associated Company is at arm's length so neither gives to nor receives from the other any cross-subsidy. There were no transactions with any associated companies except for:

- the Executive Directors of Dŵr Cymru Cyfyngedig (DCC) are also directors of other companies within the Glas Cymru Group. However, the emoluments of the Directors are paid in full by Dŵr Cymru Cyfyngedig as their activities are predominantly related to the regulated water and sewerage business. During the year the Directors' emoluments amounted to £1,675,000 (2021: £1,858,000) (including pensions accruals);
- no dividends were paid or received by the Company during the year (2021: none);
- intercompany interest payable to Dŵr Cymru (Financing) UK plc ("DCF"), another member of the Glas Cymru Holdings Cyfyngedig group, was £128,361,000 during the year (2021: £107,550,000). As at 31 March 2022 the balance outstanding on the intercompany loan from DCF stood at £3,085,276,653 (2021: £2,744,327,596);
- all borrowings raised by DCF are immediately on-lent to the company on an arm's length basis. The intercompany loan is subject to the terms and conditions of the whole business securitisation structure of Glas Cymru Anghyfyngedig and its subsidiaries. DCC, in its capacity as debtor, repays such principal and interest as is due on each borrowing on the due date plus 0.01%;
- an intercompany loan to Glas Cymru Anghyfyngedig of £1,971,000 (2021: £1,971,000) remains outstanding as at 31 March 2022. Interest payable on this loan has been waived; and
- as at 31 March 2022 intercompany trading balances owing to the Company were: Welsh Water Infrastructure Limited £13,350 (2021: £nil), Welsh Water Organic Energy (Cardiff) Limited £1,153,352 (2021: £320,559), Cambrian Limited £20,239 (2021 £10,979), Glas Cymru

Anghyfyngedig £8,481 (2021: £8,481), Glas Cymru Holdings Limited £18,901 (2021: £18,901), and Welsh Water Organic Waste Limited £55,131 (2021 £147,563).

Approved on behalf of the Board of Dŵr Cymru Cyfyngedig,

Alastair Lyons Chair of the Board	Peter Perry Chief Executive Officer
Mike Davis Chief Financial Officer	Graham Edwards Senior Independent Non-Executive Director
Debra Bowen Rees Non-Executive Director	Tom Crick Non-Executive Director
Jane Hanson Non-Executive Director	Joanne Kenrick Non-Executive Director

7 July 2022

Appendix 5 - Additional Regulatory Information

Notes to the 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 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. The measured income accrual as at 31 March 2021 was £79.2m, while amounts actually billed in 2021-22 totalled £76.3m. The difference, which constitutes less than 1% of revenue, is not significant and is a consequence of the estimation techniques necessary to calculate the accrual.

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 is 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’ have been introduced in recent years resulting 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 2022 the total value of tangible and intangible fixed assets has been revalued to the Company's 'shadow RCV', being the 31 March 2022 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. These asset lives are reviewed annually.

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 '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 Group 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 2019.

The liability recognised in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. 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 initially measured at fair value, which is the amount of the 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, inflation swaps and power hedges. Derivative instruments are used for hedging purposes to alter the risk profile of existing underlying exposures. Derivatives are recognised initially and subsequently re-measured at fair value. During the year to 31 March 2022, none of the Company's derivatives qualified for hedge accounting under IFRS 9 (2021: none). These instruments are carried at fair value with changes in fair value being recognised immediately in the income statement.

Taxation

The Group continues to invest heavily in capital expenditure for the benefit of our customers. The tax relief for this capital expenditure and the interest the Group 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 on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the 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 nor 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 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 profit will be available against which the temporary differences can be utilised.

Provisions

Provisions for restructuring costs, dilapidations, uninsured losses and losses on swap closure 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. 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 may be 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 RAGs 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 1.08 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 disapplied.
- **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 2022

	£m	
Loss for the year per statutory accounts	**(149.940)**	
Capitalisation of interest	(16.400)	Ofwat's RAG override to disapply capitalisation of borrowing costs under IAS 23
Depreciation on capitalised interest	3.639	Ofwat's RAG override to disapply capitalisation of borrowing costs under IAS 23
Revenue recognition- measured income accrual adjustment	(1.501)	Deviation from IFRS 15 as no judgement applied to the probability of collections when recognising revenue
Innovation fund	2.233	Innovation fund provision removed from operating expenditure as it's not an operating expense
Deferred tax	8.150	
	(3.879)	
Non-appointed loss (net of tax)	0.646	Regulatory tables prepared in respect of the appointed business only
Loss for the year per regulatory accounts	(153.173)	

1D – Statement of cash flows for the year ended 31 March 2022

	£m	
Increase in net cash per statutory accounts	**294.908**	
Difference between statutory and RAG definitions	(0.001)	Rounding diff
Non-appointed loss for the year	0.792	Regulatory tables prepared in respect of the appointed business only
Increase in net cash per regulatory accounts	**295.699**	

Notes to the regulatory accounts (continued)

Differences between statutory and RAG definitions (continued)

1C – Statement of financial position as at 31 March 2022

	£m	
Net assets per statutory accounts	**1,306.386**	
Capitalisation of interest		
- Fixed assets	(96.538)	Ofwat's RAG override to disapply capitalisation of borrowing costs under IAS 23
- Intangible assets	(10.560)	Ofwat's RAG override to disapply capitalisation of borrowing costs under IAS 23
	(107.098)	
Trade and other receivables:		
- Measured income accrual	4.043	Ofwat's RAG override to deviate from IFRS15; no judgement to be applied to the probability of collections, and all is considered as collectable
	4.043	
Trade and other payables:		
- Deferred income	457.432	RAG requirement to report separately on face of statement
- Accrued interest	(47.616)	RAG requirement to include accrued interest in trade and other payables
- Innovation provision	4.733	Removal of accrual for innovation competition as it's not an operating expense
	414.549	
Borrowings		
- Accrued interest	47.616	RAG requirement to include accrued interest in trade and other payables
	47.616	
Deferred income		
Deferred income – G&C	0.003	RAG requirement to report separately on face of statement
Deferred income – adopted assets	(447.249)	RAG requirement to report separately on face of statement
	(447.246)	
Provisions	(10.186)	RAG requirement to include deferred income > 1 year to provisions
Deferred tax	26.774	Deferred tax impact on RAG deviation (above)
Net assets allocated to non-appointed activities	(45.001)	Regulatory tables prepared in respect of the appointed business only
Net assets per regulatory accounts	**1,189.837**	

Notes to the regulatory accounts (continued)

Revenues by customer type

Table 2G, “Revenues by tariff type for the year ended 31 March 2022 – non-household water”, reports all >50Ml 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 customers	Average non-household retail revenue per connection
	£m	£m	£m	000s	£
Non-default tariffs					
Raw water > 50Ml (measured)	1.955	0.020	1.975	0.010	1,960
Partially treated water > 50Ml	0.803	0.008	0.811	0.001	7,978
Water large user 50Ml-99Ml (measured)	4.531	0.045	4.577	0.053	853
Water large user 100Ml-249Ml (measured)	4.561	0.046	4.607	0.030	1,529
Water large user 250Ml-499Ml (measured)	3.785	0.040	3.825	0.011	3,647
Water large user 500Ml-1000Ml (measured)	3.235	0.036	3.272	0.005	7,261
Special agreement register – ref WSHNONPOT9	1.812	0.020	1.831	0.001	19,666
Special agreement register – ref WSHNONPOT10	0.884	0.009	0.893	0.002	4,316
Total non-default tariffs	**21.566**	**0.223**	**21.790**	**0.113**	**1,977**
Default tariffs					
Raw water < 50Ml (measured)	0.001	0.000	0.001	0.003	14
Partially treated water < 50Ml (measured)	0.002	0.000	0.002	0.003	43
Potable water < 50Ml (non-household) Measured	54.139	3.339	57.478	91.616	36
Potable water < 50Ml (non-household) Unmeasured	1.868	0.267	2.135	7.384	36
Special agreement register – ref WSHPOT1	0.016	0.000	0.017	0.001	164
Total default tariffs	**56.027**	**3.606**	**59.633**	**99.007**	**36.42**

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 £1,821,000 (2021: £1,968,528).

Company interest payable to Dŵr Cymru (Financing) Limited (DCFL), another member of the Glas Cymru Holdings Cyfyngedig group, was £128.4m during the year (2021: £107.6m). As at 31 March 2021 the balance outstanding on the intercompany loan from DCFL stood at £3,085.3m (2021: £2,744.3m). 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 2022. Interest payable on these loans has been waived.

As at 31 March 2022 intercompany trading balances owing to the Company were: Welsh Water Infrastructure Limited £13,350 (2021: £nil), Welsh Water Organic Energy (Cardiff) Limited £1,153,352 (2021: £320,559), Cambrian Limited £20,239 (2021: £10,879), Glas Cymru Anghyfyngedig £8,481 (2021: £8,481), Glas Cymru Holdings Limited £18,901 (2021: £18,901) and Welsh Water Organic Waste £55,131 (2021: £147,563). There is no interest payable on these outstanding balances.

During the year no dividends were paid or received (2021: 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 3.13 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	0.447
	Welsh Water Organic Waste Ltd	0.774	Fully absorbed cost	0.197
Other costs	Welsh Water Organic Energy (Cardiff) Ltd	2.587	Fully absorbed and support cost	0.192
	Welsh Water Organic Waste Ltd	0.774	Fully absorbed and support cost	0.100
Loan interest	Dŵr Cymru (Financing) Limited	-	Loan interest payable at 0.01% mark up	128.361
Intercompany balances	Welsh Water Organic Energy (Cardiff) Ltd[1]	2.587	Intercompany balances; net increase of £0.833m. interest charged on this outstanding balance in 22/23.	1.153
	Welsh Water Organic Waste Ltd[1]	0.774	Intercompany balances; net decrease of £0.092m	0.055
	Welsh Water Infrastructure Ltd	-	Intercompany balances; increase of £0.013m	0.013
	Glas Cymru Anghyfyngedig[1]	-	Intercompany balances; no movement in year	0.008
	Cambrian Ltd[1]	-	Intercompany balances; net increase of £0.009m	0.020
	Glas Cymru Holdings Ltd[1]	-	Intercompany balances; no movement in year	0.019
Intercompany loan to	Glas Cymru Anghyfyngedig[1]	-	Intercompany loan; no movement in year	1.971
	Dŵr Cymru Holdings Limited	-	Intercompany loan; no movement in year	2.812
Intercompany loan from	Dŵr Cymru (Financing) Limited	-	Intercompany loan; net increase of £341m in the year which relates to a bond issue at the beginning of the year	3,085.277
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	0.724
Rental of appointed assets	Welsh Water Organic Waste Ltd	0.774	Arm's length contract for rental of appointed assets	0.054

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

[1]Interest has been waived on these balances

Notes to the regulatory accounts (continued)

Transactions with associates (continued)

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	1.324
Visitor centres	Fully absorbed cost of Visitor Centres	2.938
Search fees	Cost of team supporting this activity	0.314
Support costs for non regulated activity	Support costs based on FTE of non appointed activity	1.374

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 2021		309.9	166.2	732.2	(21.3)	1,187.0
Loss for the year	1A	-	-	-	(149.9)	(149.9)
Revaluation net of tax	1B	-	-	256.1	-	256.1
Actuarial gain net of tax	1B	-	-	-	13.2	13.2
Transfer to retained earnings		-	-	(73.5)	73.5	-
At 31 March 2022	**1C**	**309.9**	**166.2**	**914.8**	**(84.5)**	**1,306.4**

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 LIBOR[2] plus a margin to 5.67% fixed.

[2] Transitioned to SONIA post year-end

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 the swaps included in this line are held in DCWW and are floating-to-RPI swaps under which, after 31 March 2022, DCWW will receive floating rate SONIA and pays a fixed amount plus the movement in RPI. The swaps are "year-on-year" swaps with all payments and receipts (including RPI) settled in the year. Interest rates are a weighted average of:

(a) Column O: a fixed amount of 1.60% plus RPI of 7.09% = 8.69%; and
(b) Column P: SONIA of 1.49%.

As at 31 March 2022, £468m of swap notionals 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. The accounting value of the leases is £379m. The notional value of swaps allocated to the finance leases is £386m, representing the average balance of the finance leases subject to floating rate interest in the year. The swaps are amortising. Some leases have been terminated and, in consequence, swaps with a nominal value of £2.8m have been reallocated to floating rate European Investment Bank ("EIB") and KFW IPEX-Bank liabilities.

When calculating the nominal value by maturity, maturity has been calculated with reference to the weighted average maturity of each amortising swap. Overall, maturities of these amortising swaps range from 1 to 18 years with a weighted average of 8.5 years.

Swaps held in other group entities

DCF UK, the financing sister company of DCWW has entered into eight interest rate swaps.

(a) A £192m (nominal) floating to fixed interest swap – this swap was taken out in 2001 to hedge floating rate bond liabilities that were on-lent to DCWW. The bond liabilities have been repaid, but the swap has been retained to hedge floating rate EIB debt raised by DCFL and on-lent to DCWW by way of an inter-company loan with a margin of 0.01%. The swap is shown on line 1 of Table 4I. The swap matures in March 2031; and
(b) Seven fixed to RPI swaps which are synthetic "RPI bond" style swaps where the indexation is accreted and paid on the maturity of the swap (which will occur simultaneously with the maturity of each related bond). The swaps and the fixed rate bond liabilities have been on-lent to DCWW as combined index-linked loan instruments at a weighted average rate of 0.1% x RPI plus a margin of 0.01% which is sufficient to repay both the fixed interest rate on the bond and the RPI swap liabilities. Maturities of these swaps and the associated liabilities range from 5 to 36 years with a weighted average maturity of 11 years.

Notes to the regulatory accounts (continued)

Financial derivatives (Table 4I) (continued)

Swaps held in other group entities (continued)

The table below reports the RPI swap in the same format as table 4I:

	Nominal value by maturity (net)	Nominal value by maturity (net)	Total value			Interest rate (weighted average)	
	Less than five years	Over five years	Nominal value (net)	Mark to market	Total accretion	Payable	Receivable
Derivative type	**£m**	**£m**	**£m**	**£m**	**£m**	**%**	**%**
Interest rate swap (sterling)							
Fixed to index-linked	200	1,050	1,250	412.722	157.304	(0.04)	3.21
Total	**200**	**1,050**	**1,250**	**412.722**	**157.304**		

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.

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 2022, 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.

Notes to the regulatory accounts (continued)

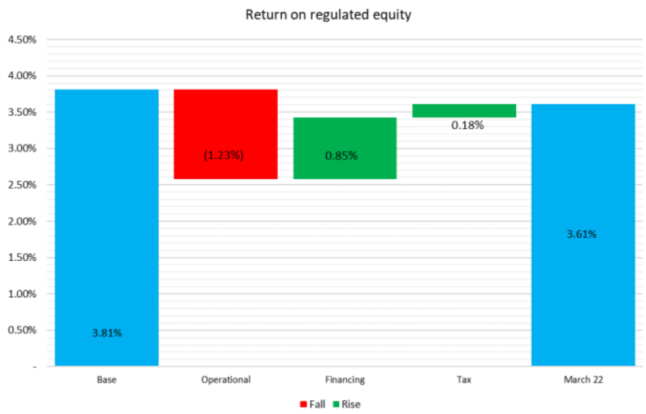
Return on regulated equity

Dŵr Cymru has a base actual return on regulated equity (RORE) of 3.81% for 2021-22, based on the allowance set at the 2019 price review.

The Company delivered an actual RORE of 3.61% for the year ended 31 March 2022.

The Company's share of overall operational underperformance, adjusted where appropriate for timing differences, delivered a negative return of 1.23%. The difference between the actual and allowed average real interest rates on debt increased the overall return by 0.85%. A corporation tax variance increased the actual return by 0.18%.

	%
Base	3.81%
Total expenditure (totex)	0.01%
Retail	(0.77%)
Outcome delivery incentives (ODIs)	(0.47%)
Operational underperformance	(1.23%)
Financing	0.85%
Corporation tax variance	0.18%
Total	**3.61%**



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 £17m in the year, reducing RORE by 0.76%; 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 £11m was accrued in 2021-22 which lowered RORE performance by 0.47%.

Financing performance

Dŵr Cymru's average real interest rate in 2021-22 was 1.64% (including the impact of hedging instruments), 0.60% lower than the cost of debt allowed for by Ofwat in PR19 (2.24%).

Impact of voluntary customer sharing arrangements

During 2021-22, £12m of revenue 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 22). Adjusted for customer value spend, the totex underperformance would reduce by 0.50% and overall RORE would increase to 4.11%.

Notes to the regulatory accounts (continued)

Taxation

Current tax	**£m**
Current period:	
Corporation tax on R&D tax credit included	0.124
Prior periods	(0.212)
Total current tax credit	**(0.088)**

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 £0.7m (2021: £0.9m). The tax credit is taxable and the corresponding charge of £0.1m (2021: £0.2m) 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 (2021: £0.5m) relate to tax credits for energy efficient capital expenditure and the remediation of contaminated land. As a consequence, a deferred tax charge in respect of prior years of £0.2m (2021: £0.5m) has arisen from claiming these tax credits and from adjustments to deferred tax balances in respect of capital expenditure.

Notes to the regulatory accounts (continued)

Taxation (continued)

Deferred taxes have been calculated at 25% (2021:19%) with the exception of temporary differences with a tax value of £42.4m which are expected to reverse in the year ending 31 March 2023. These have been calculated using a corporation tax rate of 19% which will apply for the year ending 31 March 2023; after which the 25% rate will apply. As a result of calculating deferred taxes using the 25% rate, the total deferred tax liability has increased by £151.1m of which £48.7m and £102.4m has been charged to the income statement and statement of changes in equity respectively. The differences are explained below:

Current tax reconciliation	**£m**
Loss before tax and fair value movements on derivatives	(207.179)
Multiplied by standard rate 19%	(39.364)
Expenses not deductible for tax purposes	0.148
Non-taxable IFRIC 18 income	(1.938)
Corporate interest restriction	0.463
Other timing differences – general provision	(0.315)
Tax losses (utilised)/created	4.417
Capital allowances in excess of depreciation	36.713
Prior year tax credit	(0.212)
	(0.088)

Effective tax rate	**£m**
Corporation tax credit relating to current period	0.124
Loss before tax and fair value movements on derivatives	(207.179)
Effective corporation tax rate (current year)	**(0.06%)**

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	(0.212)	Additional tax credits claimed R&D expenditure and the remediation of contaminated land.
Tax on R&D expenditure credit	0.124	Corporation tax charge on R&D expenditure credit of £0.655m x 19%
Current tax charge	**(0.088)**	

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	**456.565**
Charge to income statement	26.407
Charge to revaluation reserve	192.258
Credit to SOCI – re pensions	(2.629)
At 31 March	**672.601**

Analysis of amounts (credited)/charged to the statement of comprehensive income and revaluation reserve:

Defined benefit pension schemes	1.993
Increase in corporation tax rate-pension scheme	(4.622)
Credit to SOCI – re pensions	**(2.629)**
Revaluation of fixed assets	85.196
Increase in corporation tax- revaluation of fixed assets	107.062
Charge to revaluation reserve	**192.258**

Effect of	£m
Tax allowances in excess of depreciation	295.546
Deferred tax on revaluation of fixed assets	446.092
Capital gains rolled over	3.975
	745.613
Deferred tax on capital losses c/f	(5.861)
Deferred tax on losses of derivatives	(45.477)
Pensions	(19.329)
Other tax differences	(2.345)
	672.601

Notes to the regulatory accounts (continued)

Taxation (continued)

Tax charges for Statement 1A – Income Statement for the year ended 31 March 2022

	Statutory Accounts £m	RAG differences £m	Non appointed income £m	Reg accounts total £m
Loss before tax	(115.568)	(12.029)	0.792	(126.805)
Current tax				
Current period	-	-	-	-
Corporation tax on R&D tax credit included in operating costs	0.124			0.124
Prior periods	(0.212)			(0.212)
Total current tax	**(0.088)**	**0.000**	**0.000**	**(0.088)**
Deferred tax				
Current period	(20.393)	(2.288)	0.146	(22.535)
Prior periods	0.189		0.000	0.189
Effect of rate change	54.664	(5.862)		48.802
Total deferred tax	**34.460**	**(8.150)**	**0.146**	**26.456**
Total tax (charge)/credit	**34.372**	**(8.150)**	**0.146**	**26.368**

Reconciliation of deferred tax between statutory accounts and APR

	£m
Balance per statutory accounts	**697.032**
Differences between statutory accounts and APR	(26.774)
Differences re non- appointed income	2.343
At 31 March	**672.601**

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.

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.

Long-term viability statement

(As presented in the Glas Cymru Holdings Cyfyngedig Annual Report and Accounts – note that page references below refer to that document)

OUR VISION: TO EARN THE TRUST OF OUR CUSTOMERS EVERY DAY
We are a long-term business: as a water and sewerage provider, our commitment to our customers is
to provide continuous high quality and reliable services at the lowest possible cost, and our ongoing financial resilience is key to our ability to deliver on this commitment. The Company has a long-term commitment to the provision of resilient services for the communities it serves and plans on the basis of stewardship in perpetuity.

We have prepared this Annual Report as though we were a listed company (see page 117 of the Group Annual Report and Accounts) and in preparing this statement we have complied with Provision 31 of the UK Corporate Governance Code. We have also followed Ofwat's guidance in relation to preparing a statement on long- term financial viability (IN 19/07).

We are a regulated long-term business characterised by multi-year investment programmes and stable revenues. The water industry in England and Wales is subject to economic regulation rather than market competition and while the primary aim of Ofwat, the economic regulator, is to protect customers from monopoly abuse, it also provides protections to ensure water companies have the financial resilience to continue to carry out their essential services. Ofwat meets this obligation by setting price controls for five-year Asset Management Periods ('AMPs'), including mechanisms that reduce the risk of variability in revenues from the regulated business in the medium term, by adjusting future revenues
to balance over or under recovery compared to the original plan.

The nature of our business and our unique structure means that we are better placed than many other organisations to withstand financial shocks. Our corporate model means that we have no shareholders and our focus on financial resilience cannot, therefore, be compromised by shareholder demands for higher urns. However, this also means that we have no ability to approach shareholders for assistance in the case of financial distress in the way that a traditionally owned company could. We are, therefore, wholly debt-financed and raising debt at a low cost is a critical element of our financial strategy: it is essential that we retain access to financial markets which in turn implies a prudent financial model. Our Group Treasury team actively manages our debt maturity profile to spread the timing of refinancing requirements and to enable such requirements to be met under most market conditions.

Our strategy since Glas Cymru acquired the business of Welsh Water in 2001 has been to reduce our gearing to levels that allow us to access the most efficient level of debt funding. Over the past two decades we have steadily reduced gearing from 93% to 58%, and as a result we have a high level of financial reserves (£1,113 million) and robust credit quality.

Long-term viability statement (continued)

BASIS OF OUR APPROACH

As custodians of a long-term business, enduring viability is ingrained in our risk management and planning processes. This is underpinned by a culture of open and honest challenge and mutual support, reinforced by clear direction from our leadership team. We recognise that risk is a necessary part of business. Our appetite is to maintain it at a low level, and we have an established process to assess the Group's prospects through monitoring inherent and existing risks and striving to capture emerging risks at the earliest opportunity. The Board challenges the identification and assessment of risks on a bi-annual basis, and the assumptions and the estimated impact of mitigating activities used in financial forecasting on an annual basis. Our assessment of risks is incorporated into our annual detailed budgeting and forecasting process for the current regulatory period, and at a broader level on a five-to-ten-year horizon.

Regulatory price reviews occur on a five-yearly basis, with the current AMP7 period running to 31 March 2025. Medium-term planning considers the current price control period, over which there is typically a high degree of certainty and looks beyond this in order to facilitate smooth transitions between price control periods. The Board considers a number of factors in determining the period covered by the assessment with eight years the most appropriate forward-looking period over which to assess our ongoing financial viability. Eight years have been selected as it covers the remainder of the current AMP period to 2025, and the next AMP period to 2030.

When considering the Group's prospects beyond the period to 2025, it is necessary to make certain assumptions about the price review process for the period 2025-30 (PR24), which will be determined in 2024. This viability statement is based on the fundamental assumption that the current regulatory and statutory framework does not substantively change.

We have considered the context of our strategic planning document 'Welsh Water 2050' (as updated in 2022) in making this assessment and the potential effects of risks and the uncertainties that could have a significant financial impact under severe but plausible scenarios. Specifically, risks associated with the possible ongoing economic impact of the crisis in Ukraine, Covid-19 pandemic, the economic impact of Brexit and climate change have been incorporated into the baseline position and factored into the various scenarios modelled as part of the Group's assessment. We perform stress tests to assess the potential impact of combination scenarios aggregating multiple downside events within these risks. Our Strategic Report sets out our principal risks and uncertainties and how we intend to mitigate their potential impact on the delivery of our strategic objectives (see pages 68 to 75 of the Group Annual Report and Accounts).

STRESS SCENARIOS

Our viability assessment is based on exposing our baseline forecasts to 2030 to several negative 'stress' scenarios, which include the Board's view of the likelihood and severity of each of our principal risks and uncertainties occurring, both individually and in aggregate. The key risks faced by the Group and mitigation measures can be found in the key risks' summary on pages 68 to 76. We have also adjusted our core inflation assumptions to run these scenarios in both high and low inflationary environments. The estimated financial impacts are based on a combination of our own experience and other publicly available data, both industry-specific and UK-wide. The impact of each of the principal risks occurring has been estimated based on the Board's assessment of the post-mitigation likelihood and severity.

Long-term viability statement (continued)

We have identified what we consider to be a most severe, yet ultimately plausible, negative scenario as a means of gauging the overall level of headroom that exists in what we believe is a challenging yet deliverable plan: in turn this gives the Board confidence in the validity of its conclusions on long-term viability. We know that some of our combined scenarios are unlikely to occur in practice; however, they are useful in determining the overall level of resilience and to understand what would need to happen to threaten the Group's continued existence.

As part of the assessment, reverse stress testing of an extreme theoretical scenario focusing on totex overspend have been performed to understand the extent to which the Group could further absorb financial stress before it reaches a sub- investment grade credit rating. This reverse stress testing demonstrated that these extreme conditions would have to be significantly outside what would be considered 'severe but reasonable' scenarios before the Group's long-term viability would be at risk.

By conducting stress testing, the Board has considered the impact on the covenants attached to our existing funding position (interest cover and gearing), as well as on the principal financial metrics used by credit rating agencies in assessing our credit ratings (adjusted interest cover and the ratio of funds from operations to net debt) and liquidity (taking into account the dependency on existing financing arrangements and the availability of new debt).
The Board has reviewed the outputs of all stress scenarios overlaid on the 2022 plan and has noted that none of these presents a material threat to the long-term viability of the Group. The financial risks taken into consideration when preparing our stress scenarios can be found in the following table.

The scenarios detailed below are considered to be worst-case scenarios intended to stress test our financial plan. We have mitigation protocols in place reducing the likelihood and severity of the following incidents occurring.

Scenario	Risks
1. UKRAINE CONFLICT Stagflation environment with sustained high inflation for two years, cost pressures and low GDP growth contributing to an affordability crisis, subsequently impacting on our bad debt charge. We have stress tested our financial plan with high inflation and cost pressures based on costs incurred in the second half of this financial year projected over the next two years or more. Failure to meet our performance and cost targets will incur additional costs and result in ODI penalties.	• Customer trust • Performance and cost targets • Information security, cyber and IT system loss • Operational technology • Resilience and business continuity • Finance (funding) • Supply chain
2. ECONOMIC DOWNTURN AND COVID-19 Prolonged recession and low GDP growth leading to low inflation and poor cash collection from customers impacting on our bad debt charge. We have stress tested our financial plan with low inflation and cost pressures based on the costs incurred in the recent recession and subsequent market pressures. Failure to meet our performance and cost targets will incur additional costs and result in ODI penalties.	• Performance and cost targets • Resilience and business continuity • Finance (funding) • Impact of severe recession

Scenario	Risks
3. SEVERE CLIMATE EVENTS AND OPERATIONAL FAILURES Extreme weather events, such as prolonged heatwave, cold and wet weather resulting in unplanned costs and the failure of key assets impacting operations and delivery of service. Historically, we have incurred a severe climate event every other year. Failure to deliver services will reduce our C-MeX and D-MeX scores, as well as water quality performance.	• Customer trust • Water quality • Climate change impact
4. WATER QUALITY AND ENVIRONMENTAL FAILURES Experiencing a prolonged incident of water contamination resulting in significant supply interruptions and penalties. Potential publicity affecting other water companies impacting scrutiny of our operations. The main financial risk is incurring ODI and Regulatory penalties. A consequence of water quality failures would also result in a decline in our C-MeX and D-MeX scores.	• Customer trust • Water quality • Environmental regulation • Relationships and trust
5. CYBER SECURITY A severe breach of technology and systems impacting delivery of services, fraud or data loss. The possibility of fraud is unlikely on a large scale based on the recently increased strength of our IT services. The biggest possible financial risk would come from a breach of GDPR and rectification costs, along with the reduction in our C-MeX and D-MeX scores.	• Customer trust • Information security, cyber and IT system loss • Operational technology
6. FAILURES TO ACHIEVE PERFORMANCE COMMITMENTS AND NON-COMPLIANCE WITH REGULATIONS Penalties from failing to achieve our price review performance commitments set by Ofwat, Natural Resources Wales and Drinking Water Inspectorate resulting in fines from regulatory/ legal bodies. Subsequent lower quartile performance in C-MeX, D-MeX and B-MeX and poor ODI performance.	• Customer trust • Performance and cost targets • Environmental regulation • Relationships and trust • Supply chain
7. FAILURE TO ACHIEVE PR24 BUSINESS PLAN Failure to achieve PR24 business plan including key business risks, more stretching efficiency targets, and limited progress towards Welsh Water 2050, including asset resilience and net zero carbon. Financial impacts represent items such as failure to achieve cost savings and failure to attract high-skill staff.	• People (key skills shortage) • Performance and cost targets • PR24 • Finance (funding)
8. HEALTH AND SAFETY MAJOR INCIDENT A fatality occurring because of corporate negligence. Indicative peer company maximum historical exposures and the Group's risk-averse appetite result in the risk being considered to be £3 million exposure occurring once in eight years.	• Health and safety (serious injury/fatality)

Scenario	Risks
SEVERELY ADVERSE BUT PLAUSIBLE A severely adverse but plausible scenario reflects significant cost shocks which occur in a low-inflation environment. Cost shocks are based on a formulaic probability multiplier, combining all scenarios using their likelihood out of five to weight their financial impact (adjusted for overlap).	All risks using a formulaic possibility multiplier using likelihood of occurrence.

Event risk scenario	Financial impact on cash flows (£m)
Ukraine conflict	211
Economic downturn and Covid-19	91
Severe climate events and operational failures	73
Water quality and environmental failures	83
Cyber security	76
Failures to achieve performance commitments and non-compliance with regulations	182
Failure to achieve business plan	239
Health and safety major incident	3
Severely adverse but plausible (incl. low interest)	398
Reverse scenario testing	795

	AMP7				AMP8			
Risk category	**Reserves £m**	**Gearing %**	**S&P %**	**Moody's X**	**Reserves £m**	**Gearing %**	**S&P %**	**Moody's X**
Core scenario: 2022 financial plan	2,941	59.9%	6.0%	1.3x	3,222	61.4%	8.8%	2.0x
Principal risk scenarios								
1. Ukraine – Russia crisis	(70)	1.0%	(0.6%)	(0.2x)	(206)	2.5%	(0.8%)	(0.2x)
2. Economic downturn and Covid-19	(57)	(0.2%)	–	(0.2x)	(572)	4.4%	(1.0%)	(0.4x)
3. Severe climate events and operational failures	(21)	0.3%	(0.2%)	(0.1x)	(77)	0.9%	(0.3%)	(0.1x)
4. Water quality and environmental failures	(11)	0.1%	(0.1%)	–	(87)	1.0%	(0.3%)	(0.1x)
5. Cyber security	(14)	0.2%	(0.1%)	–	(80)	1.0%	(0.3%)	(0.1x)
6. Failure to achieve performance commitments and non-compliance with regulations								

7. Failure to achieve business plan	(40)	0.5%	(0.4%)	0.1x	(232)	2.8%	(0.9%)	(0.3x)
8. Health and safety major incident	–	–	–	–	(3)	–	–	–
'Severely adverse but plausible' - low inflation + cost shocks	(66)	–	0.1%	(0.2x)	(871)	8.3%	(1.7%)	(0.6x)

KEY MITIGATION ACTIONS

In the event of more extreme but low likelihood scenarios occurring, there are a number of key mitigations available to the Group, the effectiveness of which are underpinned by the strength of the Group's liquidity position. As well as the protections that exist from the regulatory environment within which the Group operates, a number of actions are available to mitigate more severe scenarios, which include: deferral of capital expenditure; a reduction in other discretionary totex spend; early termination of expensive debt; and an extension of revolving credit facilities.

OUTLOOK

The level of stretch in the severely adverse but plausible scenario assumes £425 million of unplanned expenditure over the forecast period (equivalent to an average annual totex overspend of around 6%). In addition, we have modelled temporary sustained inflation (RPI of 12% in 2024/25) reducing gradually to 3% by 2026/27 for the remainder of the period.

We conducted a reverse stress test on our financial plan to identify the deterioration required to put pressure on our financial metrics. The likelihood of a trigger event would occur in AMP7 where current market shocks are placing pressures on operating costs. We identified operating cash flows would need to deteriorate by c16% in AMP7 from our core plan, which is an additional 164% on our severely adverse but plausible scenario in the same period.

The combination of low gearing and a high level of liquidity means that the Group is well placed to absorb even large cost shocks while retaining access to funding markets. We are sheltered from the full impact of inflation movements in the long term, as all our allowed revenues and around two- thirds of our debt is index-linked.

The Board's overall assessment of long-term viability takes into account its assessment of the financial risk management framework and the forecast impacts of all stress testing. The Board considers that these are appropriate and do not generate any sign of material threats to the Group's viability over the next eight years.

Long-term viability statement (continued)

The Board also has regard to the Group's strong financial position when assessing viability, noting that liquidity is strong and also that gearing at 31 March 2022 is in line with the Board's target of 60%. The strength of our current liquidity position is very high with cash on deposit and undrawn loan facilities totalling £715 million. As at 31 March 2022 some £515 million of cash was held on short-term deposits (three months in practice) affording easy access to a high level of liquidity.

Long-term viability statement (continued)

The strong credit quality of the business is reflected in credit ratings which remain among the highest in the UK water sector, providing considerable headroom to support access to medium-term liquidity where required. The ratings of the Company's bonds are shown in the table below:

Bond Class	Moody's	S&P	Fitch
A	A2	AA	A
B	A3	A-	A
C	Baa2	BBB	BBB+
Date of confirmation	5 November 2021	17 May 2022	11 November 2021

The water sector is historically stable with a supportive regulator (Ofwat has a statutory duty to secure that efficient water companies can finance the proper carrying out of their functions): five-year price reviews mean that our cash flows are generally predictable and investor confidence remains high. We expect that our low gearing would help us to retain access to funding if any of the stress scenarios were to arise. Our core plan forecasts that we are already fully funded for the remainder of the current regulatory period to 2025 and as bond markets remain active, we do not currently envisage any funding risk. We have reasonably assumed that any changes to the regulatory environment and our overall level of risk will have no material impact on our ability to access financial markets.

COMMERCIAL BUSINESS

We undertake a limited amount of commercial activity outside of our regulated water and sewerage business. This consists of organic energy and waste processing activities which are complementary to our core operations. These activities make up less than 1% of the Group's annual turnover and are peripheral to the core business, as such having no material impact on our overall long-term viability.

ASSURANCE

Assurance is a fundamental part of our business planning process, with peer reviews and Executive team approval forming key milestones prior to Board review. A key part of the peer review process ensures that our financial forecasts are aligned with our operational delivery plans. All plans must receive head of department and Executive team approval prior to Board sign-off. We have received external assurance on our financing model used to generate the 2022-23 plan and stress scenarios via an 'agreed-upon procedures' exercise, with no exceptions noted, and our plan itself has been subject to scrutiny and challenge by Ofwat (being a modified form of our PR19 final business plan submission).

Our independent External Auditors review this long-term viability statement and report by exception on any material inconsistencies with the financial statements set out on pages 179 to 222 of the Group Annual Report and Accounts. None has been identified (see audit opinion on pages 172 to 178 of the Group Annual Report and Accounts).

Long-term viability statement (continued)

CONCLUSION

The Board considers that the risk management and forecasting controls in place are robust and that the 2022 plan and stress testing outputs provide an appropriate level of information from which to draw a conclusion on the Group's long-term viability. Having reviewed these outputs as summarised above, the Board has a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period to March 2030.

Long-term viability statement (continued)

The Company has in accordance with the Regulatory Reporting Guidelines and/or our Licence prepared this Long-Term Viability Statement, which was approved at the joint Board meeting of Glas Cymru Cyfyngedig and Dŵr Cymru Cyfyngedig, held on 7 July 2022, as evidenced by the Directors' signatures below.

Approved on behalf of the Board of Dŵr Cymru Cyfyngedig,

Alastair Lyons Chair of the Board	Peter Perry Chief Executive Officer
Mike Davis Chief Financial Officer	Graham Edwards Senior Independent Non-Executive Director
Debra Bowen Rees Non-Executive Director	Tom Crick Non-Executive Director
Jane Hanson Non-Executive Director	Joanne Kenrick Non-Executive Director

7 July 2022

Remuneration Committee Report

The Directors of Dŵr Cymru Cyfyngedig are also Directors of the other companies within the Glas Cymru Holdings Cyfyngedig group; however, their emoluments are paid in full by the company their activities are predominantly related to, which is the regulated water and wastewater business. The report below has been extracted from the 2022 Annual report and Accounts of Glas Cymru Holdings Cyfyngedig.

GLAS CYMRU
REMUNERATION COMMITTEE REPORT – EXTRACT TAKEN FROM THE ANNUAL REPORT AND ACCOUNTS 2021/2022

(Note page references in this section relate to the Annual Report and Accounts document)

REMUNERATION COMMITTEE REPORT

INTRODUCTION: HEADLINES AND COMMITTEE CHAIR'S LETTER PRINCIPAL

RESPONSIBILITIES

The Committee is responsible for recommending to the Board and Glas Members for approval the Executive Directors' Remuneration Policy. The Committee also sets the remuneration for the Chair of the Board, the Executive Directors and Executive team consistent with this Policy. Although the Chair of the Board is a member of the Committee, he does not participate in any decision-making in respect of his own remuneration. In exercising its responsibilities, the Remuneration Committee has oversight of workforce remuneration policy and other related policies, and of the alignment of incentives and rewards with the Company's culture and purpose, taking these points into account when setting the Executive Remuneration Policy. The Policy is put to Glas Members for approval at least every three years, or earlier if changes are proposed.

The Committee's remit is set out in detail in its terms of reference which are available at dwrcymru.com/termsofreference

During 2021-22, the Committee received independent advice from Deloitte LLP which is a signatory to the Remuneration Consultants Group Code of Conduct, and any advice given is governed by the Code. The Committee is satisfied that the advice received was independent and objective. The fees payable to Deloitte LLP for the period 2021-22 totalled £36,950 (plus VAT).

DEAR GLAS MEMBERS
On behalf of the Board, I am pleased to present our 2021-22 Remuneration Report.

Remuneration Committee Report (continued)

STRUCTURE OF THIS REPORT

For this year we have retained the simplified structure of our remuneration disclosure that we introduced last year. This Report is split into six sections:

- Section 1: Remuneration Committee Chair's statement (pages 131 to 132)
- Section 2: The Alignment of Pay and Performance, Remuneration Principles and Ofwat guidance (pages 133 to 135)
- Section 3: Summary of Directors' Remuneration Policy for AMP7 (2020/2025) which was approved by Glas Members at the 2020 AGM (pages 136 to 138)
- Section 4: Pay outcomes for 2020-21 (pages 139 to 143)
- Section 5: Pay decisions made in relation to 2021-22 (pages 144 to 146)
- Section 6: Other Important Information which is disclosed in line with best practice guidance (pages 146 to 148)

This structure has been adopted with the aim of making our remuneration arrangements and the decisions made by the Committee clear and understandable.

BUSINESS AND EMPLOYEE CONTEXT

This year, the Company has continued to deliver its services in very challenging circumstances given: the continuing Covid-19 pandemic and managing the resulting workforce absences while adapting working conditions; the supply chain disruption caused in part by EU Exit and in part by Covid-19 and, more recently, the disruption caused by the war in Ukraine; and the intensified external focus on the Company's environmental performance. The Committee has also continued to take into consideration the impact of these factors on the Company's customers and communities when making decisions on executive pay. Despite the challenges of the last year and in particular the burden that Covid-19 has placed on many of our employees, the Committee has recognised the sustained high quality of service provided to our customers. To reflect this a payment of £1,000 was made under our Colleague Reward scheme to over 2,200 employees (2021: £1,100). The Company has also continued to review our progress in establishing a diverse workforce that reflects the communities we serve.

We are committed to ensuring the Company is an inclusive environment where everyone can be themselves at work, and there are no barriers to undertaking any role. For further information on our people and policies and the progress we have made during 2021-22 see page 86. Fair workforce and Executive pay policies remain an important element in promoting an engaged, diverse and inclusive workforce.

The Committee sought feedback from employees on remuneration at a dedicated employee engagement session attended by the Chair of the Committee and the Chair of the Board, which was held by video conference in July 2021.

Remuneration Committee Report (continued)

The Committee also received feedback from Glas Members at the 2021 Annual General Meeting and the December Members' meeting and the Chair of the Committee met with those Members who wished to discuss remuneration issues individually during summer 2021. The Committee was grateful for the feedback received from all stakeholders and will continue to consider these comments and views in relation to future decision-making.

REMUNERATION COMMITTEE FOCUS AREAS IN 2021-22

As we have adopted public listed governance, although we are not a listed company, we put our Remuneration Policy to Glas Members for approval every three years. Our Directors' Remuneration Policy for AMP7 was last approved by Glas Members at the Annual General Meeting on 3 July 2020.

This year, the Committee has continued to focus on implementing this Policy. This has included reviewing how targets are set for AVPS (Annual Variable Pay Scheme) awards consistent with incentivising the delivery of the principal performance commitments set by Ofwat in the Final Determination of the PR19 regulatory price review. Having reviewed the outcomes for the first year of the scheme, it became clear that the approach of using the cumulative ODI performance for customer, strategic and operational performance meant that over or under-performance in relation to a single metric would have a disproportionate impact on the AVPS outcome in a way that had not been anticipated and was not intended when the scheme was introduced.

Accordingly, the Committee considered proposals for amending how AVPS targets are set for 2021-22 and future awards to simplify them and to make it more likely to produce a balanced outcome which reflected performance across all relevant measures.

For 2021-22 AVPS awards, as the measures and approach had already been communicated to employees and Members, the Committee agreed to retain the overall framework but to limit the impact of any single measure within a range of threshold to maximum ODI performance for that measure. This outcome would then be subject to a discretionary assessment by the Committee to make sure that the 2021-22 outcomes are consistent with the overall performance delivered to customers in the period, including consideration of environmental measures. Based on this approach, the initial formulaic AVPS outcome was higher than expected. However, the Committee noted that this outcome would be an increase compared to the 2020-21 AVPS despite performance in a number of key metrics being at threshold level.

The Committee therefore applied its discretion to reduce the outcome for the operational element from 24% to 12% of maximum, and to reduce the customer element to produce an overall outcome of 40% of maximum.

The Committee agreed that this reduced outcome was more closely aligned to performance in the period and the experience of customers. See page 158 and 159 for details of targets set and performance achieved.

For 2022-23 AVPS awards, it was agreed to reduce the number of measures under the customer, operational and strategic elements to focus on the most important and impactful measures, and to set weightings for each of these measures rather than pooling total ODI performance. The new targets and weighting are explained on page 162 below. These changes in targets are not a formal amendment to the Policy which would require approval from Glas Members, and have been scrutinised by the Committee to ensure that the resulting outcome still represents appropriate delivery of challenging targets in order to earn variable pay. For LTVPS (Long Term Variable Pay Scheme) awards, the Committee also reviewed the approach to target setting and whether the cumulative ODI

Remuneration Committee Report (continued)

approach should be retained or whether instead the approach used for AVPS awards should be applied. Overall, the Committee determined that, as the targets have been set for the full AMP7, and the structure allows for overall outcomes to be adjusted at the end of period, it would be reasonable to take a prudent approach to the interim targets and not make any adjustment at this stage. However, consistent with the plan structure, the Committee can consider applying discretion to adjust awards upwards or downwards and the LTVPS could potentially be adjusted upwards to better align the award with the performance achieved under the plan over the full AMP7 period.

The LTVPS outcome for 2021-22 was 31.9% of maximum with the totex element being met just above target level, and the performance development threshold targets not being met. In accordance with the LTVPS rules the award is capped at 30%. See page 159 to 161 for details of targets set and performance achieved.

In line with the normal annual cycle, the Committee reviewed salary levels for the Executive Directors and the Executive team. During this review the Committee considered the proposed increases for the wider workforce, business and individual performance in 2021-22, and National Living Wage and Real Living Wage rates.

The Committee decided to increase Executive Director salaries by 2.8% from 1 April 2022, which was 2% lower than the increase of 4.8% for the wider workforce under the terms of the AMP7 Working Together Agreement.

The Committee also reviewed the fee for the Chair of the Board. A benchmarking exercise took place looking at fees paid by other water companies and UK listed companies of comparable size and complexity. As part of this exercise the Committee also took into account previous practice of discounting the benchmark to reflect the Company's not for dividend structure, current rates of inflation, and the time commitment for the role, given the nature of the Company's regulated activity. Taking all these factors into account a 2.8% increase was agreed effective 1 April 2022. This is the first increase to the Chair's fee since 2018.

REMUNERATION COMMITTEE FOCUS AREAS IN 2022-23

During 2022-23 the Committee will continue to implement the Policy approved by Glas Members in accordance with our agreed Remuneration Principles.

As part of this, the Committee will monitor wider remuneration trends and best practice developments, including guidance from the Financial Reporting Council on the requirements of the UK Corporate Governance Code and from Ofwat on Board Leadership, Transparency and Governance.

The Committee also recognises the importance of setting and implementing appropriate remuneration policies in attracting and retaining a diverse and engaged workforce, and this complements other initiatives being undertaken by the business to promote equality, diversity and inclusivity across the organisation. The Committee understands the role that ethnicity pay reporting can play as part of this and will continue to look at this in the context of the business developing relevant records and metrics.

Remuneration Committee Report (continued)

Finally, the Committee values the inputs and feedback received from both employees and Glas Members and will continue to engage with them to ensure their views on the implementation of our Policy are taken into account in our decision-making process.

JOANNE KENRICK
Chair of the Remuneration
Committee
1 June 2022

Remuneration Committee Report (continued)

SECTION 2: THE ALIGNMENT OF PAY AND PERFORMANCE, REMUNERATION PRINCIPLES AND OFWAT GUIDANCE

In December 2019, Glas Members approved an amendment to our Articles of Association to set out clearly our purpose, which we have been committed to delivering since 2001 when Glas Cymru acquired the business of Welsh Water. Our purpose, which is set out on the inside front cover of this report, has informed the development of our Remuneration Principles, as set out below.

THE REMUNERATION PRINCIPLES

The Chair of the Committee regularly discusses with Glas Members the key Principles that apply to the Committee's work. These Principles, listed below, were last shared with Members at the 2020 AGM, and are unchanged since then.

1	2	3	4
Remuneration should reward/incentivise the long-term interests of the business, promote its long-term sustainable success and reflect its agreed future strategic approach.	Remuneration should help align the interests of Directors and employees with the business' customers, and reflect the Company's purpose and values.	Remuneration should be focused on the issues of key concern to the business – water and environmental quality, customer service and financial performance.	Remuneration should reflect Welsh Water's aim to be one of the best performing companies in the sector.
5	**6**	**7**	**8**
Remuneration targets should be stretching both in relation to past performance and in comparison with other companies in the sector. Where possible, they should be hard numbers which can be audited.	Remuneration is intended to incentivise management in the absence of shareholders and share options.	Remuneration should be fair and competitive both in relation to the sector and internally so as to help attract and retain high-calibre individuals.	An appropriate proportion of remuneration for the Executive Directors should be variable so as to achieve the right balance in relation to risk-taking.
9	**10**	**11**	**12**
The remuneration structure should be sufficiently clear so that those affected by it understand what it is aiming to achieve.	Remuneration will be transparent to Glas Members and subject to their regular approval.	Remuneration should take account of the Company's not-for-shareholder corporate structure, the views of members and other stakeholders.	Decisions made by the Committee should take account of workforce remuneration and related policies, and the alignment of incentives and reward with culture.

Remuneration Committee Report (continued)

When developing the Remuneration Policy and considering its implementation for 2022, the Committee was mindful of the objectives of Ofwat's Guidance on Board Leadership, Transparency and Governance and the UK Corporate Governance Code. The Committee considers that the executive remuneration framework appropriately addresses the following factors:

Clarity	The Committee is committed to being open and transparent with pay and we seek to do this through our high level of disclosure and clear reporting. In taking its decisions, the Committee follows the Objectives of Ofwat's Guidance on Board Leadership, Transparency and Governance, and the requirements of the FRC's UK Corporate Governance Code (the Code). Actual incentive outcomes are set out in the Remuneration Report each year.
Simplicity	We aim to make our remuneration structure clear to all participants so that all those affected by it understand it and its purpose. Where possible, our remuneration arrangements are in line with UK best practice.
Risk	The Committee has discretion to adjust AVPS and LTVPS outcomes if it considers these inconsistent with overall Company performance, taking into account any relevant factors. Malus and clawback provisions apply to both the AVPS and LTVPS.
Predictability	Maximum opportunities for AVPS and LTVPS are set out in the policy, with actual outcomes depending on the level of performance achieved against specific measures.
Proportionality	Our policy has been designed to strike a balance between long-term and short-term measures linked to the Company's strategic plan. A significant proportion of our remuneration arrangements for Executive Directors is tied to the achievement of stretching performance conditions to ensure individuals are rewarded fairly for success. When benchmarking Director pay we consider the data in its context, including the complexity of the role. As an additional reference we also consider the application of a discount to the market data in order to reflect our not-for-shareholder status.
Alignment to culture	The use of the same key measures for all variable pay schemes ensures transparency and a sense of shared ownership of the targets – the annual award of every colleague is determined by achievement against the same key targets, to a greater or lesser degree.

This report includes an explanation of the Company's executive pay policy and how the criteria for awarding short and long-term performance-related elements are substantially linked to stretching delivery for customers and are rigorously applied.

STRATEGIC ALIGNMENT OF PAY

In setting remuneration policies, the Committee is focused on the need to attract and retain individuals who can meet the short and long-term challenges that the Group faces.

Pay must be sustainable and encourage a focus on achieving the long-term strategy of the Company. It must also be fair to individuals and the wider workforce. The Committee is mindful when thinking about levels of pay of our not-for-shareholder corporate structure.

The Committee is determined that remuneration should not reward poor performance and that we should be transparent about the reporting of performance. This is closely aligned to the Group's vision 'To Earn the Trust of our Customers Every Day'.

Remuneration Committee Report (continued)

LINKING PAY TO PERFORMANCE AND THE CUSTOMER
In addition to linking pay to the short and long-term challenges the business faces and taking into account our corporate structure, our Remuneration Policy also ensures any performance-related element of executive pay is linked to the underlying performance of the Company in its delivery for customers.

For AMP7, the AVPS was amended to focus on the key performance objectives of the business plan while LTVPS objectives are linked to a range of performance measures which are relevant to achieving the Company's long-term goals as set out in Welsh Water 2050 (for more details about these goals, please see page 36).

Delivery against customer metrics is a key part of our incentive structure and the policy for short and long-term performance pay is linked to stretching performance delivery for customers, including through C-MeX and D-MeX metrics (Ofwat's customer measures of experience and satisfaction - see Performance Commitment Definitions on page 229).

Our policy seeks to ensure that Executive Directors are fairly rewarded, and the Committee will also assess outcomes to ensure that pay is aligned to performance. Where necessary, the Committee will make amendments through the discretion available under our schemes.

ROLE OF GLAS MEMBERS
Glas Members perform an essential governance function for the Group in the approval of remuneration policies. The 2021-22 Annual Report on Remuneration will be subject to an advisory vote by Members at the forthcoming 2022 AGM. The vote is 'advisory' because it does not change the decisions already taken, but the Committee will take it into account in its future decision-making.

Members also approve the Remuneration Policy of the Board by a binding vote at least every three years (or where any significant change is proposed). This is in accordance with the remuneration reporting requirements for UK listed companies. Members approved the Remuneration Policy for AMP7 at the 2020 AGM, and last approved the Annual Report on Remuneration at the 2021 AGM with the votes as follows:

	Vote for
Members (present in person or by proxy) who voted in favour of the Annual Report on Remuneration – 2021 AGM	96%
Members (present in person or by proxy) who approved the Directors' Remuneration Policy for 2020-2025 – 2020 AGM	90%

Remuneration Committee Report (continued)

ENGAGEMENT WITH EMPLOYEES AND OTHER STAKEHOLDERS

Colleagues from across the business are regularly invited to attend informal meetings with the Chair and Non-Executive Directors to talk about issues affecting the business, the workforce, customers and other stakeholders. One of these sessions, held in July 2021, included a discussion on the role of the Remuneration Committee, the link between performance and remuneration, and remuneration policies for the Executive Directors and the wider business. The outputs from this discussion were subsequently reviewed at a meeting of the Glas Board.

See page 121 for other examples of Board engagement and details of site visits undertaken in 2021-22. The Remuneration Committee is conscious of the Company’s position as one of the largest companies in Wales and of the geographic and socioeconomic context in which the Company operates, and in which decisions concerning remuneration are made by the Committee.

The Board is also conscious of the need to balance societal concern around the quantum of executive remuneration with the need to attract and retain key individuals with the relevant experience and capabilities. The views of other relevant stakeholders, including Ofwat and other regulators, Defra and Welsh Government and the CCWater, are also taken into account.

SECTION 3: SUMMARY OF DIRECTORS’ REMUNERATION POLICY FOR AMP7 (2020 2025)
The AMP7 Remuneration Policy was approved by the Glas Members at the 2020 AGM, and the key elements are set out in the table below.

	PURPOSE AND LINK TO STRATEGY	OPERATION	OPPORTUNITY	PERFORMANCE METRICS
Base salary	To help attract, retain and motivate high-calibre employees.	Normally reviewed annually and any increases applied with effect from 1 April. Review reflects: • Role, experience and performance • Wider economic conditions • Increases awarded throughout the rest of the workforce • Periodic reviews of remuneration within the water sector.	Annual inflationary increases generally linked to those of the wider workforce though the Remuneration Committee retain discretion to award increases to individuals above or below this level where appropriate.	Annual Performance Reviews
Benefits	To provide a market-competitive benefits package to help attract and retain employees. Healthcare benefits also promote business continuity.	Directors are eligible for private health cover. The Chief Executive has a historic entitlement to permanent health insurance. Other benefits such as relocation expenses or travel/accommodation allowances may be offered as appropriate.	Value of benefits is based on the cost to the Company and is not predetermined.	None

Remuneration Committee Report (continued)

SECTION 3: SUMMARY OF DIRECTORS' REMUNERATION POLICY FOR AMP7 (2020 2025) (continued)

	PURPOSE AND LINK TO STRATEGY	OPERATION	OPPORTUNITY	PERFORMANCE METRICS
Pension	To help attract and retain high-calibre employees.	All employees, including Executive Directors, are entitled to a maximum employer pension contribution of 11%. Eligible employees have the opportunity to opt out and receive a cash allowance of 9.7% (9.6% from 1 April 2022). Pension benefits for all employees who participated in the DCWW Pension Scheme continue to increase in line with increases in their base salary. These increases are also provided for in the Employer Funded Retirement Benefits Scheme in which Peter Perry participates. Life assurance at 4x base salary is provided for Executive Directors and all employees who participate in the DCWW Group Personal Pension Plan or Pension Cash Alternative Plan.	The cash allowance is equivalent to the employer contribution of 11% less employer NI contribution.	None

Remuneration Committee Report (continued)

SECTION 3: SUMMARY OF DIRECTORS' REMUNERATION POLICY FOR AMP7 (2020 2025) (continued)

	PURPOSE AND LINK TO STRATEGY	OPERATION	OPPORTUNITY	PERFORMANCE METRICS
AVPS	To incentivise the annual delivery of stretching targets and delivery of strategic goals.	AVPS targets reviewed annually by the Committee. Performance is measured against threshold, target and maximum levels. Outturn against targets is determined by the Remuneration Committee after the year end based on performance against targets. • Paid as cash • Not pensionable • Clawback provisions apply in the following circumstances: – Material misstatement or a calculation error in assessing any Group member company's financial results – Material failure of risk management in any Group member company or a relevant business unit – Gross misconduct or reputational damage caused to the Company or Group member company – Material corporate failure in any Group member company or a relevant business unit AVPS awards may be varied (either increased or decreased) at the discretion of the Committee or clawed back either prior to the payment of the award for a particular performance year or in the following performance year.	Maximum AVPS potential of 100% of salary, for the achievement of stretching performance targets.	Measures aligned to the Business Plan and based on overall reward/ penalty outcomes – 40% based on Customer Service, 40% based on Operational Performance and 20% based on a suite of strategic goals, which are selected by the Committee each year.

Remuneration Committee Report (continued)

SECTION 3: SUMMARY OF DIRECTORS' REMUNERATION POLICY FOR AMP7 (2020 2025) (continued)

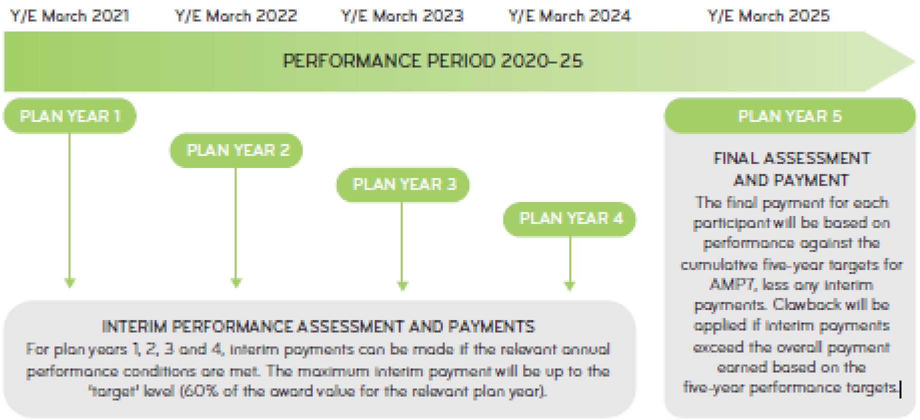
	PURPOSE AND LINK TO STRATEGY	OPERATION	OPPORTUNITY	PERFORMANCE METRICS
LTVPS	To align the long-term focus of the Executive Directors with those of Welsh Water's customers and stakeholders. To incentivise achievement of the Company's long-term strategy.	Cash awards based on stretching performance targets. Performance is measured against threshold, target and maximum levels. Performance against the measures is assessed over the five-year period of AMP7. Interim payments are made on an annual basis. LTVPS awards may be varied (either increased or decreased) at the discretion of the Committee or clawed back either prior to the payment of the award for a particular performance year or until the accounts for the year to 31 March 2028 have been audited.	The maximum potential award for the Chief Executive is 500% of salary over the five-year regulatory period (to a maximum potential award of 100% per annum). For the Chief Financial Officer, the maximum potential award is 300% of salary over the five-year regulatory period to 31 March 2025 (to a maximum potential award of 60% per annum).	50% based on totex performance and 50% based on overall reward/ penalty outcomes for a range of performance development measures relevant to achieving the Company's long-term goals as set out in Welsh Water 2050.
Non-Executive Directors	Provides an appropriate level of fixed fee to attract and retain individuals with a broad range of experience and skill to support the Board in the delivery of its duties.	The Remuneration Committee determines the fee payable to the Chair of the Board and, separately, the Executive Directors and the Chair approve the fee payable to the Non-Executive Directors. All Directors may be paid for additional expenses incurred in connection with their role on the Board and are responsible for any taxable benefit implications that may result.	Non-Executive Directors do not receive any additional fees for chairing committees.	Annual Review

The elements of the Remuneration Policy which address Executive Directors joining and leaving the Board are set out in the 2020 Annual Report which is available at dwrcymru.com/glascymrureports.

Remuneration Committee Report (continued)

LONG-TERM INCENTIVE – LTVPS

The below illustrates how and when performance is assessed, and payments are made.



SECTION 4: PAY LAST YEAR – 2021-22

WIDER WORKFORCE PAY

The Remuneration Committee is responsible for setting the remuneration policy for the Executive Directors and Executive team and maintains oversight of pay policy across the Group. Workforce pay policy is agreed with our recognised trade unions and follows the terms of our Working Together and Household Customer Services Partnership Agreements.

FIXED PAY

The Annual General Salary Award is agreed with our recognised trade unions and salaries are uplifted consistently across the workforce. For the 2022 salary review the Committee, on the recommendation of the Executive Directors, decided it would not be appropriate to align the Executive Director salary increase with that of 4.8% awarded to the wider workforce in accordance with the AMP7 Working Together Agreement but instead reduced the percentage by 2 percentage points. This resulted in a 2.8% increase from 1 April 2022.

Pension benefits are aligned across the Company with all Group Personal Pension Plan members receiving the same employer contribution as a percentage of salary, in line with best practice.

Remuneration Committee Report (continued)

VARIABLE PAY

The Annual Variable Pay Scheme (for colleagues below Executive Director level above Band 5) and the Colleague Reward Scheme (Bands 1-5) utilise a number of the same key measures ‑ those linked to Customer, Performance and Expenditure. The use of the same key measures for all variable pay schemes, to a greater or lesser degree, ensures transparency and a sense of shared ownership of the targets.

The Annual Variable Pay Scheme includes an element of opportunity based on achievement of personal objectives, as well as on Company performance. Maximum opportunity ranges from 10% to 60% of base salary.

The Colleague Reward scheme, which applies to all other employees, does not include a personal element and award payment is based entirely on Company performance against the identified key measures.

- Maximum opportunity: £1,500
- Actual pay-out 2021-22: £1,000
- Actual pay-out 2020-21: £1,100
- Actual Pay-out 2019‑20: £1,500
- Actual Pay-out 2018‑19: £1,000.

PAY FOR EXECUTIVE DIRECTORS

HOW MUCH EXECUTIVE DIRECTORS WERE PAID FOR 2021-22 (AUDITED)

		Peter Perry		Mike Davis	
		2022 £'000s	2021[1] £'000s	2022 £'000s	2021[1] £'000s
Fixed Pay	Salary	332	309	263	245
	Benefits[2]	1	1	1	1
	Other	5[3]	5	3[4]	–
	Pension and pension accrual[5]	105	337	25	25
	Total Fixed Pay	443	652	292	271
Variable Pay	Annual variable pay – AVPS	133	165	105	131
	Long-term incentive – LTVPS	99	75	47	36
	Total Variable Pay[6]	232	240	152	167
Total Single Figure of Remuneration[5]		675	892	444	438

Remuneration Committee Report (continued)

HOW MUCH EXECUTIVE DIRECTORS WERE PAID FOR 2021-22 (AUDITED) (continued)

1. Peter Perry and Mike Davis requested that their salaries should be reduced by 20% for May, June and July 2020. The figures shown for FY2021 reflect these reductions. The value of these reductions were added to the Company's Community Fund and did not impact their other elements of remuneration.
2. Taxable benefits relate to private health cover.
3. For Peter Perry this represents a £5,000 per annum car allowance.

4. Payment in line with company Transfer of Base policy due to Nelson closure.
5. Total Remuneration for Peter Perry in 2021 included pensions accrual reflective of increase in his salary on appointment as CEO.
6. 2021 figures adjusted since last year's report to reflect final outcome of AVPS scheme.

PENSIONS (AUDITED)

Pension benefits for all employees who participated in the DCWW Pension Scheme continue to increase in line with increases in their base salary. These increases are also provided for in the Employer Funded Retirement Benefits Scheme in which Peter Perry participates. The pension earned by Peter Perry during the year is shown below.

	Normal retirement age	Accrued pension at 31 March 2021	Capitalised value of accrued pension at 31 March 2021	Revalued capitalised value of accrued pension at 31 March 2021	Accrued pension at 31 March 2022	Capitalised value of accrued pension at 31 March 2022	Member contributions paid during the year 2022	Pension Input Amount (net of member contributions) 2022
Peter Perry	60	193,555	3,871,100	3,890,456	198,166	3,963,311	-	72,855

From 1 April 2020 Peter Perry and Mike Davis have been eligible to receive a maximum employer pension contribution of 11% of salary. Eligible employees can opt out and receive a cash allowance of 9.7%. Both Peter Perry and Mike Davis have elected to receive their pension allowance as a cash allowance.

ANNUAL VARIABLE PAY (AVPS) - OUTCOME FOR 2021-22

The table below shows the breakdown of performance against the targets for AVPS for 2021-22. Where the final outcome for a particular target is not available as at the date of this report, the award reported is based on a current best estimate.

Payments will not be made until final performance data is available.

Remuneration Committee Report (continued)

Up to 100% of salary can be earned in any year. Performance achieved for each target is shown below:

Element	Weighting	Metric	Threshold performance (10% achievement)	Target performance (60% achievement)	Maximum performance (100% achievement)	Performance achieved
Customer service	40%	C-MeX	4.4	4.4	6.0	3.4
		D-MeX	(2.0)	0	3.0	(0.3)
		Business Customer Satisfaction	4.4	4.4	4.5	4.4
Total Company ODI £m			1.4	1.9	3.2	1.8
Total % of Salary for this Element			4	24	40	19.1
Operational performance	40%	Tap water quality (score)	4.17	2.90	2.0	9.85
		Water supply interruptions	11:08	10:4	6:1	16:12
		Treatment works compliance (Percent)	99.00	99.16	100	98.32
		Pollution incidents from wastewater (Incidents per 10,000 km of sewers)	23.72	23.72	22.4	23.17
		Bioresources disposal (Percent)	100	100	100	100
		Bioresources product quality (Percent)	96.1	97.3	98.6	98.7
		Sewer flooding to customer properties internal (Properties per 10,000 connections)	2.05	1.6	1.58	1.36
		Sewer flooding to customer properties external (Properties per 10,000 connections)	25.82	25.44	24.47	26.27
		Total Complaints (Complaints per 10,000 customers)	122	105	84	28*
		Unbilled properties (Percent)	4.03	3.80	3.65	3.78
		Water process unplanned outages (Percent)	1.5	1.5	0.7	0.55
Total Company ODI £m			(7.5)	(3)	1.9	(3.7)
Total % of Salary for this Element			4	24	40	12
Strategic Goals	20%	Employee engagement (Percent)	75	80	85	69
		Customer trust (Ranking)	4th Quartile	Top	Top + Score ≥8.15	2nd Place
		Tap water quality (Ranking)	Average	Upper Quartile	Top	Below Average
		Employee training (Percent)	85	90	95	91
		Risk of sewer flooding in a storm (Percent)	33.88	30.38	26.88	25.05
		Company level of bad debt (Percent)	4.3	3.3	3	2.5
Total % of Salary for this Element			2	12	20	8.9
Total % Award Achieved						40%

* Note that performance measure changed for 2021-22

Remuneration Committee Report (continued)

ANNUAL VARIABLE PAY (AVPS) – OUTCOME FOR 2021-22 (continued)

Customer service – outcome based on regulatory outperformance/underperformance payment achieved against Ofwat's Outcome Delivery Incentive (ODI) (performance against regulatory targets) performance for these measures over the year.

· Operational performance – outcome based on total financial outperformance/underperformance payments achieved against Ofwat's ODI performance for these measures over the year.

· As discussed in the Committee Chair's statement, during the year the Committee became aware of the potential unintended consequences of measuring ODI performance as a cumulative assessment across a basket of measures, in particular that a single measure could disproportionately dominate the AVPS outcome with outperformance in other measures having little opportunity to affect the outcome. As a result, the Committee decided to limit the potential impact of over or under performance against each ODI measure at the threshold and maximum levels in the framework. The intention of this change in approach is to better reward performance across all ODI measures in the scheme, including key environmental measures, while retaining the emphasis on meeting stretching targets aligned to customers for any payment to be made. The Committee, therefore, also considered the role of discretion under the framework and the need to adjust the formulaic outcomes produced by the scorecard where they are not consistent with overall performance achieved in the year.

· The revised approach to assessment of ODI performance increased the overall customer service and operational performance Company ODI performance achieved. This would have produced an overall AVPS award of 50.1% of maximum. Reflecting the overall performance achieved in the year the Committee determined that discretion should be applied to cap the customer service and operational performance at 19.1% of salary and 12% of salary respectively. This resulted in an overall AVPS award of 40% of maximum. The level of performance resulted in total awards to Executive Directors of: Peter Perry: £132,647 (40% of salary) and Mike Davis: 105,132 (40% of salary).

· For reference, Peter Perry had a target opportunity of £198,970 (60% of salary) and a maximum opportunity of £331,617 (100% of salary). Mike Davis had a target opportunity of £157,698 (60% of salary) and a maximum opportunity of £262,830 (100% of salary).

LONG-TERM PLAN (LTVPS) OUTCOME FOR 2021-22

Under the LTVPS for the period 2020 to 2025, performance is assessed annually against interim goals and interim payments are made up to 60% of maximum for each of the two elements, with overall performance over the five-year period resulting in a final payment or recovery of any overpaid amounts (see illustration on page 156).

For 2021-22, the performance achieved for each target has been as follows:

Remuneration Committee Report (continued)

LONG-TERM PLAN (LTVPS) OUTCOME FOR 2021-22 (continued)

Element	Weighting	Threshold level of performance (10% achievement)	Target level of performance (60% achievement)	Maximum level of performance (100% achievement)	Performance achieved	% of element earned
Totex Performance	50%	£690m	£655m	£639m	£653m	31.9
Overall ODI outcomes for performance development measures	50%	£(2.8)m	£(1.5)m	£0.0m	£(2.9)m	0
Total (as % of salary)						31.9

In accordance with the LTVPS rules, as this is an interim payment on account of the performance achieved during the period of the AMP, the pay-out for each element is capped at 60% of the maximum, i.e. 30%.

Details of the performance achieved for each of the performance development measures which contributed to the overall LTVPS assessment for 2021-22 were as follows:

Remuneration Committee Report (continued)

Measure	CEO CFO Units	Threshold level of performance (5% achievement) (3% achievement)	Target level of performance (30% achievement) (18% achievement)	Maximum level of performance (50% achievement) (30% achievement)	Performance achieved	Outcome Delivery Incentive (ODI) £m
Continuous service measures						
Acceptability of drinking water	Contacts per 1,000 pop.	2.72	2.64	2.07	2.44	(0.9)
Mains repairs	# per 1,000km of Mains	133	132.7	137	136.6	0.0
Leakage	%	2.2	4.2	4.2	5.2	0.3
Sewer collapses	# per 1,000km of Sewer	7.2	7.2	7.2	6.7	–[1]
Community education	Nr	70,000	72,000	72,000	45,655	(0.1)
Visitors to recreational facilities	Nr	560,000	675,000	675,000	842,701	0.2
Per capita consumption	% reduction	0.7	1.4	2.0	(8.9)	(2.3)
Investment programme measures						
Lead pipes replaced	Nr	2,800	2,800	2,800	1,462	–
Km of river improved	Km	5	5	31	94	[2]
Surface water removed from sewers	m^3	141,900	141,900	141,900	–	(0.1)
Combined sewer overflow storage systems	m^3	–	–	–	–	–
Delivery of dam safety programme	Sites	8	8	8	8	–[1]
Delivery of zonal studies programme	Zones	0	0	0	2	–[1]
Direct procurement for customers: Cwm Taf Water supply strategy scheme (underperformance)	Per Date	n/a	n/a	n/a	n/a	–
Direct procurement for customers: Cwm Taf Water supply strategy scheme (outperformance)	Date	n/a	n/a	n/a	n/a	–
Delivery of a new visitor centre	Delivered	n/a	n/a	n/a	n/a	–
Delivery of the Company's South Wales Grid water supply resilience scheme	% complete	3	3	3	0	–
Total		(2.8)	(1.5)	(0.0)		(2.9)

[1] No ODI for outperforming this measure – penalty only measure.

[2] End of AMP measure.

Remuneration Committee Report (continued)

LONG-TERM PLAN (LTVPS) OUTCOME FOR 2021-22 (continued)

The measures in the table above with "n/a" for performance in the year reflect commitments to ensure we deliver our capital programmes on time, where there were no outputs scheduled for 2021-22. The overall performance achieved for 2021-22 was 31.9% of maximum, below the target level of 60% of maximum. The award for each element is capped at 30% and therefore this resulted in LTVPS awards to Executive Directors of:
- Peter Perry: 30% of salary (£99,485) – to be paid in July 2022 and will be subject to final performance to 31 March 2025.
- Mike Davis: 18% of salary (£47,309) – to be paid in July 2022 and will be subject to final performance to 31 March 2025.

For 2021-22 performance, Peter Perry had a target opportunity of 60% of salary and a maximum opportunity of 100% of salary. Mike Davis had a target opportunity of 36% of salary and a maximum opportunity of 60% of salary.

FEES FOR CHAIR AND NON-EXECUTIVE DIRECTORS (AUDITED)
How the Chair of the Board and Non-Executive Directors were paid last year

	Fees		Benefits		Total remuneration	
Non-Executive Directors	£000 2022[1]	£000 2021	£000 2022	£000 2021	£000 2022	£000 2021
Alastair Lyons	222	211	–	–	222	211
Graham Edwards[2]	73	67	–	–	73	67
Joanne Kenrick	62	59	–	–	62	59
John Warren[3]	16	59	–	–	16	59
Debra Bowen Rees	62	59	–	–	62	59
Tom Crick	59	62	–	–	59	62
Jane Hanson[4]	62	16	–	–	62	16

1. Fees in 2021 were reduced after the Chair of the Board and the then serving Non-Executive Directors requested their fees for May, June and July 2020 to be reduced by 20%. Due to an administrative error, Tom Crick's fee reduction took place retrospectively from June 2021. This is reflected in Tom's fee for 2022.
2. Graham Edwards is Senior Independent Director and receives an additional fee of £11k per annum.
3. Stepped down from the Board on 2 July 2021.
4. Joined the Board on 1 January 2021.

Remuneration Committee Report (continued)

SECTION 5: PAY DECISIONS FOR NEXT YEAR – 2022-23
PAY FOR EXECUTIVE DIRECTORS

	Base salary 2022-23	Base salary 2021-22
Peter Perry	£340,903	£331,617
Mike Davis	£270,189	£262,830

BASE SALARY

When reviewing Executive salaries, the Committee considered the proposed increases for the wider workforce, business and individual performance to date in 2021-22, and National Living Wage and Real Living Wage rates. The Committee decided to accept the recommendation of the Executive Directors that it would be appropriate to award an increase lower than the increase for the wider workforce under the AMP7 Working Together Agreement. The wider workforce were awarded 4.8% in line with CPIH in December 2021 and the Executives were awarded a 2.8% increase, both with effect from April 2022.

BENEFITS AND PENSION
Benefits and pension arrangements will not change for 2022-23. All employees, including Executive Directors, are entitled to a maximum pension contribution of 11%. Eligible employees have the opportunity to opt out and receive a cash allowance equivalent to 9.6%. Benefits in the year will include private health insurance and car allowances.

ANNUAL VARIABLE PAY
For 2022-23 annual variable pay of up to 100% of salary will be able to be earned, based on performance achieved. The performance measures used are set out below and have been set with reference to the aims under the 2020-25 business plan. As discussed in the Committee Chair's statement, the targets for 2022-23 will continue to be set for the customer, operational and strategic elements, but each measure will have a defined weighting rather than using the cumulative rewards and/or penalties set by Ofwat. This approach will simplify the scheme and will reduce the impact of extreme over or under performance against any single measure, better rewarding performance across all measures included in the framework.
Details of the measures and their weightings are set out below.

Remuneration Committee Report (continued)

ANNUAL VARIABLE PAY (continued)

	Customer Service	Operational Performance	Strategic Goals
Measures	• C-MeX (25%)* • B-MeX (7.5%)* • D-MeX (7.5%)* *Ofwat's measures of customer service for household, business, and developer customer satisfaction, respectively.	Water: • Water quality compliance (5%) • Interruptions to supply (5%) • Acceptability of water (5%) • Leakage performance (5%) Waste: • Waste water compliance (10%) • Pollution incidents from waste water (5%) • Internal sewer flooding on customer property (5%)	• PR24 preparation (8%) • Employee engagement (4%) • Credit rating performance (4%) • Improve gender balance at senior manager level (4%)
How much of the scheme?	40%	40%	20%

LONG-TERM PLAN

The long-term plan will continue to operate in line with the Policy. As summarised above, performance will be measured under the 2020-25 five-year plan and be based on:

· Totex (total expenditure – operating costs and investments): (50%)

· Overall rewards/penalties for performance development measures: (50%)

HOW MUCH COULD OUR EXECUTIVE DIRECTORS EARN NEXT YEAR?

THE GRAPHS BELOW SHOW THE OPPORTUNITIES FOR EACH EXECUTIVE DIRECTOR FOR 2022-23:

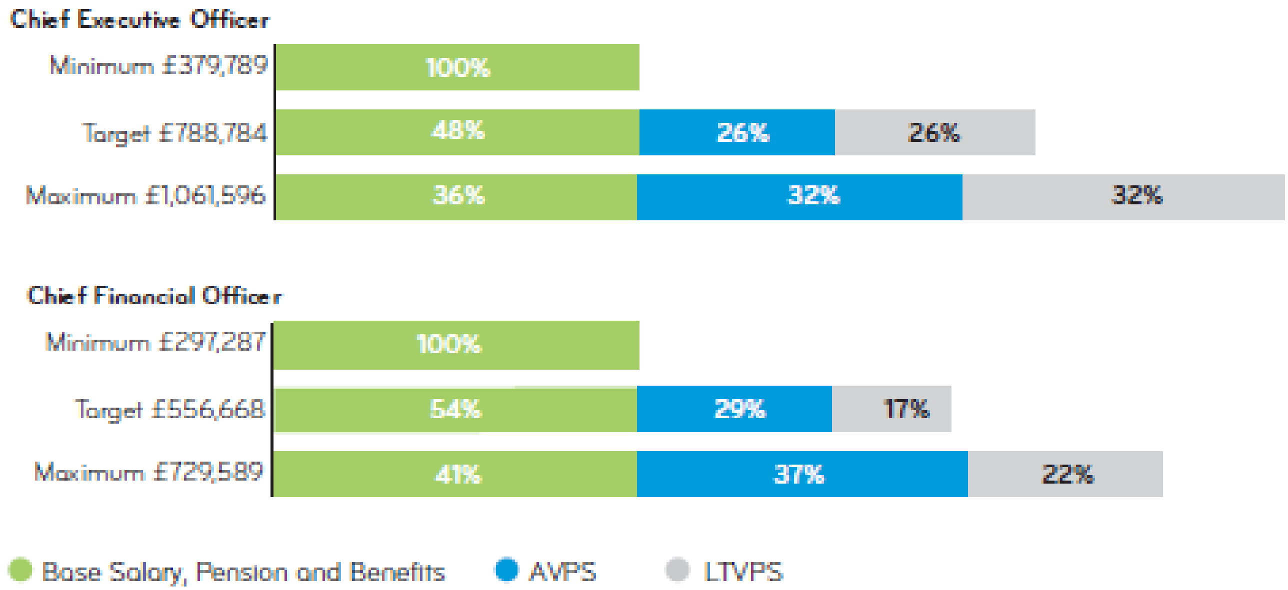
· The minimum level of remuneration payable. This comprises basic salary, any travel and car allowances, health insurance benefits and pension;

· On-target level of remuneration which represents 60% of the maximum payout for the annual variable pay and the long-term incentive; and

· The maximum level of remuneration, if all annual variable pay and long-term incentive performance targets were fully achieved.

Remuneration Committee Report (continued)

HOW MUCH COULD OUR EXECUTIVE DIRECTORS EARN NEXT YEAR? (continued)



Over the last 10 years, the average outcome for variable pay elements has been 61.9% of maximum for the AVPS, and 47.3% of maximum for the LTVPS. The maximum award has not been achieved under either plan during that time.

FEES FOR CHAIR AND NON-EXECUTIVE DIRECTORS

The fees payable to the Chair of the Board were reviewed in March 2022 and the Committee (in the absence of the Chair) resolved that the Chair of the Board's fee should be increased by 2.8% and be reviewed in spring 2023.

In March 2022, the Chair of the Board and the Executive Directors resolved that the fees for Non-Executive Directors should also be increased by 2.8% and be reviewed in spring 2023.

For the past three annual reviews (March 2019, March 2020 and March 2021) there had been no increase in either the Chair or Non-Executive Director fees. Fees for 2022-23 will be as follows:

Remuneration Committee Report (continued)

FEES FOR CHAIR AND NON-EXECUTIVE DIRECTORS (continued)

Role	Fee
Chair	£228,213
Senior Independent Director	£75,044
Non-Executive Directors	£63,376

SECTION 6: OTHER IMPORTANT INFORMATION
WORKFORCE PAY ACROSS DŴR CYMRU
CEO PAY RATIO
This is the third year that we have applied the CEO Pay Ratio Reporting requirements for UK listed companies which compares the CEO's pay to the 25th percentile, median, and 75th percentile employees. In order to calculate the ratio we have applied methodology A from the UK Government guidance.

Year	Methodology	25th percentile pay ratio	Median pay ratio	75th percentile pay ratio
2021-22	A	19:1	15:1	12:1
2020-21	A	28:1	23:1	18:1
2019-20	A	22:1	18:1	14:1

The median ratio this year represents a significant decrease from last year. This is mainly due to the pension accrual reported for the CEO in 2021, which was a one-off adjustment to accruals relating to the increase in his salary on promotion to CEO. A reduction in the CEO's AVPS and LTVPS awards since FY2019-20 also contributed to this outcome.

The 25th percentile, median, and 75th percentile employees were determined on 10 May 2022 using total pay for the year ended 31 March 2022 for all employees as at 31 March 2022. Pay details for the individuals on a full-time equivalent basis are set out below:

Year 2021-22	25th percentile pay ratio	Median pay ratio	75th percentile pay ratio
Salary	25,642	39,334	40,743
Total pay	30,997	39,362	50,189

Remuneration Committee Report (continued)

METHODOLOGY NOTES

- The pay ratios reflect our remuneration principles and our approved Remuneration Policy. Total remuneration is considered to be fair and competitive and to reflect wider economic conditions, enabling us to attract and retain the necessary skills and talent.
- The variable pay elements have been estimated for the wider workforce, as individual payments are not finalised until July 2022.
- Pension accrual has been excluded as the figures for the wider workforce were not available at the time of reporting.
- Total payments and benefits have been included on a full-time equivalent annualised basis for new hires, part-time employees, unpaid leave relating to long-term sickness and maternity.

GENDER PAY GAP

The gender pay gap is defined as the overall median and mean gender pay and bonus gap (based on hourly rate of pay at the snapshot date of 5 April 2021 and bonuses paid in the year to 5 April 2021) regardless of role or seniority. We have seen a decrease in both our median and mean Gender Pay Gaps continuing the downward trend over the last five years. It is encouraging that our gender pay gap remains significantly lower than the national average. Our Gender Pay Gap report (link below) highlights the key initiatives we are undertaking to promote diversity and inclusivity at Welsh Water.

We are continuing to promote the progression of women through the Company – for further details of some of the actions we are taking to support gender and other forms of diversity throughout our organisation, please see page 93 within our Environmental, Social and Governance report section.

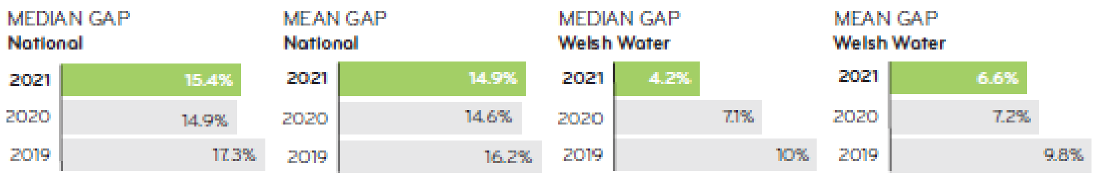
Full details of our gender pay reporting are available on our website at dwrcymru.com/genderreport

DEFINITIONS

Median – The difference between the midpoints in the ranges of men’s and women’s pay

Mean – The difference between the average of men’s and women’s pay.

The median gap has reduced from 7.1% in 2020 to 4.2% in 2021, and the mean gap has reduced from 7.2% in 2020 to 6.6% in 2021. While there are always a variety of factors that affect gender gaps, the main factors in the reduction in 2021 are the increase in women in senior roles within the organisation, and also the split of men and women in less senior roles where the percentage of men has increased.



Remuneration Committee Report (continued)
As regards bonuses, the majority of our employees receive the fixed amount Colleague Reward payment. The midpoint for each gender falls within the numbers of colleagues who receive the Colleague Reward payment, and as this is a fixed payment, there is no difference between men and women when calculated on a median basis. As a result, as in previous years, there continues to be no median bonus gap. The mean bonus gap reflects the higher proportion of men occupying the most senior positions in the Company where variable pay opportunities are higher. This, however, decreased from 14.5% in 2020 to 8.1% as the gap between Annual Variable Pay awards and the Colleague Reward payment reduced. We expect this to increase next year and be more in line with previous years' results.

ETHNICITY PAY GAP
During the year, the Committee continued to explore the possibility of including our ethnicity pay gap within this year's annual report in light of developing good practice and as part of our actions to support diversity throughout our organisation.
However, when looking at the data, while the information we hold has increased to 66.5% of the workforce as at 31 March 2022 (31 March 2021: 45%), we still do not currently have sufficient information available under the necessary metrics to produce meaningful information at this time. The Committee will continue to monitor this going forward, and will continue strongly to encourage the collation of data across the organisation which will make this reporting possible.

ANNUAL CHANGE IN PAY FOR DIRECTORS AND ALL EMPLOYEES
The following table sets out the change in the remuneration paid to Board Directors from financial years 2021-22 and 2020-21 compared with the average percentage change for Dŵr Cymru employees:

	2021-2022			2020-2021		
	% change in salary/fees	% change in benefits	% change in AVP	% change in salary/fees	% change in benefits	% change in AVP
Directors						
Peter Perry	2	(5.1)	(19.7)	2	(2.3)	(6.3)
Mike Davis	2	(5.1)	(19.7)	2	22	51.7
Non-Executive Directors						
Alastair Lyons	–	–	–	–	–	–
Graham Edwards	–	–	–	–	–	–
Joanne Kenrick	–	–	–	–	–	–
John Warren	–	–	–	–	–	–
Debra Bowen Rees	–	–	–	–	–	–
Tom Crick	–	–	–	–	–	–
Jane Hanson	–	–	–	–	–	–
Average Dŵr Cymru Employee	4.5	0	1.0	4.5	0	4.1

Remuneration Committee Report (continued)

HOW DOES THE CHIEF EXECUTIVE'S PAY COMPARE TO PREVIOUS YEARS?

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total remuneration for Managing Director/Chief Executive (£'000)	590	742	974	746	629	679	607	685	892	675
Total remuneration net of pension accrual (£'000)	590	520	690	604	629	601	624	678	555	570
Annual variable pay outcome	61%	51%	79%	70%	75%	65%	67%	60%	50.8%	40%
Long-term plan outcome	50%	78%	91%	65%	65%	27%	25%	19%	23.1%	30%*

* As this is an interim payment on account of the performance achieved during the period of the AMP the pay-out is capped at 30%.

HOW DOES THE TOTAL SPEND ON EXECUTIVE PAY AND TOTAL STAFF PAY COMPARE TO OTHER EXPENDITURE?

			Change	
	2021	2022	£m	%
Total expenditure	828.5	744.9	77.6	9.43
Employee remuneration costs	153	150	3	1.96
Customer return of value	11	13	2	18.18
Executive Director remuneration costs	1.3	1.1	(0.2)	(15.38)

DIRECTORS' SERVICE CONTRACTS AND LETTERS OF APPOINTMENT

Dates of the service contracts of the Executive Directors and letters of appointment of the Non-Executive Directors in place at 31 March 2022 are as follows:

Alastair Lyons 12 April 2016	Graham Edwards 1 October 2013	Tom Crick 1 October 2017	Debra Bowen Rees 5 December 2019
Jane Hanson 3 December 2020	Peter Perry 3 June 2020	Joanne Kenrick 1 November 2015	Mike Davis 3 June 2020

Enquiries for the inspection by Members of the above service contracts and letters of appointment should be made via email to the Company Secretary at company.secretary@dwrcymru.com

Appendix 6 – Reporter’s Letter of Assurance

Appendix 7 - Restatement of 2020/21 assured by Technical Auditor

The following tables presents a summary of the data that we are restating from our 2020-21 Annual Performance Report.

Table	Line	Description	2020-21 submitted	2020-21 restated	Reason for change
5A	18	Total number of water reservoirs	73	74	Llyn Eiddew Mawr, a natural lake always used but was omitted from 5A.18 in 2020-21.
5A	19	Total volumetric capacity of water reservoirs	459,228 Ml	459,362 Ml	See line 5A.18 - An increase of 134 Ml for Llyn Eiddew Mawr reservoir.
5A	23	Average pumping head – raw water abstraction	39.44 m.hd	36.73 m.hd	In preparing our 2021-22 APH data we have identified that our 2020-21 cost allocation across price controls (raw water abstraction, raw water transport, water treatment and treated water distribution) was incorrectly allocated. In addition, further work has been undertaken on APH at boreholes resulting in data improvements.
6A	6	Average pumping head - raw water transport	17.15 m.hd	21.12 m.hd	In preparing our 2021-22 APH data we have identified that our previous 2020-21 cost allocation across price controls (raw water abstraction, raw water transport, water treatment and treated water distribution) was incorrectly allocated.
6A	31	Average pumping head – water treatment	41.58 m.hd	15.34 m.hd	In preparing our 2021-22 APH data we have identified that our previous 2020-21 cost allocation across price controls (raw water abstraction, raw water transport, water treatment and treated water distribution) was incorrectly allocated.
6B	23	Number of potable water pumping stations that re-pump water already within the treated water distribution system	538	537	A decrease of six as a result of five water pumping stations being decommissioned in the year and one water pumping station being identified as a common treated source and therefore should not have been included last year.
6B	28	Average pumping head – treated water distribution	46.83 m.hd	72.57 m.hd	In preparing our 2021-22 APH data we have identified that our previous 2020-21 cost allocation across price controls (raw water abstraction, raw water transport, water treatment and treated water distribution) was incorrectly allocated. In addition, further work has been undertaken on APH at boreholes resulting in data improvements.
7B	1	Large STW name (existing works)	22	23	The increase of one is due to the reclassification of Rotherwas (Hereford). There is a shared flow for Rotherwas and Hereford Eign as there is a connector between the two separate sites (over a river) and the actual amount treated at each site means both sites should be treated as Large WWTW. Previously Rotherwas has been reported as a Band 3 site based on the catchment that is naturally serves. Hereford (Eign) has a reduction in population equivalent compared to previous years due to the inclusion of Rotherwas (Hereford).

Table	Line	Description	2020-21 submitted	2020-21 restated	Reason for change
7E	7	Energy consumption - sewage treatment	194,356.566 MWh	191,645.046 MWH	In preparing our 2021-22 Energy consumption data and the Ofwat additional data request we have identified that our interpretation of the Ofwat guidance was incorrectly applied in our 2020-21 submitted data.
7E	8	Energy consumption - wastewater network +	242,053.441 MWh	239,341.921 MWh	In preparing our 2021-22 Energy consumption data and the Ofwat additional data request we have identified that our interpretation of the Ofwat guidance was incorrectly applied in our 2020-21 submitted data.
8C	17	Recharge to Bioresources by network plus for costs of handling and treating bioresources liquors	1.213 £m	4.780 £m	In preparing our 2021-22 data we have identified that our submitted 2020-21 figure did not include capital recharge costs.

7D.1 to 7 – Load received at STW size bands

It has been identified that the treatment categories for Activated sludge and Biological were transposed incorrectly in the APR 2020-21 return. The data for Biological was input into the Activated sludge column for all seven lines and vice versa.

This is shown in the table below.

APR line	Actual APR 2020-21 data submitted to Ofwat Treatment categories		Restated APR 2020-21 data Treatment categories	
	Activated Sludge	Biological	Activated Sludge	Biological
Load received by STWs in size band 1 (KgBOD5/day)	1,719	224	224	1,719
Load received by STWs in size band 2 (KgBOD5/day)	1,721	320	320	1,721
Load received by STWs in size band 3 (KgBOD5/day)	4,900	1,348	1,348	4,900
Load received by STWs in size band 4 (KgBOD5/day)	7,330	2,979	2,979	7,330
Load received by STWs in size band 5 (KgBOD5/day)	3,904	5,605	5,605	3,904
Load received by STWs above size band 5 (KgBOD5/day)	4,593	116,057	116,057	4,593
Total load received	24,167	126,533	126,533	24,167

8C.1 to 4 and 6 Bioresources energy and liquors analysis

In preparing our 2021-22 Energy consumption data and the Ofwat additional data request we have identified that our interpretation of the Ofwat guidance was incorrectly applied in our 2020-21 submitted data. The following table shows our submitted data for 2020-21 alongside our revised figures based on our new understanding of the guidance.

2020-21	Submitted				Restated				
Line description	Electricity MWh (0 DPs)	Total* MWh (0 DPs)	Electricity £m (3 DPs)	Total* £m (3 DPs)	Electricity MWh (0 DPs)	Total* MWh (0 DPs)	Electricity £m (3 DPs)	Total* £m (3 DPs)	RAG 4 reference
Energy consumption - bioresources				5.341				6.239	8C.1
Energy generated by and used in bioresources control	13,734	33,414	1.812	1.812	14,787	34,467	1.951	1.951	8C.2
Energy generated by bioresources and used in network plus control	25,324	25,324	3.34	3.340	17,595	17,595	2.321	2.321	8C.3
Energy generated by bioresources and exported to the grid or third party	7,494	43,630	0.322	0.728	3549	39,685	0.152	0.558	8C.4
Energy bought from grid or third party and used in bioresources control	28,772	76,211	3.795	4.257	29004	76,443	3.826	4.288	8C.6

Change control

Date	Version	Reason for Change
15 July 2022	V1 - First Published	
24 January 2023	V2	Response to Ofwat query WSH-APR-DE-001 amendments to table 4B
		Update to Compliance Risk Index 6C.22 to match with DWI final published report.
		Update to Event Risk Index 6C.23 to match with DWI final published report.
		Minor update to rounding corrections for some consent figures in 7D.6 as per response to Ofwat query WSH-APR-CA-014.