

Part 4 – Additional regulatory information



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4A – Non-financial information for the year ended 31 March 2020

	Unmeasured	Measured
Retail - household		
Number of void households (000s)	36.329	20.428
Per capita consumption (excluding supply pipe leakage) I/h/d	176.04	131.19
	Water	Wastewater
Wholesale - volume	MI/d	MI/d
Bulk supply export	298.934	0.000
Bulk supply import	20.638	0.091
Distribution input	846.602	



4B – Wholesale totex analysis for the year ended 31 March 2020

		Cui	Current year		ve 2015-20 ¹
	Ref	Water	Wastewater	Water	Wastewater
		£m	£m	£m	£m
Actual totex	2B	351.329	371.473	1,599.349	1,564.672
Less: Items excluded from the menu					
Third party costs	2B	11.782	2.023	56.250	3.407
Pension deficit recovery payments	2B	6.188	4.522	17.413	12.291
Other 'rule book' adjustments			-	-	-
Total items excluded from the menu		17.970	6.545	73.663	15.698
Transition expenditure ²		-	(25.752)	0.751	(24.267)
Adjusted actual totex: outturn price base	4D, 4E	333.359	339.176	1,526.437	1,524.707
Adjusted actual totex base year prices		280.636	285.533	1,354.787	1,353.334
Allowed totex based on final menu choice – base year prices		229.983	261.444	1,193.554	1,358.090

Capital expenditure over the AMP is £190m higher than our final determination allowance. The following tables below provides a high-level overview of the differences between our actual expenditure and our internal business plan.

Our expenditure is higher than the final determination

allowance due to new requirements, additional expenditure to improve our performance on our measures of success and operational challenges that were not anticipated at PR14.

Total difference between adjusted actual totex and allowed totex based on final menu choices at outturn price base

	Current year			ve 2015-20
	Water	Wastewater	Water	Wastewater
	£m	£m	£m	£m
Opex	20.5	(11.2)	51.8	(52.9)
Opex IRE adjustment	68.0	34.3	258.8	153.6
Total adjusted opex	88.5	23.1	310.6	100.7
Capex	39.7	39.8	138.3	56.8
Capex IRE adjustment	(68.0)	(34.3)	(258.8)	(153.6)
Transition expenditure ²	_	-	(2.1)	(2.1)
Total capex	(28.3)	5.5	(122.6)	(98.9)
Total difference: outturn price base	60.2	28.6	188.0	1.8
Total difference: base year prices	50.6	24.1	161.2	(4.8)

² Transition expenditure of £25.8m relates to Loughor expenditure allowed in the PR19 Final Determination. Loughor transition expenditure of £25.2m is reported in table 4M - Enhancement expenditure by purpose and £0.6m is included in base expenditure.

¹Actual cumulative values have been reported in outturn prices.



4B – Wholesale totex analysis for the year ended 31 March 2020 (continued)

Capex Water

	2015/16 £m	2016/17 £m	2017/18 £m	2018/19 £m	2019/20 £m	Cumulative £m
Over/under spends on the programme: Water Resources: increased costs are due to a full upgrade at Prioress Mill water pumping station rather than a partial upgrade (full upgrade originally profiled for delivery in AMP7).	(10.3)	(1.9)	4.2	6.9	5.1	4.0
Water Resource Management Plan: expenditure has been reprofiled for delivery in AMP7.	(3.1)	(1.8)	(1.7)	0.2	0.7	(5.7)
WTW Maintenance: increased expenditure for the abandonment of Portis water treatment works and increased reactive maintenance after extreme weather events.	4.3	(2.3)	5.6	2.0	(0.7)	8.9
Safety and Acceptability of Water: Year 1 studies have informed an increased programme of works, to meet the customer performance challenge for improved acceptability of water. A "source-to-tap" programme of work has addressed the root cause of acceptability issues at a zone level, resulting in a higher number of pipe and large diameter mains renewals than originally scoped and cleansing, due to asset deterioration.	(11.3)	13.7	21.4	7.4	9.0	40.2
WTW Quality: additional costs at Bryn Cowlyd due to ground conditions and at Tynywaun due to raw water quality requiring additional treatment to meet water quality standards.	(2.2)	6.2	4.1	5.7	(10.5)	3.3
Impounding reservoirs: changes to the Reservoirs Act required additional investment to address a higher number of assets. The Act has also been amended to include Measures in the Interest Of Maintenance (MIOM) and new requirements for draw-down and spillways.	-	5.3	3.5	6.0	16.6	31.4
Leakage: additional investment following the introduction of the convergence measure for industry-aligned reporting and increased activity to meet performance targets.	4.9	2.2	3.7	1.6	8.0	20.4
Abstractions: additional investment was made as a result of abstraction abandonment following water quality failure.	-	1.2	1.0	(0.1)	(0.6)	1.5
Service reservoirs: increased storage capacity scheme in Hereford catchment.	-	-	1.9	0.6	6.1	8.6
Network Ancillary Assets: increased maintenance expenditure over the period. Additional expenditure in Years 4 and 5 is attributed to managing the 2018 drought and Storm Dennis in 2020.	-	5.2	4.3	11.2	4.9	25.6



4B – Wholesale totex analysis for the year ended 31 March 2020 (continued)

Capex Water (continued)	2015/16 £m	2016/17 £m	2017/18 £m	2018/19 £m	2019/20 £m	Cumulative £m
Bulk meters, pressure release valve and air valves: investment has been delayed to facilitate additional work on network ancillary assets and leakage.	-	-	(2.7)	(1.6)	(2.9)	(7.2)
Water element of cross-service: includes additional costs for IT systems upgrade (including automation of telemetry and control), visitor centre upgrades and improvement of Health and safety at works.	-	-	7.4	3.4	(0.6)	10.2
Catchments: lower expenditure to facilitate work on leakage, dam safety and at Vowchurch.	(0.8)	(1.0)	(0.7)	(0.3)	1.1	(1.7)
Customer supply meters: Reprofiling of expenditure over the AMP.	(0.9)	(0.5)	(0.5)	0.3	1.6	-
Water pumping stations: reallocation of investment to Water Resources to support the Prioress Mill WPS rebuild.	(1.8)	(0.5)	(0.5)	(1.5)	2.2	(2.1)
Other	(1.2)	(1.7)	(2.1)	1.6	(0.3)	(3.7)
Total	(22.4)	24.1	48.9	43.4	39.7	133.7
Difference due to final determination menu Total difference from final determination	¹ (22.4)	24.1	2.2 51.1	2.4 45.8	39.7	4.6 138.3

¹This has changed from (£18.0m) reported in 2018/19 to (£22.4m) and is a result of using the most recent Cost Assessment tables.



¹This has changed from (£43.8m) reported in 2018/19 to (£47.1m) and is a result of using the most recent Cost Assessment tables.

4B – Wholesale totex analysis for the year ended 31 March 2020

Capex wastewater	2015/16 £m	2016/17 £m	2017/18 £m	2018/19 £m	2019/20 £m	Cumulative £m	:
Over/under spends on the programme: Continuous and intermittent: additional programme of works brought forward to meet regulatory environmental commitments for the Loughor estuary L2 driver.	(22.8)	(5.6)	2.4	28.5	30.6	33.1	1
Sludge schemes: Five Fords and Treborth schemes were delayed in the early years of the AMP whilst and North and South Wales sludge strategies were agreed. The schemes are now nearing completion.	(7.1)	(1.5)	8.6	12.7	(0.1)	12.6	,
Sludge schemes: South Wales sludge strategy, Year 5 underspend is a result of scheme delays on the delivery of mechanical and electrical packages due to severe weather and COVID-19.	-	-	9.6	10.4	(9.5)	10.5	
Sewer network maintenance: additional programme costs to reduce sewer blockages and improve internal and external flooding performance and service to customers.	-	1.7	2.2	2.4	5.7	12.0	
WWTW Maintenance	-	-	(1.0)	3.8	(1.2)	1.6	
Private sewers and pumping stations assets transferred are generally in better condition than anticipated with less remedial work required. Underspend has been reallocated to support additional maintenance and the North Wales Sludge strategy.	(9.9)	(3.0)	0.7	0.2	0.2	(11.8)	
Sewage pumping stations: overspend on Cardiff Western District Pump station power resilience which was not previously in the programme.	-	-	0.3	2.2	4.1	6.6	
Wastewater element of cross-service: includes additional costs for IT systems upgrade (including automation of telemetry and control), energy saving and generation schemes and transport upgrades.	-	-	12.8	7.4	4.5	24.7	
EDM programme for Afan Catchment investigation which has informed our spill reduction programme for AMP7.	-	-	-	-	1.8	1.8	
Sewer flooding HO early start on three projects to reduce impact on customers experiencing external flooding.	-		-	-	5.4	5.4	
Other	(7.3)	2.4	(5.5)	(2.0)	7.9	(4.5)	
Total	(47.1)	(6.0)	30.1	65.6	49.4	92.0	
Difference due to final determination menu.		-	(14.1)	(11.4)	(9.6)	(35.1)	
Total difference to final determination	¹ (47.1)	(6.0)	16.0	54.2	39.8	56.9	



4B – Wholesale totex analysis for the year ended 31 March 2020

Opex water							Opex wastewater						
	2015/16 ¹ £m	2016/17 £m	2017/18 £m	2018/19 £m	2019/20 £m	Cum £m		2015/16 £m	2016/17 £m	2017/18 £m	2018/19 £m	2019/20 £m	Cum £m
Renegotiation of the NRW service charge	(1.3)	(1.6)	(1.8)	(2.0)	(3.0)	(9.7)	Lower expenditure on adoption of pumping stations and private sewers relating in part to synergy savings	(3.0)	(8.1)	(7.0)	(9.9)	(11.1)	(39.1)
Rates refund received after challenging the 2005 water network assessment	(20.0)	-	-	-	-	(20.0)	Lower chemical usage in relation to anticipated opex from capital schemes	(1.7)	(2.4)	(1.6)	(1.1)	(0.9)	(7.7)
Net power difference	(2.2)	(1.7)	(3.3)	1.4	2.6	(3.2)	Savings from insourcing	(1.0)	-	-	-	-	(1.0)
Reduced insurance cost	(1.7)	(0.9)	(2.6)	(1.5)	(2.3)	(9.0)	Rates refund	(4.5)	-	(2.0)	(5.4)	(6.1)	(18.0)
Release of provision regarding billing dispute	-	(2.1)	-	(0.8)	-	(2.9)	Reduced insurance cost	(1.7)	(0.9)	(2.6)	(1.6)	(2.3)	(9.1)
Cumulo rates increase	-	0.9	-	-	-	0.9	Net power difference: reduced						
Water connections increase	-	1.5	2.0	2.1	2.5	8.1	energy usage partially offset by lower income due to delay in capital scheme		(3.8)	(4.0)	(2.0)	(1.3)	(11.1)
Transport fleet savings not yet achieved	-	1.6	1.1	0.2	-	2.9	IT increase relating to transitional costs	-	2.6	-	-	-	2.6
Increase in minor works contract due to increased rates	-	2.3	1.8	2.3	3.2	9.6	Sludge disposal increase	-	0.9	0.4	1.3	1.2	3.8
IT increase relating to transitional costs	-	3.2	-	-	-	3.2	Water recharged to waste sites	-	-	1.9	2.0	1.8	5.7
Water recharged to waste sites	-	-	(1.9)	(2.0)	(1.8)	(5.7)	Water sludge recharge to waste	-	-	(0.4)	(0.4)	(0.4)	(1.2)
Atypical costs: adverse weather	-	-	7.3	15.3	6.3	28.9	Atypical costs: adverse weather	-	-	-	1.5	5.5	7.0
Direct labour increase	-	-	6.7	8.7	7.5	22.9							
Other net cost pressures	4.7	6.7	3.6	5.3	5.5	25.8	Other net cost (efficiencies)/pressures	(2.9)	4.1	5.9	5.7	2.4	15.2
Total opex difference	(20.5)	9.9	12.9	29.0	20.5	51.8	Total opex difference	(14.8)	(7.6)	(9.4)	(9.9)	(11.2)	(52.9)

¹ The opex difference has changed in 2015/16 by £1.4m from (£21.9m) in water to (£20.5m) and by £0.7m in wastewater from (£14.1m) to (£14.8m) to reflect the most recent Cost Assessment tables



4C – Impact of AMP performance to date on RCV for the year ended 31 March 2020

	Water	Wastewater
	£m	£m
Cumulative totex over/underspend in the price control period	192.814	(5.688)
Customer share of cumulative totex over/underspend	96.580	(2.810)
RCV element of customer share of cumulative totex over/underspend	59.890	(6.951)
Adjustment for ODI outperformance or underperformance	-	-
RCV determined at FD at 31 March	1,868.328	4,018.623
Projected 'shadow' RCV	1,928.218	4,011.672

The "cumulative totex over/underspend so far in the price control period" is obtained from the Totex Menu Model from the PR14 Reconciliation rulebook "Totex under/(over) performance" line 162 and 163. This does not include menu exclusions. The "Customer share of cumulative totex over/underspend" is (1- Efficiency Rate) multiplied by the cumulative totex over/underspend in line 1.

The "RCV element of totex over/underspend" is the proportion of the "Totex Adjustment from Rulebook" that is not treated as "pay as you go." This is obtained from "Water/Sewerage: RCV adjustment" lines 202 and 203 of the Totex Menu Model from the PR14 Reconciliation Rulebook. These figures are presented at March 2020 prices.

	Water	Wastewater	Total
Base year prices	£m	£m	£m
Totex for input to PAYG	1,193.55	1,358.09	2,551.64
Adjusted actual totex for input to PAYG	1,354.79	1,353.33	2,708.12
Difference	161.24	(4.76)	156.48
Reconciliation rulebook adjustments	3.58	(8.78)	(5.20)
Totex adjustment from rulebook	164.82	(13.54)	151.28
PAYG rate	69.61%	57.04%	
RCV element of totex underspend (Difference x (1 – PAYG))	50.08	(5.81)	44.27
RCV element of totex underspend (March 2019 prices)	59.89	(6.95)	52.94



4D – Wholesale totex analysis for the year ended 31 March 2020 – water

National Properties		Water Resources			Net			
Departing expenditure Power Powe		Abstraction	Raw water	Raw	Raw	Water	Treated	Total
Power		licenses	abstraction	water	water	treatment	water	Total
Power Company Compan		£m	£m	£m	£m	£m	£m	£m
Income treated as negative expenditure (0.090) (4.368) (0.071) (0.018) (1.863) (1.204) (7.614) (Abstraction charges/discharge consents 9.094 - - 0.25 - 0.252 - 9.346 (Bulk supply 0.025	Operating expenditure							
Abstraction charges/discharge consents Bulk supply Other operating expenditure – renewals expensed in year (infrastructure) Other operating expenditure – excluding renewals Local authority rates and Cumulor rates Total operating expenditure Other operating expenditure excluding third party services Total operating expenditure Maintaining the long term capability of the asset – non infra Other capital expenditure – infra Maintaining the long term capability of the asset – non infra Other capital expenditure – infra Other capital expenditure excluding third party services Total operating expenditure Maintaining the long term capability of the asset – non infra Other capital expenditure excluding third party services Total operating expenditure excluding third party services Total operating expenditure Maintaining the long term capability of the asset – non infra Other capital expenditure – infra Other capital expenditure – infra Total gross capital expenditure – non infra Total gross capital expenditure excluding third party services Total gross capital expenditure (excluding third party services) Total gross capital expenditure Cash expenditure – pension deficit recovery payments Dougla Double Total State Total State Total Research and Contributions Total gross capital expenditure – pension deficit recovery payments Double Cash expenditure – pension deficit recovery payments Double	Power	-	6.538	2.439	0.170	6.455	12.904	28.506
Bulk supply 0.025 0.075 0.042 - 0.168 0.521 0.831 Other operating expenditure – renewals expensed in year (infrastructure) - 17.626 0.168 - - 50.167 67.961 Other operating expenditure – excluding renewals 0.149 6.952 1.356 0.855 33.434 57.615 100.361 Local authority rates and Cumulo rates - 0.802 0.305 0.063 1.513 13.121 15.804 Total operating expenditure excluding third party services 9.178 27.625 4.239 1.070 39.959 133.122 215.95 Total operating expenditure excluding third party services 1.383 4.099 0.595 - 0.294 1.764 8.135 Total operating expenditure 10.561 31.724 4.834 1.070 40.253 133.488 223.330 Capital Expenditure Maintaining the long term capability of the asset – infra - 1.185 - - - 15.807 16.992 Maintaining the lon	Income treated as negative expenditure	(0.090)	(4.368)	(0.071)	(0.018)	(1.863)	(1.204)	(7.614)
Other operating expenditure – renewals expensed in year (infrastructure) - 17.626 0.168 - - 50.167 67.961 Other operating expenditure – renewals expensed in year (non-infra) 0 - <td>Abstraction charges/discharge consents</td> <td>9.094</td> <td>-</td> <td>-</td> <td>-</td> <td>0.252</td> <td>-</td> <td>9.346</td>	Abstraction charges/discharge consents	9.094	-	-	-	0.252	-	9.346
Other operating expenditure – renewals expensed in year (non-infra) -	Bulk supply	0.025	0.075	0.042	-	0.168	0.521	0.831
Other operating expenditure – excluding renewals 0.149 6.952 1.356 0.855 33.434 57.615 100.361 Local authority rates and Cumulo rates - 0.802 0.305 0.063 1.513 13.121 15.804 Total operating expenditure excluding third party services 9.18 27.625 4.239 1.070 39.959 133.124 215.195 Total operating expenditure 1.383 4.099 0.595 - 0.029 1.764 8.135 Total operating expenditure 1.383 4.099 0.595 1.00 40.253 134.888 223.330 Capital Expenditure - 1.185 - - - 15.807 16.992 Maintaining the long term capability of the asset – infra - 1.185 - - - 15.807 16.992 Other capital expenditure – infra - 5.309 0.179 0.129 31.115 32.892 69.624 Other capital expenditure – non infra - 16.807 0.031 0.002 3.553	Other operating expenditure – renewals expensed in year (infrastructure)	-	17.626	0.168	-	-	50.167	67.961
Decid authority rates and Cumulo rates - 0.802 0.305 0.063 1.513 13.121 15.804 Total operating expenditure excluding third party services 9.178 27.625 4.239 1.070 39.959 133.124 215.195 Total operating expenditure 1.383 4.099 0.595 - 0.294 1.764 8.135 Total operating expenditure 10.561 31.724 4.834 1.070 40.253 134.888 223.330 Capital Expenditure	Other operating expenditure – renewals expensed in year (non-infra)	-	-	-	-	-	-	-
Total operating expenditure excluding third party services 9.178 27.625 4.239 1.070 39.959 133.124 215.195 Third party services 1.383 4.099 0.595 - 0.294 1.764 8.135 Total operating expenditure 10.561 31.724 4.834 1.070 40.253 134.888 223.330 Capital Expenditure Maintaining the long term capability of the asset – infra - 1.185 - - - 15.807 16.992 Maintaining the long term capability of the asset – non infra - 5.309 0.179 0.129 31.115 32.892 69.624 Other capital expenditure - infra - 16.807 0.231 - - 14.833 31.871 Other capital expenditure - non infra - 10.207 0.003 0.002 3.553 2.987 16.752 Infrastructure network reinforcement - - - - 0.02 0.013 34.668 66.763 135.483 Third party services	Other operating expenditure – excluding renewals	0.149	6.952	1.356	0.855	33.434	57.615	100.361
Third party services 1.383 4.099 0.595 - 0.294 1.764 8.135 Total operating expenditure 10.561 31.724 4.834 1.070 40.253 134.888 223.330 Capital Expenditure Maintaining the long term capability of the asset – infra - 1.185 - - - 15.807 16.992 Maintaining the long term capability of the asset – non infra - 5.309 0.179 0.129 31.115 32.892 69.624 Other capital expenditure - infra - 16.807 0.231 - - 14.833 31.871 Other capital expenditure - non infra - 10.207 0.003 0.002 3.553 2.987 16.752 Infrastructure network reinforcement - - - - - 0.003 0.002 3.553 2.987 16.752 Infrastructure network reinforcement - - 33.508 0.413 0.131 34.668 66.763 135.483 Third party servi	Local authority rates and Cumulo rates	_	0.802	0.305	0.063	1.513	13.121	15.804
Total operating expenditure 10.561 31.724 4.834 1.070 40.253 134.888 223.330 Capital Expenditure Capital Expenditure Maintaining the long term capability of the asset – infra - 1.185 - - - 15.807 16.992 Maintaining the long term capability of the asset – non infra - 5.309 0.179 0.129 31.115 32.892 69.624 Other capital expenditure - infra - 16.807 0.231 - - 14.833 31.871 Other capital expenditure - non infra - 10.207 0.003 0.002 3.553 2.987 16.752 Infrastructure network reinforcement - - - - - 0.024 0.244 Total gross capital expenditure (excluding third party services) - 33.508 0.413 0.131 34.668 66.763 135.483 Third party services - 36.510 0.413 0.131 34.798 67.278 139.130 Grants and contributions	Total operating expenditure excluding third party services	9.178	27.625	4.239	1.070	39.959	133.124	215.195
Capital Expenditure Maintaining the long term capability of the asset – infra - 1.185 15.807 16.992 Maintaining the long term capability of the asset – non infra - 5.309 0.179 0.129 31.115 32.892 69.624 Other capital expenditure - infra - 16.807 0.231 14.833 31.871 Other capital expenditure - non infra - 10.207 0.003 0.002 3.553 2.987 16.752 Infrastructure network reinforcement 0.244 0.244 Total gross capital expenditure (excluding third party services) - 33.508 0.413 0.131 34.668 66.763 135.483 Tird party services - 3.002 0.130 0.515 3.647 Total gross capital expenditure - 36.510 0.413 0.131 34.798 67.278 139.130 Grants and contributions - 3.037 0.002 0.001 0.088 14.191 17.319 Totex 10.561 65.197 5.245 1.200 74.963 187.975 345.141	Third party services	1.383	4.099	0.595	-	0.294	1.764	8.135
Maintaining the long term capability of the asset – infra - 1.185 - - - 15.807 16.992 Maintaining the long term capability of the asset – non infra - 5.309 0.179 0.129 31.115 32.892 69.624 Other capital expenditure - infra - 16.807 0.231 - - 14.833 31.871 Other capital expenditure - non infra - 10.207 0.003 0.002 3.553 2.987 16.752 Infrastructure network reinforcement - - - - - 0.244 0.244 Total gross capital expenditure (excluding third party services) - 33.508 0.413 0.131 34.668 66.763 135.483 Third party services - 3.002 - - 0.130 0.515 3.647 Total gross capital expenditure - 36.510 0.413 0.131 34.798 67.278 139.130 Grants and contributions - 3.037 0.002 0.001 0.088 14.191 17.319 Totex 10.561	Total operating expenditure	10.561	31.724	4.834	1.070	40.253	134.888	223.330
Maintaining the long term capability of the asset – non infra - 5.309 0.179 0.129 31.115 32.892 69.624 Other capital expenditure - infra - 16.807 0.231 - - 14.833 31.871 Other capital expenditure - non infra - 10.207 0.003 0.002 3.553 2.987 16.752 Infrastructure network reinforcement - - - - 0.244 0.244 Total gross capital expenditure (excluding third party services) - 33.508 0.413 0.131 34.668 66.763 135.483 Third party services - 3.002 - - 0.130 0.515 3.647 Total gross capital expenditure - 36.510 0.413 0.131 34.798 67.278 139.130 Grants and contributions - 3.037 0.002 0.001 0.088 14.191 17.319 Totex 10.561 65.197 5.245 1.200 74.963 187.975 345.141 Cash expenditure – pension deficit recovery payments 0.002 0.355 0.068	Capital Expenditure							
Other capital expenditure - infra - 16.807 0.231 - - 14.833 31.871 Other capital expenditure - non infra - 10.207 0.003 0.002 3.553 2.987 16.752 Infrastructure network reinforcement - - - - - 0.244 0.244 Total gross capital expenditure (excluding third party services) - 33.508 0.413 0.131 34.668 66.763 135.483 Third party services - 3.002 - - 0.130 0.515 3.647 Total gross capital expenditure - 36.510 0.413 0.131 34.798 67.278 139.130 Grants and contributions - 3.037 0.002 0.001 0.088 14.191 17.319 Totex 10.561 65.197 5.245 1.200 74.963 187.975 345.141 Cash expenditure – pension deficit recovery payments 0.002 0.355 0.068 0.051 2.380 3.332 6.188	Maintaining the long term capability of the asset – infra	-	1.185	-	-	-	15.807	16.992
Other capital expenditure - non infra - 10.207 0.003 0.002 3.553 2.987 16.752 Infrastructure network reinforcement - - - - - 0.244 0.244 Total gross capital expenditure (excluding third party services) - 33.508 0.413 0.131 34.668 66.763 135.483 Third party services - 3.002 - - 0.130 0.515 3.647 Total gross capital expenditure - 36.510 0.413 0.131 34.798 67.278 139.130 Grants and contributions - 3.037 0.002 0.001 0.088 14.191 17.319 Totex 10.561 65.197 5.245 1.200 74.963 187.975 345.141 Cash expenditure – pension deficit recovery payments	Maintaining the long term capability of the asset – non infra	-	5.309	0.179	0.129	31.115	32.892	69.624
Infrastructure network reinforcement	Other capital expenditure - infra	-	16.807	0.231	-	-	14.833	31.871
Total gross capital expenditure (excluding third party services) - 33.508 0.413 0.131 34.668 66.763 135.483 Third party services - 3.002 - - 0.130 0.515 3.647 Total gross capital expenditure - 36.510 0.413 0.131 34.798 67.278 139.130 Grants and contributions - 3.037 0.002 0.001 0.088 14.191 17.319 Totex 10.561 65.197 5.245 1.200 74.963 187.975 345.141 Cash expenditure – pension deficit recovery payments 0.002 0.355 0.068 0.051 2.380 3.332 6.188	Other capital expenditure - non infra	-	10.207	0.003	0.002	3.553	2.987	16.752
Third party services - 3.002 - - 0.130 0.515 3.647 Total gross capital expenditure - 36.510 0.413 0.131 34.798 67.278 139.130 Grants and contributions - 3.037 0.002 0.001 0.088 14.191 17.319 Totex 10.561 65.197 5.245 1.200 74.963 187.975 345.141 Cash expenditure – pension deficit recovery payments 0.002 0.355 0.068 0.051 2.380 3.332 6.188	Infrastructure network reinforcement		-	-	-	=	0.244	0.244
Total gross capital expenditure - 36.510 0.413 0.131 34.798 67.278 139.130 Grants and contributions - 3.037 0.002 0.001 0.088 14.191 17.319 Totex 10.561 65.197 5.245 1.200 74.963 187.975 345.141 Cash expenditure – pension deficit recovery payments 0.002 0.355 0.068 0.051 2.380 3.332 6.188	Total gross capital expenditure (excluding third party services)	-	33.508	0.413	0.131	34.668	66.763	135.483
Grants and contributions - 3.037 0.002 0.001 0.088 14.191 17.319 Totex 10.561 65.197 5.245 1.200 74.963 187.975 345.141 Cash expenditure – pension deficit recovery payments 0.002 0.355 0.068 0.051 2.380 3.332 6.188	Third party services		3.002	-	-	0.130	0.515	3.647
Totex 10.561 65.197 5.245 1.200 74.963 187.975 345.141 Cash expenditure – pension deficit recovery payments 0.002 0.355 0.068 0.051 2.380 3.332 6.188	Total gross capital expenditure	-	36.510	0.413	0.131	34.798	67.278	139.130
Cash expenditure – pension deficit recovery payments 0.002 0.355 0.068 0.051 2.380 3.332 6.188	Grants and contributions	_	3.037	0.002	0.001	0.088	14.191	17.319
	Totex	10.561	65.197	5.245	1.200	74.963	187.975	345.141
	Cash expenditure – pension deficit recovery payments	0.002	0.355	0.068	0.051	2.380	3.332	6.188
		10.563	65.552	5.313	1.251	77.343	191.307	351.329



4D – Wholesale totex analysis for the year ended 31 March 2020 – water (continued)

	Water reso	ources		Netv	vork+	
	Abstraction licenses	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution
Unit cost information (operating expenditure)						
Licensed volume available (MI)	1,253,923.460					
Volume abstracted (MI)		490,285.936				
Volume transported (MI)			386,388.774			
Average volume stored (MI)				286.614		
Distribution input volume (MI)					307,469.107	
Distribution input – volume (MI)						309,856.258
Unit cost (£/MI)	8.422	64.705	12.511	3,733.244	130.917	435.324
Population (000s)	3,071.030	3,071.030	3,071.030	3,071.030	3,071.030	3,071.030
Unit cost (£/pop)	3.439	10.330	1.574	0.348	13.107	43.923



4E – Wholesale totex analysis for the year ended 31 March 2020 – wastewater

	Network	+ Sewage collec	tion	Network	+ Sewage		Sludge		
	Foul	Surface water drainage	Highway drainage	Sewage treatment &	Imported Sludge liquor	Sludge transport	Sludge treatment	Sludge disposal	Total
	£m	£m	£m	£m	£m	£m	£m	£m	£m
Operating expenditure									
Power	4.176	1.371	0.686	19.942	3.706	0.685	1.317	0.030	31.913
Income treated as negative expenditure	-	-	-	(1.857)	(0.155)	-	(3.927)	-	(5.939)
Discharge consents	1.052	0.346	0.173	3.140	0.161	-	-	-	4.872
Bulk discharge	-	-	-	-	-	-	-	-	-
Other operating expenditure – renewals expensed in year	19.922	9.273	5.152	-	-	-	-	-	34.347
Other operating expenditure – renewals expensed in year (non-	-	-	-	-	-	-	-	-	-
Other operating expenditure – excluding renewals	18.217	4.545	1.595	31.078	1.874	5.302	9.042	4.533	76.186
Local authority rates and Cumulo rates	0.056	0.014	0.005	6.049	-	-	0.375	0.001	6.500
Total operating expenditure excluding third party services	43.423	15.549	7.611	58.352	5.586	5.987	6.807	4.564	147.879
Third party services	1.227	0.306	0.107	-	-	-	-	-	1.640
Total operating expenditure	44.650	15.855	7.718	58.352	5.586	5.987	6.807	4.564	149.519
Capital Expenditure									
Maintaining the long term capability of the assets – infra	6.306	2.936	1.631	-	-	-	-	-	10.873
Maintaining the long term capability of the assets – non-infra	11.912	5.450	3.027	54.930	-	0.863	40.559	0.596	117.337
Other capital expenditure - infra	16.504	13.816	7.677	-	-	-	-	-	37.997
Other capital expenditure – non-infra	2.634	2.155	1.197	50.584	-	0.002	4.833	0.001	61.406
Infrastructure network reinforcement	2.142	0.007	-	-	-	-	-	-	2.149
Total gross capital expenditure (excluding third party services)	39.498	24.364	13.532	105.514	-	0.865	45.392	0.597	229.762
Third party services	0.383	-	-	-	-	-	-	-	0.383
Total gross capital expenditure	39.881	24.364	13.532	105.514	-	0.865	45.392	0.597	230.145
Grants and contributions	5.700	3.780	2.100	1.133	_	-	-	_	12.713
Totex	78.831	36.439	19.150	162.733	5.586	6.852	52.199	5.161	366.951
Cash expenditure – pension deficit recovery payments	1.157	0.289	0.101	2.246	0.015	0.119	0.476	0.119	4.522
Totex including cash items	79.988	36.728	19.251	164.979	5.601	6.971	52.675	5.280	371.473



4E – Wholesale totex analysis for the year ended 31 March 2020 – wastewater (continued)

	Netwo	ork + Sewage colle	ection	Network + Sewa	ge treatment		Sludge	
	Foul	Surface water drainage	Highway drainage	Sewage treatment & disposal	Imported Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal
Unit cost information (operating expenditure)								
Volume collected (MI)	223,115.223							
Volume collected (MI)		53,754.727						
Volume collected (MI)			29,505.257					
Biochemical Oxygen Demand (BOD) (Tonnes)				91,073.420				
Biochemical Oxygen Demand (BOD) (Tonnes)					4,665.922			
Volume transported (m³)						676,127.732		
Dried solid mass treated (ttds)							77.029	
Dried solid mass disposed (ttds)								40.398
Unit cost (£/unit)	200.121	294.951	261.581	640.714	1,197.191	8.855	88,369.315	112,975.890
Population (000s)	3,080.777	3,080.777	3,080.777	3,080.777	3,080.777	3,080.777	3,080.777	3,080.777
Unit cost (£/pop)	14.493	5.146	2.505	18.941	1.813	1.943	2.210	1.481



4F – Cost analysis for the year ended 31 March 2020 – household retail

		Househo	old unmeasured			Househo	ld measured		Total	
	Water	Wastewater	Water and	Total	Water	Wastewater	Water and	Total		
	only	only	wastewater	Total	only	only	wastewater	Total		
	£m	£m	£m	£m	£m	£m	£m	£m	£m	
Operating expenditure										
Customer services	0.345	0.328	5.576	6.249	0.228	0.606	5.414	6.248	12.497	
Debt management	0.201	0.191	3.244	3.636	0.067	0.179	1.596	1.842	5.478	
Doubtful debts	0.160	0.152	2.580	2.892	0.699	1.857	16.590	19.146	22.038	
Meter reading	-	-	-	-	0.071	0.191	1.703	1.965	1.965	
Other operating expenditure	0.343	0.326	5.546	6.215	0.201	0.533	4.768	5.502	11.717	
Total operating expenditure excluding third party services	1.049	0.997	16.946	18.992	1.266	3.366	30.071	34.703	53.695	
Third party services operating expenditure	-	-	-	-	-	-	=	-	-	
Total operating expenditure	1.049	0.997	16.946	18.992	1.266	3.366	30.071	34.703	53.695	
Depreciation - tangible fixed assets										
- on assets existing at 31 March 2015	0.007	0.007	0.117	0.131	0.004	0.011	0.098	0.113	0.244	
- on assets acquired since 1 April 2015	0.001	0.001	0.012	0.014	-	0.001	0.010	0.011	0.025	
Amortisation - intangible fixed assets										
- on assets existing at 31 March 2015	0.056	0.054	0.910	1.020	0.032	0.086	0.766	0.884	1.904	
- on assets acquired since 1 April 2015	0.126	0.120	2.045	2.291	0.073	0.193	1.722	1.988	4.279	
Total operating costs	1.239	1.179	20.030	22.448	1.375	3.657	32.667	37.699	60.147	
Capital expenditure ¹	0.218	0.208	3.526	3.952	0.125	0.332	2.969	3.426	7.378	

¹Capital expenditure consists of £0.080m tangible and £7.298m intangible additions.

Other operating expenditure includes the net retail expenditure for the following retail activities which are part-funded by wholesale:

	IIII
Household	
Demand-side water efficiency - gross expenditure	0.081
Demand-side-water efficiency - expenditure funded by wholesale	-
Demand-side-water efficiency - net retail expenditure	0.081
Customan side lead vancine and surrounditure	2 720
Customer-side leak repairs - gross expenditure	3.739
Customer-side leak repairs - expenditure funded by wholesale	3.739
Customer-side leak repairs - net retail expenditure	<u> </u>



4G – Wholesale current cost financial performance for the year ended 31 March 2020

Income statement	Ref	Water £m	Wastewater £m	Total £m
Revenue	2A	318.702	394.124	712.826
Operating expenditure	2A	(223.330)	(149.519)	(372.849)
Capital maintenance charges		(89.781)	(122.656)	(212.437)
Other operating income	2A	0.158	0.193	0.351
Current cost operating profit		5.749	122.142	127.891
Other income		9.691	9.815	19.506
Interest income		1.853	3.856	5.709
Interest expense		(59.547)	(123.889)	(183.436)
Other interest expense		(0.722)	(1.502)	(2.224)
Current cost (losses)/ gains before tax and fair value	e movements	(42.976)	10.422	(32.554)
Fair value losses on financial instruments		(5.868)	(12.207)	(18.075)
Current cost loss before tax		(48.844)	(1.785)	(50.629)



4H – Financial metrics for the year ended 31 March 2020

	Ref	Units	Current year	AMP to date
Financial indicators				
Net debt		£m	3,510.947	
Regulated equity		£m	2,376.004	
Regulated gearing		%	59.64%	
Post-tax return on regulated equity		%	(5.79%)	
RORE (return on regulated equity)	Note 6 (page 91)	%	4.36%	4.36%
Dividend yield ²		%	0.00%	
Retail profit margin - household		%	(2.22%)	
- non-household		%	1.62%	
Credit rating ¹			A-/A3/A	
Return on RCV		%	0.67%	
Dividend cover ²		dec	0.000	
Funds from operations (FFO)		£m	215.540	
Interest cover (cash)		dec	2.64	
Adjusted interest cover (cash)		dec	1.45	
FFO/Debt		dec	0.06	
Effective tax rate		%	0.42%	
RCF		£m	215.540	
RCF/capex		dec	0.56	
Revenues and earnings				
Revenue (actual)		£m	749.670	
EBITDA (actual)		£m	318.127	
Movement in RORE				
Base return		%	5.60%	5.60%
Totex out/(under) performance		%	(0.96%)	(0.77%)
Retail cost out/(under) performance		%	(0.40%)	(0.26%)
ODI out/(under) performance		%	(0.12%)	(0.02%)
Financing out/(under) performance		%	0.24%	(0.19%)
Regulatory return for the year		%	4.36%	4.36%

¹S&P/Moody's/Fitch at 31 March 2020, all with stable outlook.

²There were no dividends declared or paid in the year.



4H – Financial metrics for the year ended 31 March 2020 (continued)

	Ref	Units	Current year
Borrowings			
Proportion of borrowings which are:			
- fixed rate	1E	%	19.83%
- floating rate	1E	%	5.46%
- index-linked	1E	%	74.71%
		_	100.00%
Proportion of borrowings which are:			
- due within one year or less		%	9.73%
- due in more than one year but no more than two years		%	1.76%
- due in more than two years but not more than five years		%	9.55%
- due in more than five years but not more than 20 years		%	73.56%
- due in more than 20 years		%	5.40%
		_	100.00%



4I – Financial derivatives for the year ended 31 March 2020

	Nominal v	value by matu	rity (net)	Total	value		(weighted a	est rate verage for 12 L March 2020)
	One to two years	Two to five years	Over five years	Nominal value (net)	Mark to market	Total accretion	Payable	Receivable
Derivative type	£m	£m	£m	£m	£m	£m	%	%
Interest rate swap (sterling)								
Floating to fixed rate	-	-	(192.000)	(192.000)	(99.710)	-	5.67%	0.85%
Floating from fixed rate	-	-	-	-	-	-	-	-
Floating to index linked	-	(41.727)	(459.162)	(500.889)	(200.383)	-	3.84%	1.03%
Floating from index linked	-	-	-	-	-	-	-	-
Fixed to index-linked	-	-	-	-	-	-	-	-
Fixed from index-linked	-	-	-	-	-	-	-	-
Total	-	(41.727)	(651.162)	(692.889)	(300.093)	-		
Other financial derivatives ¹	(47.440)	(3.780)	-	(51.220)	(1.745)	_	-	-
Total financial derivatives	(47.440)	(45.507)	(651.162)	(744.109)	(301.838)	-		

¹ 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.

The Company holds no financial derivatives other than those reported in the table above.

Reconciliation to Table 1C

	£m
Non-current assets	
Financial instruments	0.200
Current assets	
Financial instruments	0.100
Current liabilities	
Financial instruments	(23.448)
Non-current liabilities	
Financial instruments	(278.690)
Total financial instruments	(301.838)



4J – Atypical expenditure by business unit – wholesale water for the year ended 31 March 2020

	Water Ro	esources		Net	work+		
			Raw	Raw		Treated	
	Abstraction	Raw water	water	water	Water	water	
	licenses £m	abstraction £m	transport	storage	treatment	distribution	Total
Operating expenditure (excluding atypicals)	EIII	EIII	£m	£m	£m	£m	£m
Power	_	6.538	2.439	0.170	6.331	12.904	28.382
Income treated as negative expenditure	(0.090)	(4.368)	(0.071)	(0.018)	(1.863)	(1.204)	(7.614)
Abstraction charges/discharge consents	9.094	(1.300)	(0.071)	(0.010)	0.252	(1.201)	9.346
Bulk supply	0.025	0.075	0.042	_	0.168	0.521	0.831
Other operating expenditure – renewals expensed in year (infrastructure)	-	17.626	0.168	_	-	49.601	67.395
Other operating expenditure – renewals expensed in year (non-infrastructure)	-	-	-	_	-	-	_
Other operating expenditure – excluding renewals	0.149	6.702	1.330	0.842	31.095	53.834	93.952
Local authority and Cumulo rates	_	0.802	0.305	0.063	1.513	13.121	15.804
Total operating expenditure excluding third party services	9.178	27.375	4.213	1.057	37.496	128.777	208.096
Third party services	1.383	4.099	0.595	_	0.294	1.764	8.135
Total operating expenditure	10.561	31.474	4.808	1.057	37.790	130.541	216.231
Capital expenditure (excluding atypicals)							
Maintaining the long-term capability of the assets – infra	-	1.185	_	_	-	15.807	16.992
Maintaining the long-term capability of the assets – non infra	-	5.309	0.179	0.129	30.920	32.892	69.429
Other capital expenditure - infra	-	16.807	0.231	-	-	14.833	31.871
Other capital expenditure - non infra	-	10.207	0.003	0.002	3.553	2.987	16.752
Infrastructure network reinforcement	-	-	-	-	-	0.244	0.244
Total gross capital expenditure excluding third party services	-	33.508	0.413	0.131	34.473	66.763	135.288
Third party services	-	3.002	-	-	0.130	0.515	3.647
Total gross capital expenditure	_	36.510	0.413	0.131	34.603	67.278	138.935
Grants & contributions	-	3.037	0.002	0.001	0.088	14.191	17.319
Totex	10.561	64.947	5.219	1.187	72.305	183.628	337.847
Cash expenditure							
Pension deficit recovery payments	0.002	0.355	0.068	0.051	2.380	3.332	6.188
Totex including cash items	10.563	65.302	5.287	1.238	74.685	186.960	344.035
Atypical expenditure – severe weather	-	0.010	0.001	0.001	0.716	2.342	3.070
Atypical expenditure – restructuring provision	-	0.234	0.018	0.011	1.909	1.782	3.954
Atypical expenditure – Covid-19	-	0.007	0.007	0.001	0.032	0.223	0.270
Total expenditure	10.563	65.553	5.313	1.251	77.342	191.307	351.329

4K – Atypical expenditure by business unit – wholesale wastewater for the year ended 31 March 2020



	Networl	k+ Sewage	Collection		+ Sewage		Sludge		
	Foul	Surface water drainage	Highway drainage	Sewage treatment & disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge Disposal	Total
	£m	£m	£m	£m	£m	£m			£m
Operating expenditure (excluding atypicals)	4.476	4.074	0.606	10 210	2.706	0.605	4 247	0.000	24 200
Power	4.176	1.371	0.686	19.318	3.706	0.685	1.317	0.030	31.289
Income treated as negative expenditure	-	-	-	(1.857)	(0.155)	-	(3.927)	-	(5.939)
Discharge consents	1.052	0.346	0.173	3.140	0.161	-	-	-	4.872
Other operating expenditure		0.070							-
- Renewals expensed in year (Infrastructure)	19.164	9.273	5.152	-	_	-	_	-	33.589
- Renewals expensed in year (Non-Infrastructure)	17.042	4 100	1 205	20.040	1 050	- - 117	0.454	4.202	71 261
 Other operating expenditure excluding renewals Local authority and Cumulo rates 	17.043	4.190	1.395 0.005	28.949 8.399	1.850	5.117	8.454	4.263 0.001	71.261
•	0.056	0.014					0.525		9.000
Total operating expenditure (excluding third party services)	41.491	15.194	7.411	57.949	5.562	5.802	6.369	4.294	144.072
Third party services	1.227	0.306	0.107			- - -		4 204	1.640
Total operating expenditure	42.718	15.500	7.518	57.949	5.562	5.802	6.369	4.294	145.712
Capital expenditure (excluding atypicals)									
Maintaining the long-term capability of the asset – infra	6.306	2.936	1.631	-	-	-	-	-	10.873
Maintaining the long-term capability of the asset – non infra	11.912	5.450	3.027	54.928	-	0.863	40.307	0.596	117.083
Other capital expenditure - infra	16.504	13.816	7.677	-	-	-	-	-	37.997
Other capital expenditure - non infra	2.634	2.155	1.197	50.584	-	0.002	4.833	0.001	61.406
Infrastructure network reinforcement	2.142	0.007	-	-	-	-	-	-	2.149
Total gross capital expenditure excluding third party services	39.498	24.364	13.532	105.512	-	0.865	45.140	0.597	229.508
Third party services	0.383	-	-	-	-	-	-	-	0.383
Total gross capital expenditure	39.881	24.364	13.532	105.512	-	0.865	45.140	0.597	229.891
Grants & contributions	5.700	3.780	2.100	1.133	-	-	_	-	12.713
Totex	76.899	36.084	18.950	162.328	5.562	6.667	51.509	4.891	362.890
Cash expenditure									
Pension deficit recovery payments	1.157	0.289	0.101	2.246	0.015	0.119	0.476	0.119	4.522
Totex including cash items	78.056	36.373	19.051	164.574	5.577	6.786	51.985	5.010	367.412
Atypical expenditure – severe weather	0.894	0.053	0.032	0.768	0.020	0.054	0.347	0.166	2.334
Atypical expenditure – restructuring provision	1.002	0.297	0.162	1.958	0.004	0.128	0.485	0.102	4.138
Atypical expenditure – Covid-19	0.036	0.005	0.006	0.029	-	0.003	0.008	0.002	0.089
Atypical expenditure – Rates refund WWTW	-	-	-	(2.350)	_	-	(0.150)	-	(2.500)
Totex expenditure	79.988	36.728	19.251	164.979	5.601	6.971	52.675	5.280	371.473
and a productive									

4L – Enhancement capital expenditure by purpose for the year ended 31 March 2020 – wholesale water



Expenditure in the year

	Water re	esources		Network+			
	Abstraction licenses	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution	Total
	£m	£m	£m	£m	£m	£m	£m
NEP - Making ecological improvements at abstractions (Habitats Directive, SSSI, NERC, BAPs) <i>Note</i> 1	-	9.520	-	-	-	(0.103)	9.417
NEP - Eels Regulations (measures at intakes)	-	0.363	-	-	-	-	0.363
NEP - Invasive Non Native Species	-	-	-	-	-	-	-
Addressing low pressure	-	-	-	-	-	0.008	0.008
Improving taste / odour / colour <i>Note 2</i>	-	-	-	-	-	5.732	5.732
Meeting lead standards	-	-	-	-	-	0.209	0.209
Supply side enhancements to the supply/demand balance (dry year critical / peak conditions)	-	0.085	0.116	-	-	-	0.201
Supply side enhancements to the supply/demand balance (dry year annual average conditions)	-	0.083	0.116	-	-	-	0.199
Demand side enhancements to the supply/demand balance (dry year critical / peak conditions)	-	0.075	-	-	-	-	0.075
Demand side enhancements to the supply/demand balance (dry year annual average conditions)	-	0.075	-	-	-	-	0.075
New developments <i>Note 3</i>	-	0.001	-	-	-	8.618	8.619
New connections element of new development (CPs, meters)	-	-	-	-	-	0.547	0.547
Investment to address raw water deterioration (THM, nitrates, Crypto, pesticides, others) <i>Note 4</i>	-	0.600	-	-	1.972	0.178	2.750
Resilience	-	0.602	-	-	-	-	0.602
SEMD	-	0.082	0.002	0.002	1.581	0.164	1.831
NEP - Drinking Water Protected Areas (schemes)	-	-	-	-	-	-	-
NEP - Water Framework Directive Measure	-	0.036	-	-	-	-	0.036
NEP – Investigations <i>Note 5</i>	-	1.554	-	-	-	-	1.554
Improvements to river flows	-	-	-	-	-	-	-
Metering (excluding cost of providing metering to new service connections) - meters requested by optants	-	-	-	-	-	2.656	2.656
Metering (excluding cost of providing metering to new service connections)- meters introduced by companies	-	-	-	-	-	-	-
Metering (excluding cost of providing metering to new service connections) – other	-	-	-	-	-	0.055	0.055
Capital expenditure purpose - Cwm Taf Water Supply Strategy	-	-	-	-	-	-	-
Capital expenditure purpose - Impounding Reservoirs <i>Note 6</i>	-	13.938	-	-	-	-	13.938
Total enhancement expenditure	-	27.014	0.234	0.002	3.553	18.064	48.867

4L – Enhancement capital expenditure by purpose for the year ended 31 March 2020 – wholesale water (continued)





Cumulative expenditure on schemes completed in the report year

	Water re	esources	Network+				
				Raw		Treated	
	Abstraction licenses	Raw water abstraction	Raw water transport	water storage	Water treatment	water distribution	Total
	£m	£m	£m	£m	£m	£m	£m
NEP - Making ecological improvements at abstractions (Habitats Directive, SSSI, NERC, BAPs) <i>Note 7</i>	-	2.349	-	-	-	0.110	2.459
NEP - Eels Regulations (measures at intakes)	-	0.130	-	-	-	-	0.130
NEP - Invasive Non Native Species	-	-	-	-	-	-	-
Addressing low pressure	-	-	-	-	-	-	-
Improving taste / odour / colour <i>Note 8</i>	-	-	-	-	-	1.763	1.763
Meeting lead standards	-	-	-	-	-	-	-
Supply side enhancements to the supply/demand balance (dry year critical / peak conditions)	-	-	-	-	-	-	-
Supply side enhancements to the supply/demand balance (dry year annual average conditions)	-	-	-	-	-	-	-
Demand side enhancements to the supply/demand balance (dry year critical / peak conditions)	-	-	-	-	-	-	-
Demand side enhancements to the supply/demand balance (dry year annual average conditions)	-	-	-	-	-	-	-
New developments <i>Note 9</i>	-	0.001	-	-	-	6.264	6.265
New connections element of new development (CPs, meters) <i>Note 10</i>	-	-	-	-	-	0.547	0.547
Investment to address raw water deterioration (THM, nitrates, Crypto, pesticides, others)	-	0.981	-	-	48.449	0.177	49.607
Resilience	-	0.274	-	-	-	-	0.274
SEMD	-	0.206	-	-	1.583	0.161	1.950
NEP - Drinking Water Protected Areas (schemes)	-	-	-	_	-	-	-
NEP - Water Framework Directive measure	-	0.031	_	_	-	-	0.031
NEP – investigations <i>Note 11</i>	-	1.681	_	_	-	-	1.681
Improvements to river flows	-	_	_	_	-	-	-
Metering (excluding cost of providing metering to new service connections) - meters requested by optants <i>Note 12</i>	-	-	-	-	-	2.656	2.656
Netering (excluding cost of providing metering to new service connections) - meters introduced by companies	-	-	-	-	-	-	-
Metering (excluding cost of providing metering to new service connections) - other	-	-	-	-	-	0.055	0.055
Capital expenditure purpose - Cwm Taf Water Supply Strategy	-	-	-	-	-	-	
Capital expenditure purpose - Impounding Reservoirs <i>Note 13</i>	-	0.925	-	-	-	-	0.925
Total enhancement expenditure	-	6.578	-	-	50.032	11.733	68.343



4L - Enhancement capital expenditure by purpose for the year ended 31 March 2020 - wholesale water (continued)

Notes

Expenditure in year

- 1. The costs for raw water abstraction are predominately attributable to the Prioress Mill Habitat Intake Screen scheme (£8.5m).
- 2. We have several on-going schemes to address improving taste/odour/colour which have been completed this year with a few schemes due to complete in 2020/21. This year we have two schemes attracting major investment at Rhymney (£1.6m) and Maerdy (£3m).
- 3. Included within this line are schemes to address new developments. In addition, we have included a Water Network Growth Scheme at Hereford City, as it is a growth scheme due to existing customers and does not satisfy the guidance on lines 4L.7 to 4L.10.
- 4. There are several schemes in our programme of works. The largest of these are at Bryn Cowlyd WTW (£0.7m) and Tynywaun WTW (£0.7m).
- 5. We have a few NEP investigations schemes, including NEP Strategic Sampling (£0.6m) and expenditure on AMP 7 NEP Emergency Risks (£0.8m). This was for NEP regulatory sampling. This was a new method of sampling that was only signed off by NRW at the end of Yr. 4 AMP 6. A 12-month sampling regime was put in place for Year 5 AMP 6, with the results required to inform and identify emerging risks and the safeguarding zones for an AMP 7 commitment to reduce 23 safeguard zones to 18.
- 6. We have undertaken several Impounding Reservoir improvement schemes that match the criteria used in the PR19 process to identify enhancement schemes. There are five large expenditure schemes in this line which are: Llanishen Reservoir £1.4m Ynysyfro Reservoir £1.3m Plas Uchaf Spillway upgrade £2.9m Lower Carno Spillway £2.1m and Dolwen Spillway £2.6m.

Cumulative expenditure

Schemes have been allocated in the cumulative expenditure columns based on completion dates, which may not be in the same year that outputs are claimed. In addition, where a scheme output has already been claimed but expenditure incurred during a subsequent year we have not included this cost in the cumulative table, only in the expenditure by year table. These comments apply to all lines in this table.

- 7. This year we have completed five schemes. Prioress Mill Intake Screen has not been completed this year as forecast and will be completed in 2020/21.
- 8. We have completed several schemes this year, such as Cefn Golau and Kinmel Bay.
- 9. Schemes under New Development and Growth provide an ongoing programme of work that is continually fluid and as such are unable to provide actual completion dates. For this reason, we have provided in the cumulative table the costs for the current year, excluding the growth schemes Hereford City Trunk Mains which was forecast to complete in 2019/20 but the scheme will not be completed until 2020/21.
- 10. We have an ongoing programme of work for new connections associated with new development and, as this work is fluid, we are unable to provide actual completion dates. For this reason, we have reported in the cumulative table the costs for current year.
- 11. We have completed a few schemes for the NEP Investigations the largest of which are NEP strategic sampling (£0.6m) and AMP7 NEP Emerging Risks (£0.8m).
- 12. The metering programme provide a continual programme of works and as a result we have provided the costs in the year as completed in the year.
- 13. Four schemes have been completed in 2019/20 plus on-costs. We have only included the costs from when they have been regarded as enhancement, previously these schemes were categorised as maintenance expenditure. We have included below both the total costs of the schemes for completeness and the 2019/20 amount which has been reported in the cumulative element.



4L – Enhancement capital expenditure by purpose for the year ended 31 March 2020 – wholesale water (continued)

Notes

Cumulative Expenditure (continued)

SCHEME	TOTAL EXPENDITURE	2019/20 costs
Cantref Spillway	£0.224m	£0.177m
Ynys Y Fro Lower Spillway	£0.022m	£0.022m
Cwm Dulyn Spillway	£0.131m	(£0.030m)
Llyn Morwynion	£0.020m	(£0.002m)



4M – Enhancement expenditure by purpose for the year ended 31 March 2020 – wholesale wastewater

				Expenditure	in report year	r			
	Network	+ Sewage Co	ollection	Network+ treatr	•		Sludge		
	Foul	Surface water drainage	Highway drainage	Sewage treatment & disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge Disposal	Total
	£m	£m	£m	£m	£m	£m	£m	£m	£m
First time sewerage (s101A)	0.216	0.177	0.098	_	_	_	_	_	0.491
Sludge enhancement (quality)	-	-	-	_	_	_	_	_	-
Sludge enhancement (growth) Note 1	_	_	_	_	_	_	4.824	_	4.824
NEP - Conservation drivers	_	_	_	0.056	_	_	-	_	0.056
NEP - Eels Regulations (measures at outfalls)	_	_	_	-	_	_	_	_	-
NEP - Event Duration Monitoring at intermittent discharges <i>Note 2</i>	1.090	0.891	0.495	0.081	_	_	_	_	2.557
NEP - Flow monitoring at sewage treatment works <i>Note 3</i>		-	-	1.686	_	_	_	_	1.686
NEP - Monitoring of pass forward flows at CSOs	_	_	_	0.575	_	_	_	_	0.575
NEP - Schemes to increase flow to full treatment	_	_	_	-	_	_	_	_	-
NEP - Schemes to increase storm tank capacity	_	_	_	0.137	_	_	_	_	0.137
NEP - Storage schemes to reduce spill frequency at CSOs, storm tanks, etc	(0.118)	(0.096)	(0.053)	-	_	_	_	_	(0.267)
NEP - Chemicals monitoring/ investigations/ options appraisals	-	-	-	0.261	_	_	_	_	0.261
NEP - National phosphorus removal technology investigations	_	_	_	(0.006)	_	_	_	_	(0.006)
NEP - Groundwater schemes	_	_	_	-	_	_	_	_	-
NEP – Investigations <i>Note 4</i>	0.909	0.744	0.413	0.552	_	_	_	_	2.618
NEP - Nutrients (N removal)	_	_	_	_	_	_	_	_	_
NEP - Nutrients (P removal at activated sludge STWs) <i>Note 5</i>	1.146	0.937	0.521	6.280	_	_	_	_	8.884
NEP - Nutrients (P removal at filter bed STWs) <i>Note 6</i>	_	_	_	13.984	_	_	_	_	13.984
NEP - Reduction of sanitary parameters <i>Note 7</i>	_	_	_	1.165	_	_	_	_	1.165
NEP - UV disinfection (or similar)	_	_	_	_	_	_	_	_	-
NEP - Discharge relocation	_	_	_	_	_	_	_	_	_
NEP - Flow 1 schemes	_	_	_	_	_	_	_	_	_
Odour	_	_	_	0.692	_	_	_	_	0.692
New development and growth	5.271	2.881	1.597	_	_	_	-	_	9.749
Growth at sewage treatment works (excluding sludge treatment) <i>Note 8</i>	_	_	_	4.744	_	_	_	_	4.744
Resilience	0.003	0.003	0.001	0.003	_	_	0.004	_	0.014
SEMD	0.013	0.011	0.007	1.859	_	0.002	0.005	0.001	1.898
Reduce flooding risk for properties <i>Note 9</i>	6.680	5.465	3.036	_	_	_	-	_	15.181
Transferred private sewers and pumping stations <i>Note 10</i>	0.269	0.220	0.122	_	_	_	-	_	0.611
Capital expenditure purpose - Previous Amp Continuous Discharges	_	_	_	_	_	_	-	_	_
Capital expenditure purpose - Previous Amp Intermittent Discharges	_	_	_	-	-	_	-	-	_
Capital expenditure purpose - ESL – UID	_	_	_	_	_	_	-	_	_
Capital expenditure purpose - Llanelli/Gowerton/Loughor Catchment <i>Note</i> 11	2.848	2.330	1.295	-	-	_	-	-	6.473
Capital expenditure purpose - Loughor Transition <i>Note 12</i>	2.953	2.415	1.342	18.515	_	_	-	-	25.225
Total enhancement capital expenditure	21.280	15.978	8.874	50.584	-	0.002	4.833	0.001	101.552



4M – Enhancement expenditure by purpose for the year ended 31 March 2020 – wholesale wastewater (continued)

Cumulative expenditure on schemes completed in report year

	Network-	Sewage Co	llection	Network+ Sewage tr	eatment		Sludge		
	Foul	Surface water drainage	Highway drainage	Sewage treatment & disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge Disposal	Total
	£m	£m	£m	£m	£m	£m	£m	£m	£m
First time sewerage (s101A) <i>Note 13</i>	0.303	0.248	0.138					_	0.689
Sludge enhancement (quality)	0.505	0.240	0.130		_		_		0.005
Sludge enhancement (growth)									_
NEP - Conservation drivers <i>Note 14</i>				4.601					4.601
NEP - Eels Regulations (measures at outfalls)				4.001					4.001
NEP - Event Duration Monitoring at intermittent discharges <i>Note 15</i>	1.089	0.891	0.495	0.045					2.520
NEP - Flow monitoring at sewage treatment works	1.089	0.891	0.495	0.043					2.320
NEP - Monitoring of pass forward flows at CSOs				0.816					0.816
NEP - Schemes to increase flow to full treatment				0.810					0.810
NEP - Schemes to increase now to full treatment	-	_			_	_	_	_	-
NEP - Storage schemes to reduce spill frequency at CSOs, storm tanks, etc	0.645	0.528	0.293						1.466
Note 16	0.043	0.526	0.293	-	_	_	_	_	1.400
NEP - Chemicals monitoring/ investigations/ options appraisals	-	_	_	_	_	_	_	_	_
NEP - National phosphorus removal technology investigations	-	_	_	_	_	_	_	_	_
NEP - Groundwater schemes	-	_	_	_	_	_	_	_	_
NEP – Investigations <i>Note</i> 17	0.540	0.442	0.245	0.962	_	_	_	_	2.189
NEP - Nutrients (N removal)	-	_	_	_	_	_	_	_	_
NEP - Nutrients (P removal at activated sludge STWs) <i>Note 18</i>	-	_	_	1.891	_	_	_	_	1.891
NEP - Nutrients (P removal at filter bed STWs) <i>Note 19</i>	_	_	_	5.606	_	_	_	_	5.606
NEP - Reduction of sanitary parameters <i>Note 20</i>	_	_	_	7.829	_	_	_	_	7.829
NEP - UV disinfection (or similar)	-	_	_	_	_	_	_	_	_
NEP - Discharge relocation	_	_	_	_	_	_	_	_	_
NEP - Flow 1 schemes	-	_	_	_	_	_	_	_	_
Odour	_	_	_	0.024	_	_	_	_	0.024
New development and growth <i>Note 21</i>	4.070	3.330	1.850	_	_	_	_	_	9.250
Growth at sewage treatment works (excluding sludge treatment)	-	_	_	3.498	_	_	_	_	3.498
Resilience	_	_	_	-	_	_	_	_	_
SEMD	_	_	_	1.583	_	_	_	_	1.583
Reduce flooding risk for properties <i>Note 22</i>	2.639	2.159	1.199	-	_	_	_	_	5.997
Transferred private sewers and pumping stations	-	_	_	_	_	_	_	_	_
Capital expenditure purpose - Previous Amp Continuous Discharges	_	_	_	_	_	_	_	_	_
Capital expenditure purpose - Previous Amp Intermittent Discharges	_	_	_	_	_	_	_	_	_
Capital expenditure purpose - ESL - UID	_	_	_	_	_	_	_	_	_
Capital expenditure purpose - Llanelli/Gowerton/Loughor Catchment <i>Note</i>					_	_	_	_	
23	4.683	3.831	2.129	1.483					12.126
Capital expenditure purpose - Loughor Transition <i>Note 24</i>	1.073	0.878	0.488		_	_	-	-	2.439
Total enhancement capital expenditure	15.042	12.307	6.837	28.338	-	-	-	-	62.524



4M – Enhancement expenditure by purpose for the year ended 31 March 2020 – wholesale wastewater (continued)

Notes

Expenditure in Year

- 1. Expenditure on sludge enhancement (growth) in the year relates mainly to two schemes; these are: -
 - Five Fords (£0.2m) and
 - Cog Moors (£4.6m)
- 2. We have several schemes in our programme to address the NEP Event Duration Monitoring at intermittent discharges. It is an ongoing programme of work that will continue throughout AMP 7.
- 3. Flow monitoring at sewage treatment works is an ongoing programme of work that will continue in AMP 7. To date we have installed 48 flow monitors at sewage treatment works along with associated on costs and the start of schemes to support the AMP 7 investment in this area. The AMP 6 NEP Flow 3 Scheme is not due to complete until 2020/21.
- 4. We have a programme of work to undertake NEP Investigations, many of which are early investigations to support the AMP 7 Investment Plan.
- **5.** The expenditure mainly relates to four schemes:
 - Gwili Gwendraeth (£0.9m)
 - Weycock Cross WWTW (£2.75m)
 - Raglan WWTW (£1.2m)
 - Ruthin WWTW (£2.9m)
- 6. We have several large and smaller expenditure schemes which are due to complete in early AMP 7. These include:
 - Eglwysbach WWTW (£1m)
 - Rhiwlas WWTW (£2m)
 - Dyserth WWTW (£2.7m)
 - Brynmawr WWTW (£1.7m)
 - Lletty Brongu WWTW (£5m)
- 7. A number of schemes incurred small expenditure in the year such as Cerrigydrudion (£0.2m) and Hirwaun (£0.2m).
- 8. We have a number of WWTW schemes with an element of Growth such as Lletty Brongu WWTW (£0.6m) and Raglan WWTW (£0.4m).
- 9. We have undertaken several schemes to reduce flooding risk such as Penperlleni longhouse (£2.1m) and Osborne Place, Crofty (£1.4m).
- 10. The spend in the year relates to private pumping stations which are treated as maintenance capex for accounting purposes but have moved this to enhancement as per the RAG guidance. In addition, Private sewer costs (£5.5m) have been expensed and are included in line 4E.5 and therefore not reported as capital within this table 4M line 29.
- 11. There have been several schemes included such as Loughor Program Pwll Rainscape Ph2 (£1.1m) and Pwll SPS Optimisation (£3.6m).
- 12. We have identified a programme of works to address issues at Llanelli Gowerton relating to the L2 driver. This is a major programme of works that will require additional funding from AMP 7 to complete. The Loughor Transition expenditure reported in the APR will be in line with the costs we have submitted for Ofwat in the price review. As a result, we have in 19/20 spent £25.7m of transitional expenditure which includes £0.5m allocated to Base expenditure for the L2 driver. Enhancement costs include Gowerton PFET (£7.2m), Northumberland Avenue (£7m), Llanelli PFET (£8.5m), Emma Street (£0.4m), Station Road (£2.1m).



4M – Enhancement expenditure by purpose for the year ended 31 March 2020 – wholesale wastewater (continued)

Notes (continued)

Cumulative Expenditure

Schemes have been allocated in the cumulative expenditure columns based on completion dates, which may not be in the same year that the outputs are claimed. In addition, where a scheme output has already been claimed but expenditure is incurred during a subsequent year, we have not included this cost in the cumulative table – only in the expenditure by year table. These comments apply to all lines in this table.

- 13. We have one scheme that has been completed during the year at Bagillt s101a.
- 14. We have completed two schemes which are Llanberis WWTW Crow Quality Improvement (£3.1m), Llanberis Q Crow 1 -Storm (£1.5m). These schemes were forecasted to be complete in 2018/19.
- 15. The majority of individual scheme completions cannot be determined so we have allocated the costs in the year as complete.
- 16. Two schemes have been completed in this year these are Conwy (Conwy Gyffin St Agnes Road CSO) and Conwy Quay SPS.
- 17. We have completed a number of investigations during the year, providing information to support development of the AMP7 Quality Programme, development of our approach to the Storm Overflow Assessment Framework (SOAF) and Water Framework Directive Investigations.
- 18. One scheme has completed this year, Raglan WWTW (£1.8m). Ruthin WWTW and Denbigh Eglwyswen WWTW were due to complete this year however there have been delays to commissioning due to Covid 19 restrictions.
- 19. We have two schemes completing this year Cowbridge WWTW (£3.3m), Brynmawr WWTW (£2.3m). Dyserth WWTW, and Lletty Brongu WWTW was due to complete this year however there have been delays to commissioning due to Covid 19 restrictions. Also, Eglwysbach WWTW and Rhiwlas WWTW has been agreed with NRW to delay until December 2021.
- 20. Two schemes have been completed this year, Rhydlafar WWTW (£4.3m), Hirwaun WWTW (£3.4m) plus supporting costs. Crymych WWTW was due to complete this year however due to issues on the inlet package plant this was delayed, and the scheme is now due to be completed in 2020/21.
- 21. Schemes under New Development provide an ongoing programme of work that is continually fluid and as such we are unable to provide actual completion dates. For this reason, we have reported in the cumulative table the costs for the current year. A number of schemes relating to Growth in the sewerage network are not yet complete and hence not included in the cumulative data cells.
- 22. We have completed several schemes such as Carway Street (£3.2m) and London Road Pembroke Dock (£1m).
- 23. We have this year completed a number of schemes such as Pwll Rainscape Ph1,2&3 (£4.9m).
- 24. We have this year completed one scheme with the L2 driver at Asda Llanelli. The remainder of the schemes to address the L2 driver will continue into AMP7.



4N – Sewage treatment - functional expenditure for the 12 months ended 31 March 2020

	Network+ £000'
Costs of STWs in size bands 1 to 5	
Direct costs of STWs in size band 1 (Note 1)	4,308.910
Direct costs of STWs in size band 2	3,709.933
Direct costs of STWs in size band 3	5,073.921
Direct costs of STWs in size band 4	7,149.306
Direct costs of STWs in size band 5	6,695.515
General & support costs of STWs in size bands 1 to 5	5,512.371
Functional expenditure of STWs in size bands 1 to 5	32,449.956
Costs of STWs in size band 6	
Service charges for STWs in size band 6	476.788
Estimated terminal pumping costs size band 6 works (Note 2)	3,432.978
Other direct costs of STWs in size band 6 (Note 3)	17,237.857
Direct costs of STWs in size band 6	21,147.623
General & support costs of STWs in size band 6	4,291.615
Functional expenditure of STWs in size bands 6	25,439.238
Total Functional expenditure for Sewage treatment	57,889.194

Notes

- 1. Overall increase in costs of 11% due to power costs, mainly as a result of severe weather in 2019/20. New cost centres created for Band 2 & 3 assets that were previously grouped with Band 1 works. For 2019/20 APR only 11 sites needed a cost allocation exercise from Band 1 into Band 2.
- 2. Increase in power costs due to severe weather in early months of 2019/20 (Impact of £1.5m at Terminal Pumping Stations).
- 3. Reduction, largely due to Gas to Grid at Five Fords being fully operational during 2019/20.



40 – Large sewage treatment works for the year ended 31 March 2020 – wholesale wastewater

Sewage treatment works – explanatory variables		STWNAMED 01	STWNAMED 02	STWNAMED 03	STWNAMED 04	STWNAMED 05	STWNAMED 06	STWNAMED 07	STWNAMED 08
Works name ¹		AFAN	CARDIFF BAY	CHESTER	CILFYNYDD	COG MOORS	COSLECH	CYNON	FIVE FORDS
Classification of treatment works		SAS	SAS	SAS	SB	SAS	SAS	SAS	TA2
Population equivalent of total load received	000	133.33	929.99	115.25	76.11	215.41	55.96	68.43	114.2
Suspended solids consent	mg/l		_	40	30	_	30	40	60
BOD ₅ consent ²	mg/l	25	25	25	20	25	20	25	25
Ammonia consent	mg/l	-	20	10	5	_	8	_	10
Phosphorus consent	mg/l	_	_	_	2	_	2	2	1
UV consent	mW/s/cm ²	-	_	_	-	_	_	_	_
Load received by STW	kgBOD₅/d	8,000	55,799	6,915	4,567	12,925	3,358	4,106	6,852
Flow passed to full treatment	m³/d	74,154	380,150	39,108	39,554	119,482	19,223	34,789	36,606
Sewage treatment works – functional expenditure									
Service charges	£000	41	63	34	27	34	15	15	15
Estimated terminal pumping expenditure ³	£000	276	1089	6	-	748	_	-	5
Other direct expenditure ⁴	£000	1,067	3,484	679	204	1,348	285	314	666
Total direct expenditure	£000	1,385	4,637	719	231	2,130	300	330	686
General and support expenditure	£000	65	351	283	140	180	48	39	451
Functional expenditure	£000	1,450	4,988	1,002	371	2,309	348	368	1,138

¹We have reported one less large WwTW this year as Llanasa has fallen below the threshold for large works as a result of reduction in metered commercial flow - reducing the overall PE.

²This year we have reported the tighter consents of the UWWTD or WRA permits.

³TPS costs have increased as a result of severe weather in early 2019/20.

⁴Five Fords "gas-to-grid" was operational during 2019/20 reducing direct expenditure at that site; also, one less large sewage works in 2019/20



40 - Large sewage treatment works for the year ended 31 March 20 - wholesale wastewater (continued)

Sewage treatment works – explanatory variables		STWNAMED 09	STWNAMED 10	STWNAMED 11	STWNAMED 12	STWNAMED 13	STWNAMED 14	STWNAMED 15	STWNAMED 16
Works name ¹		GANOL	GARNSWLLT	GOWERTON	HEREFORD	KINMEL BAY	LLANELLI	NASH	PENYBONT
Classification of treatment works		TA2	TA2	TA2	TB2	SAS	TA2	SAS	TA2
Population equivalent of total load received	000	80.16	35.43	55.4	125.43	72.65	56.89	300.72	162.23
Suspended solids consent	mg/l	60	28	60	60	-	60	30	35
BOD ₅ consent ²	mg/l	25	23	25	25	25	25	20	25
Ammonia consent	mg/l	-	4	9	10	-	10	18	6
Phosphorus consent	mg/l	-	2	1	1	-	1	_	-
UV consent	mW/s/cm ²	24	-	30	-	-	32	_	30
Load received by STW	kgBOD₅/d	4,810	2,126	3,324	7,526	4,359	3,413	18,043	9,734
Flow passed to full treatment	m³/d	25,573	24,033	30,065	46,351	21,260	30,434	70,175	104,168
Sewage treatment works – functional expenditure									
Service charges	£000	8	9	-	20	8	6	41	41
Estimated terminal pumping expenditure ³	£000	226	-	40	1	198	4	-	62
Other direct expenditure ⁴	£000	721	286	836	1,197	509	474	1,061	1,199
Total direct expenditure	£000	954	295	877	1,217	715	484	1,102	1,301
General and support expenditure	£000	11	-	333	659	82	20	232	384
Functional expenditure	£000	965	295	1,209	1,876	797	504	1,334	1,685

¹We have reported one less large WwTW this year as Llanasa has fallen below the threshold for large works as a result of reduction in metered commercial flow - reducing the overall PE.

²This year we have reported the tighter consents of the UWWTD or WRA permits.

³TPS costs have increased as a result of severe weather in early 2019/20.

⁴ Five Fords "gas-to-grid" was operational during 2019/20 reducing direct expenditure at that site; also, one less large sewage works in 2019/20



40 - Large sewage treatment works for the year ended 31 March 2020 - wholesale wastewater (continued)

Sewage treatment work – explanatory variables		STWNAMED 17	STWNAMED 18	STWNAMED 19	STWNAMED 20	STWNAMED 21
Works name ¹				SWANSEA	BANGOR TREBORTH	ABERYSTWYTH (GLAN YR
		PONTHIR	QUEENSFERRY	BAY	NORTH WEST	AFON)
Classification of treatment works		SAS	TB2	TA2	TA2	TA2
Population equivalent of total load received	000	98.69	63.12	193.21	31.32	33.40
Suspended solids consent	mg/l	60	56	60	60	34
BOD ₅ consent ²	mg/l	25	25	25	25	17
Ammonia consent	mg/l	20	25	-		8
Phosphorus consent	mg/l	-	-	-	-	-
UV consent	mW/s/cm ²	-	30	22	24	32
Load received by STW	kgBOD₅/d	5,921	3,787	11,593	1,879	2,004
Flow passed to full treatment	m³/d	44,678	12,088	75,098	13,008	12,933
Sewage treatment works –						
functional expenditure						
Service charges	£000	41	14	28	8	9
Estimated terminal pumping expenditure ³	£000	-	33	537	209	-
Other direct expenditure ⁴	£000	483	425	1,302	407	289
Total direct expenditure	£000	524	472	1,868	624	298
General and support expenditure	£000	239	289	341	141	3
Functional expenditure	£000	763	761	2,209	764	301

¹We have reported one less large WwTW this year as Llanasa has fallen below the threshold for large works as a result of reduction in metered commercial flow - reducing the overall PE.

²This year we have reported the tighter consents of the UWWTD or WRA permits

³TPS costs have increased as a result of severe weather in early 2019/20.

⁴ Five Fords "gas-to-grid" was operational during 2019/20 reducing direct expenditure at that site; also, one less large sewage works in 2019/20.





4P – Non-financial data for WR, WT and WD for the year ended 31 March 2020 – wholesale water

			Current year
Line	Water resources		
1	Proportion of distribution input derived from impounding reservoirs (Note 1)	Propn 0 to 1	0.431
2	Proportion of distribution input derived from pumped storage reservoirs (Note 1)	Propn 0 to 1	0.297
3	Proportion of distribution input derived from river abstractions (Note 1)	Propn 0 to 1	0.240
4	Proportion of distribution input derived from groundwater works, excluding managed aquifer recharge (MAR) water supply schemes (Note 1)	Propn 0 to 1	0.032
5	Proportion of distribution input derived from artificial recharge (AR) water supply schemes	Propn 0 to 1	_
6	Proportion of distribution input derived from aquifer storage and recovery (ASR) water supply schemes	Propn 0 to 1	-
7	Proportion of distribution input derived from saline abstractions	Propn 0 to 1	-
8	Proportion of distribution input derived from water reuse schemes	Propn 0 to 1	-
9	Number of impounding reservoirs (Note 2)	nr	36
10	Number of pumped storage reservoirs	nr	4
11	Number of river abstractions	nr	26
12	Number of groundwater works excluding managed aquifer recharge (MAR) water supply schemes (Note 3)	nr	15
13	Number of artificial recharge (AR) water supply schemes	nr	-
14	Number of aquifer storage and recovery (ASR) water supply schemes	nr	-
15	Number of saline abstraction schemes	nr	-
16	Total number of sources (Notes 2 and 3)	nr	81
17	Number of reuse schemes	nr	-
18	Total number of water reservoirs (Note 4)	nr	77
19	Total capacity of water reservoirs (Note 5)	MI	459,729
20	Total number of intake and source pumping stations (Note 6)	nr	56
21	Total number of raw water transport stations (Note 6)	nr	13
22	Total capacity of intake and source pumping stations (Note 6)	kW	32,402
23	Total capacity of raw water transfer pumping stations (Note 6)	kW	6,951





4P – Non-financial data for WR, WT and WD for the year ended 31 March 2020 – wholesale water (continued)

			Current year
Line	Water treatment		
24	Total length of raw water abstraction mains and other conveyors	km	81.53
25	Average pumping head – raw water abstraction (Note 7)	m.hd	58.89
26	Average pumping head – raw water transport (Note 7)	m.hd	19.00
27	Total length of raw and pre-treated (non-potable) water transport mains	km	533.09
28	Water resources capacity (measured using water resources yield)	MI/d	1,120.23
29	Total water treated at all SW simple disinfection works	MI/d	0.00
30	Total water treated at all SW1 works	MI/d	0.00
31	Total water treated at all SW2 works	MI/d	0.00
32	Total water treated at all SW3 works (Note 8)	MI/d	189.87
33	Total water treated at all SW4 works (Note 9)	MI/d	5.96
34	Total water treated at all SW5 works (Note 8)	MI/d	624.69
35	Total water treated at all SW6 works	MI/d	0.00
36	Total water treated at all GW simple disinfection works	MI/d	0.00
37	Total water treated at all GW1 works	MI/d	0.00
38	Total water treated at all GW2 works	MI/d	0.00
39	Total water treated at all GW3 works	MI/d	0.00
40	Total water treated at all GW4 works (Note 10)	MI/d	0.02
41	Total water treated at all GW5 works (Note 10)	MI/d	26.07
42	Total water treated at all GW6 works	MI/d	0.00
43	Total water treated at more than one type of works	MI/d	0.00
44	Total number of SW simple disinfection works	nr	0
45	Total number of SW1 works	nr	0
46	Total number of SW2 works	nr	0
47	Total number of SW3 works	nr	20
48	Total number of SW4 works (<i>Note 11</i>)	nr	0
49	Total number of SW5 works	nr	29
50	Total number of SW6 works	nr	0





4P – Non-financial data for WR, WT and WD for the year ended 31 March 2020 – wholesale water (continued)

			Current year
Line	Water treatment		
51	Total number of GW simple disinfection works	nr	0
52	Total number of GW1 works	nr	0
53	Total number of GW2 works	nr	0
54	Total number of GW3 works	nr	0
55	Total number of GW4 works (<i>Note 12</i>)	nr	0
56	Total number of GW5 works	nr	13
57	Total number of GW6 works	nr	0
58	Number of treatment works requiring remedial action because of raw water deterioration	nr	0
59	Zonal population receiving water treated with orthophosphate	0	2987.390
60	Average pumping head – water treatment (<i>Note 7</i>)	m.hd	40.25
	Water distribution		
61	Total length of potable mains as at 31 March (Note 13)	km	27,733.4
62	Total length of potable mains relined	km	-
63	Total length of potable mains renewed	km	57.5
64	Total length of new potable mains	km	42.6
65	Total length of potable water mains (≤320mm)	km	25,823.5
66	Total length of potable water mains >320mm - ≤450mm	km	927.0
67	Total length of potable water mains >450mm - ≤610mm	km	543.2
68	Total length of potable water mains > 610mm	km	439.6
69	Capacity of booster pumping stations	kW	43,015
70	Capacity of service reservoirs	MI	1,956
71	Capacity of water towers	MI	2
72	Distribution input (Note 1)	MI/d	846.60





4P – Non-financial data for WR, WT and WD for the year ended 31 March 2020 – wholesale water (continued)

			Current year
Line	Water distribution		yeai
73	Water delivered (non-potable)	MI/d	37.71
74	Water delivered (potable) (Note 14)	MI/d	723.76
75	Water delivered (billed measured residential) (Note 15)	MI/d	161.89
76	Water delivered (billed measured business) (Note 16)	MI/d	177.28
77	Total leakage (Note 17)	MI/d	167.95
78	Distribution losses (Note 18)	MI/d	110.91
79	Water taken unbilled	MI/d	14.74
80	Number of lead communication pipes	nr	172,047
81	Number of galvanised iron communication pipes (Note 19)	nr	99
82	Number of other communication pipes (Note 20)	nr	853,259
83	Number of booster pumping stations	nr	613
84	Total number of service reservoirs	nr	462
85	Number of water towers	nr	4
86	Total length of mains laid or structurally refurbished pre-1880 (Note 21)	km	126.8
87	Total length of potable mains laid or structurally refurbished between 1881 and 1900 (Note 21)	km	750.5
88	Total length of potable mains laid or structurally refurbished between 1901 and 1920 (Note 21)	km	2,556.6
89	Total length of potable mains laid or structurally refurbished between 1921 and 1940 (Note 21)	km	1,915.6
90	Total length of potable mains laid or structurally refurbished between 1941 and 1960 (Note 21)	km	4,455.4
91	Total length of potable mains laid or structurally refurbished between 1961 and 1980 (Note 21)	km	6,259.9
92	Total length of potable mains laid or structurally refurbished between 1981 and 2000 (Note 21)	km	6,669.2
93	Total length of potable mains laid or structurally refurbished post 2001 (Note 22)	km	4,999.3
94	Average pumping head – treated water distribution (Note 7)	m.hd	48.79





4P – Non-financial data for WR, WT and WD for the year ended 31 March 2020 – wholesale water (continued)

			Current year
Line	Band disclosure (nr)		
95	WTWs in size band 1 (Note 23)	nr	21
96	WTWs in size band 2 (Note 23)	nr	10
97	WTWs in size band 3 (Note 23)	nr	7
98	WTWs in size band 4 (Note 23)	nr	11
99	WTWs in size band 5 (Note 23)	nr	10
100	WTWs in size band 6 (Note 23)	nr	4
101	WTWs in size band 7 (Note 23)	nr	2
102	WTWs in size band 8 (Note 23)	nr	1
	Band disclosure (%)		
103	Proportion of Total DI band 1 (Note 24)	%	2.0%
104	Proportion of Total DI band 2 (Note 23)	%	3.3%
105	Proportion of Total DI band 3 (Note 23)	%	4.9%
106	Proportion of Total DI band 4 (Note 24)	%	12.1%
107	Proportion of Total DI band 5 (Note 23)	%	29.1%
108	Proportion of Total DI band 6 (Note 25)	%	11.8%
109	Proportion of Total DI band 7 (Note 23)	%	21.5%
110	Proportion of Total DI band 8 (Note 23)	%	15.2%



4P - Non-financial data for WR, WT and WD for the year ended 31 March 2020 - wholesale water (continued)

- 1) Increase reflective of an increase of production at works and water into supply across 2019-20.
- 2) Increase in one as Beacons reservoir has been used in the year as a direct source of supply into Cantref WTW.
- 3) An increase of one with the inclusion of Valley Court as a direct source into Bolton Hill WTW.
- 4) A reduction of one due to Upper Neuadd reservoir no longer in service.
- 5) A slight reduction of 1,184 MI due to Upper Neuadd reservoir no longer being in service.
- 6) As part of our continuous improvement we have reviewed in detail each of the assets within lines 20 and 21 and this has resulted in improved allocation this year. In addition, a number of assets have been removed as part of this review and one newly commissioned asset has been added.
- 7) This line has been influenced by improved pressure data and the changes explained in note 6.
- 8) Change is reflective of the change in DI (Note 1) and production at the works.
- 9) This includes two bulk import works from Severn Trent Water. Change is reflective of the change in DI (Note 1) and production at the works.
- 10) This includes one bulk import works from Severn Trent Water. Change is reflective of the change in DI (Note 1) and production at the works.
- 11) There are no water treatment works in this category. The MI/d in line 4P 33 relates to a bulk supply import from two water treatment works.
- 12) There are no water treatment works in this category. The MI/d in line 4P 40 relates to a bulk supply import from one water treatment works.
- 13) Due to rounding this is not an exact match to the sum of lines 4P65 to 4P68 and the sum of Lines 4P86 to 4P93.
- 14) Increase reflects increased new connections and changes in customer habits relating to demand across 2019-20. Approximately 7 MI/d of the increase versus 2018-19 is a result of the improvements associated with the calculation of unmeasured household demand and the extrapolation of domestic consumption monitor results across the region using property types.



4P - Non-financial data for WR, WT and WD for the year ended 31 March 2020 - wholesale water (continued)

- 15) This reflects any changes in customer habits relating to demand across 2019-20. Increase also expected in line with new connections and meter optants which increase company household metering and measured demand.
- 16) Decrease reflective and expected given the 2019-20 climate conditions (across the spring and summer periods) were less extreme than 2018-19.
- 17) See APR part 3 (MOS F2 Leakage).
- 18) The reduction this year reflects the increase in the supply leakage rates that are used to determine the supply pipe leakage volume and which are deducted from the total leakage estimate to arrive at distribution losses.
- 19) The increase is due to our improvement in process around determining the material of the communication pipes repaired during the year.
- 20) The number of 'other' communication pipes has increased in line with the increase in the number of connected properties.
- 21) 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 based on the years the pipe material was available, the midpoint of the year has been applied.
- 22) See note 21. Potable Mains constructed during 2001 have been included within this line.
- 23) In the course of the year two works have moved between band 4 and band 5 and the changes in the proportion of total Distribution Input per banding in lines 95 to 102 align with these movements. Included in the figures are four bulk import works from Severn Trent Water, these works are included in lines 95 (1 bulk imports), 98 (1 bulk imports) and 100 (2 bulk imports).
- 24) See note 23. Includes 1 Bulk Import Works from Severn Trent Water.
- 25) See note 23. Includes 2 Bulk Import Works from Severn Trent Water.





4Q – Non-financial data for properties, population and other for the year ended 31 March 2020 – wholesale water

		Current
Line	Properties and population	,
1	Residential properties billed for measured water (external meter)	512.872
2	Residential properties billed for measured water (not external meter)	65.673
3	Business properties billed measured water	92.393
4	Residential properties billed for unmeasured water (Note 1)	703.762
5	Business properties billed unmeasured water	7.667
6	Total business connected properties at year end	116.457
7	Total residential connected properties at year end	1334.868
8	Total connected properties at year end	1451.325
9	Number of residential meters renewed (Note 2)	7.659
10	Number of business meters renewed (Note 2)	2.024
11	Number of meters installed at request of optants	13.020
12	Number of selective meters installed (<i>Note 3</i>)	-
13	Total number of new business connections	0.358
14	Total number of new residential connections	7.759
15	Total population served	3071.030
16	Number of business meters (billed properties) (Note 4)	96.857
17	Number of residential meters (billed properties) (Note 4)	584.257
18	Company area km2 (Note 5)	20,082





4Q – Non-financial data for properties, population and other for the year ended 31 March 2020 – wholesale water (continued)

			Current year
Line	Other		
19	Number of lead communication pipes replaced for water quality	nr	28
20	Total supply side enhancements to the supply demand balance (dry year critical / peak conditions)	MI/d	-
21	Total supply side enhancements to the supply demand balance (dry year annual average conditions)	MI/d	-
22	Total demand side enhancements to the supply demand balance (dry year critical / peak conditions)	MI/d	-
23	Total demand side enhancements to the supply demand balance (dry year annual average conditions	Ml/d	-
24	Energy consumption - network plus	MWh	185,784
25	Energy consumption - water resources	MWh	59,178
26	Energy consumption – wholesale	MWh	244,962
27	Mean zonal compliance (Note 6)	%	99.94%
28	Compliance risk index (<i>Note 7</i>)	nr	4.0
29	Event risk index (<i>Note 7</i>)	nr	25.9
30	Volume of Leakage above or below the sustainable economic Level (Note 8)	MI/d	(1.294)



4Q - Non-financial data for properties, population and other for the year ended 31 March 2020 - wholesale water (continued)

- 1) The unmeasured base has reduced as expected due to customers opting for meters.
- 2) The replacement of meters is on a reactive basis.
- 3) We do not have a selective meter policy.
- 4) As per RAG 4.08 guidance, void properties are excluded.
- 5) The 20,082 km² excludes 2.3 km² of Inset Appointment areas.
- 6) See APR Part 3 MOS A1b. This figure is reported on a calendar year basis as per DWI guidance.
- 7) As published by the Drinking Water Inspectorate on 9 July 2020.
- 8) The MOS-F2 (Leakage) 2019-20 outturn (167.95 MI/d) is below our PR14 SELL target (169.24 M/d). This number is derived from our PR14 SELL target less MOS-F2 outturn. Negative volumes are indicative of exceeding (below) target performance.





4R – Non-financial data for wastewater network and sludge for the year ended 31 March 2020 – wholesale wastewater

Line	Wastewater network		Current year
1	Connectable properties served by s101A schemes completed in the report year (<i>Note 1</i>)	nr	2
2	Number of s101A schemes completed in the report year (Note 1)	Nr	1
3	Total pumping station capacity (Note 2)	KW	61,171
4	Number of network pumping stations (<i>Note 3</i>)	nr	2,446
5	Total number of sewer blockages	nr	19,670
6	Total number of gravity sewer collapses	nr	594
7	Total number of sewer rising main bursts / collapses	nr	76
8	Number of combined sewer overflows (Note 4)	nr	2,198
9	Number of emergency overflows (Note 4)	nr	453
10	Number of settled storm overflows (Note 4)	nr	208
11	Sewer age profile (constructed post 2001) (Note 5)	km	1,933
12	Volume of trade effluent	MI/d	11,338.79
13	Volume of wastewater receiving treatment at sewage treatment works (Note 6)	MI/yr	623,557.56
14	Length of gravity sewers rehabilitated (Note 7)	km	21
15	Length of rising mains replaced or structurally refurbished (<i>Note 7</i>)	km	2
16	Length of foul (only) public sewers	km	5,481
17	Length of surface water (only) public sewers	km	3,506
18	Length of combined public sewers	km	8,811
19	Length of rising mains	km	1,296
20	Length of other wastewater network pipework	km	361
21	Total length of "legacy" public sewers as at 31 March	km	19,455
22	Length of formerly private sewers and lateral drains (s105A sewers) (Note 8)	km	17,175





4R - Wastewater network and sludge for the year ended 31 March 2020 – wholesale wastewater (continued)

Line	Sludge		Current year
23	Total sewage sludge produced, treated by incumbents	ttds/year	76.0
24	Total sewage sludge produced, treated by 3rd party sludge service provider (Note 9)	ttds/year	1.0
25	Total sewage sludge produced	ttds/year	77.0
26	Total sewage sludge produced from non-appointed liquid waste treatment (<i>Note 10</i>)	ttds/year	1.8
27	Percentage of sludge produced and treated at a site of STW and STC co-location	%	78.80%
28	Total sewage sludge disposed by incumbents (Note 11)	ttds/year	39.0
29	Total sewage sludge disposed by 3rd party sludge service provider (Note 9)	ttds/year	1.4
30	Total sewage sludge disposed		40.4
31	Total measure of intersiting 'work' done by pipeline (Note 12)	ttds*km/year	3
32	Total measure of intersiting 'work' done by tanker (Note 13)	ttds*km/year	284
33	Total measure of intersiting 'work' done by truck (Note 14)	ttds*km/year	1,973
34	Total measure of intersiting 'work' done (all forms of transportation)	ttds*km/year	2,260
35	Total measure of intersiting 'work' done by tanker (by volume transported) (Note 15)	m3*km/year	7,797,122
36	Total measure of 'work' done in sludge disposal operations by pipeline	ttsd*km/year	-
37	Total measure of 'work' done in sludge disposal operations by tanker (Note 16)	ttsd*km/year	-
38	Total measure of 'work' done in sludge disposal operations by truck (Note 17)	ttsd*km/year	2,203
39	Total measure of 'work' done in sludge disposal operations (all forms of transportation)	ttsd*km/year	2,203
40	Total measure of 'work' done by tanker in sludge disposal operations (by volume transported) (Note 16)	m3*km/year	-
41	Chemical P sludge as percentage of sludge produced at STWs (Note 18)	%	29.22%



4R - Wastewater network and sludge for the year ended 31 March 2020 - wholesale wastewater (continued)

- 1) The data takes account of all properties (i.e. "polluting" or "likely to pollute") that have been identified in the s101a assessment report (or Determination Report where applicable) that are either connected or able to connect to the completed s101a scheme reported in line 2. One s101a scheme at Bagillt was delivered in 2019-20 to serve two properties.
- 2) The increase in kW is largely down to Maintenance & Reliability Support (MaRS) survey data which has been received and updated in our SAP system.
- 3) The increase is due to a combination of newly adopted private pumping stations along with some newly commissioned pumping stations.
- 4) The data improvement exercise has continued within 2019 and has resulted in some further movement between lines 8, 9 and 10.
- 5) The total length of PST sewers currently held within GIS represents approximately 24% of the total PST sewers estimated. 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.
- The increase from 2018/19 is firstly due to the driest summer on record for 2018 and secondly the summer and winter of 2019/20 has been one of the wettest on record. These two opposing weather extremes between 2018/19 and 2019/20 has resulted in a large increase.
- 7) We have maintained a consistent methodology for the reporting of sewer rehabilitation. This is based on restoring manhole manhole length of sewer to operational service, by repairing the sewer defects within that length.
- 8) Modelled length of sewers based on the WRC model.
- 9) As a result of issues commissioning Five Fords Advanced Anaerobic Digestion (AAD), we utilised a third party Biosolids Assurance Scheme (BAS) approved contractor to lime treat surplus sludge.
- 10) The value quoted is the domestic tankered waste we receive from private companies. This volume is included in line 25.
- 11) Sewage sludge disposed has fallen this year because a higher percentage is dealt with through AAD which increases the destruction rate, where previously it had been limed which increased the total weight disposed.
- 12) This includes the value transported between Rotherwas and Eign WwTWs.
- 13) This year we have focussed on thickening sludge to reduce haulage. As a result, we have moved the same TDS with a 25% reduction in road haulage.
- 14) North and South Wales sludge strategies are focussing all sludge into strategic AAD sites which increases interworks haulage by truck. This APR line will continue to increase over coming years.



4R - Wastewater network and sludge for the year ended 31 March 2020 – wholesale wastewater (continued)

Notes (continued)

- 15) This year we have focussed on thickening sludge and reducing haulage in reporting year, moved same TDS with 25% reduction in road haulage due to increased dry solids.
- 16) Last liquid to land site Porthmadog decommissioned last year (2018).
- 17) Reduction due to commissioning Five Fords AAD and increased destruction through AAD. This has taken effect during the year.
- 18) The reduction this year is mainly a result of commissioning issues at Five Fords and sludge being treated at other sites.



4S – Non-financial data for sewage treatment for the year ended 31 March 2020 – wholesale wastewater

		Treatment Categories							
		Secondary Tertia			iary				
		Primary	Activated Sludge	Biological	A1	A2	B1	B2	Total
Load received at sewage treatment works in 2019/20									
Load received by STWs in size band 1	Kg BOD₅/day	115	284	1,968	145	41	204	-	2,757
Load received by STWs in size band 2	Kg BOD₅/day	24	399	2,006	42	71	316	-	2,858
Load received by STWs in size band 3	Kg BOD₅/day	-	1,500	5,284	180	442	1,223	702	9,331
Load received by STWs in size band 4	Kg BOD₅/day	-	3,844	8,563	1,181	3,069	2,362	2,374	21,393
Load received by STWs in size band 5	Kg BOD₅/day	-	6,086	4,752	4,696	6,890	5,727	2,923	31,074
Load received by STWs above size band 5	Kg BOD₅/day	-	119,425	4,567	-	45,735	-	11,313	181,040
Total load received	<u>-</u>	139	131,538	27,140	6,244	56,248	9,832	17,312	248,453
Load received from trade effluent customers at treatment works	Kg BOD₅/day	-	-	-	-	-	-	-	19,005
Number of sewage treatment works at 31 March 2020 (Note	e 1)								
STWs in size band 1	nr	67	41	324	12	2	26	-	472
STWs in size band 2	nr	1	10	78	2	1	15	-	107
STWs in size band 3	nr	-	21	82	2	4	13	4	126
STWs in size band 4	nr	-	15	37	3	8	9	7	79
STWs in size band 5	nr	-	6	5	4	5	6	3	29
STWs above size band 5	nr	-	9	1	-	9	-	2	21
Total number of works	_	68	102	527	23	29	69	16	834



4S - Non-financial data for sewage treatment for the year ended 31 March 2020 - wholesale wastewater (continued)

Treatment work consents Phosphorus >0.5 to <=0.5mg/l >1mg/1 No permit Total <=1mg/l Load received at sewage treatment works in 2019/20 Load received by STWs in size band 1 Kg BOD₅/day 2,757 2,757 Load received by STWs in size band 2 Kg BOD₅/day 76 2,783 2,859 Load received by STWs in size band 3 Kg BOD₅/day 147 8,919 9,332 266 Load received by STWs in size band 4 Kg BOD₅/day 3,232 1,170 16,992 21,394 Load received by STWs in size band 5 Kg BOD₅/day 7,456 7,184 16,433 31,073 Load received by STWs above size band 5 Kg BOD₅/day 21,116 14,156 145,769 181,041 **Total load received** 147 32,070 22,586 193,653 248,456 Number of sewage treatment works at 31 March 2020 (Note 1) STWs in size band 1 472 472 nr STWs in size band 2 103 107 nr STWs in size band 3 1 3 122 126 nr STWs in size band 4 11 4 64 **79** nr 7 STWs in size band 5 nr 15 29 STWs above size band 5 13 21 nr **Total number of works** 1 25 19 789 834



4S – Non-financial data for sewage treatment for the year ended 31 March 2020 – wholesale wastewater (continued)

Treatment work consents

		BOD₅					
		<=7mg/l	>7 to <=10mg/l	>10 to <=20mg/l	>20mg/1	No permit	Total
Load received at sewage treatment works in 2019/20							
Load received by STWs in size band 1	Kg BOD₅/day	-	3	310	1,452	993	2,758
Load received by STWs in size band 2	Kg BOD₅/day	-	39	330	2,438	51	2,858
Load received by STWs in size band 3	Kg BOD₅/day	-	164	1,698	7,425	46	9,333
Load received by STWs in size band 4	Kg BOD₅/day	751	778	4,094	15,770	-	21,393
Load received by STWs in size band 5	Kg BOD₅/day	-	4,065	4,259	22,749	-	31,073
Load received by STWs above size band 5	Kg BOD₅/day	-	-	27,971	153,069	_	181,040
Total load received	- -	751	5,049	38,662	202,903	1090	248,455
Number of sewage treatment works at 31 March 2020	(Note 1)						
STWs in size band 1	nr	-	1	34	168	269	472
STWs in size band 2	nr	-	2	15	88	2	107
STWs in size band 3	nr	-	3	23	99	1	126
STWs in size band 4	nr	2	4	14	59	-	79
STWs in size band 5	nr	-	4	4	21	-	29
STWs above size band 5	nr	-	-	4	17	-	21
Total number of works		2	14	94	452	272	834



4S – Non-financial data for sewage treatment for the year ended 31 March 2020 – wholesale wastewater (continued)

Treatment work consents

		Ammonia					
		<=1mg/l	>1 to <=3mg/l	>3 to <=10mg/l	>10mg/1	No permit	Total
Load received at sewage treatment works in 2019/20							
Load received by STWs in size band 1	Kg BOD₅/day	-	11	253	541	1,953	2,758
Load received by STWs in size band 2	Kg BOD₅/day	-	27	458	693	1,680	2,858
Load received by STWs in size band 3	Kg BOD₅/day	-	164	2,055	2,049	5,064	9,332
Load received by STWs in size band 4	Kg BOD₅/day	-	1,102	5,747	4,419	10,125	21,393
Load received by STWs in size band 5	Kg BOD₅/day	-	4,065	7,040	8,991	10,978	31,074
Load received by STWs above size band 5	Kg BOD₅/day	-	-	42,292	91,077	47,671	181,040
Total load received	_	_	5,369	57,845	107,770	77,471	248,455
Number of sewage treatment works at 31 March 2020) (Note 1)						
STWs in size band 1	nr	-	3	30	58	381	472
STWs in size band 2	nr	-	1	22	31	53	107
STWs in size band 3	nr	-	3	28	31	64	126
STWs in size band 4	nr	-	4	21	21	33	79
STWs in size band 5	nr	-	4	7	8	10	29
STWs above size band 5	nr	-	-	9	5	7	21
Total number of works		-	15	117	154	548	834





4S – Non-financial data for sewage treatment for the year ended 31 March 2020 – wholesale wastewater (continued)

	000s
Population equivalent	
Current population equivalent served by STWs	3,964.464
Current population equivalent served by discharge relocation schemes	-
Current population equivalent served by filter bed STWs with tightened/new P consents (Note 2)	12.817
Current population equivalent served by activated sludge STWs with tightened/new P consents (Note 2)	1.138
Current population equivalent served by groundwater protection schemes	-
Current population equivalent served by STWs with a Flow1 driver scheme	-
Current population equivalent served by STWs with tightened/new N consents	-
Current population equivalent served by STWs with tightened/new sanitary parameter consents (<i>Note 2</i>)	2.767
Current population equivalent served by STWs with tightened/new UV consents	-
Population equivalent treatment capacity enhancement (Note 3)	60.883



4S - Non-financial data for sewage treatment for the year ended 31 March 2020 - wholesale wastewater (continued)

- 1) A small number of changes to WwTWs have occurred during the year with a net decrease of one WwTWs when compared to previous year.
- 2) We have completed four schemes in the reporting year.
- 3) We have completed seven schemes in the reporting year for capacity enhancement.





4T – Non-financial data for sludge treatment for the year ended 31 March 2020 – wholesale wastewater

	By incumbent	By 3 rd party sludge service providers
Sludge treatment process		
% Sludge – untreated	-	-
% Sludge treatment process - raw sludge liming (Note 1)	8.0%	1.3%
% Sludge treatment process - conventional AD (Note 1)	8.7%	-
% Sludge treatment process- advanced AD (Note 1)	82.0%	-
% Sludge treatment process - incineration of raw sludge	-	-
% Sludge treatment process - incineration of digested sludge	-	-
% Sludge treatment process - phyto-conditioning/composting	-	-
% Sludge treatment process - other (specify)	-	-
% Sludge treatment process - Total	98.7%	1.3%
(Un-incinerated) sludge disposal route		
% Sludge disposal route - landfill, raw	-	-
% Sludge disposal route - landfill, partly treated	-	-
% Sludge disposal route - land restoration / reclamation	-	-
% Sludge disposal route - sludge recycled to farmland (Note 2)	96.6%	3.4%
% Sludge disposal route - other (specify)		-
% Sludge disposal route - Total	96.6%	3.4%



4T – Non-financial data for sludge treatment for the year ended 31 March 2020 – wholesale wastewater (continued)

- 1) This year a higher percentage of sludge is dealt with through Advanced Anaerobic Digestion (AAD). In addition, due to issues commissioning at Five Fords, we have utilised a third party Biosolids Assurance Scheme (BAS) approved contractor to lime treat surplus sludge.
- 2) All sludge recycled to agriculture. For some sludge we have utilised a Biosolids Assurance Scheme (BAS) approved contractor for treatment and disposal due to commissioning issues at Five Fords.



4U – Non-financial data for properties, population and other for the year ended 31 March 2020

			Current year
Line	Properties and population		
1	Residential properties connected during the year	000s	9.279
2	Business properties connected during the year	000s	0.504
3	Residential properties billed unmeasured sewage (Note 1)	000s	701.248
4	Residential properties billed measured sewage (Note 1)	000s	628.341
5	Residential properties billed for sewage	000s	1,329.589
6	Business properties billed unmeasured sewage	000s	6.880
7	Business properties billed measured sewage	000s	65.778
8	Business properties billed for sewage	000s	72.658
9	Void properties	000s	62.085
10	Total number of properties	000s	1,464.332
11	Resident population	000s	3,080.770
12	Non-resident population (Note 2)	000s	181.144
	Other		
13	Energy consumption - network plus	MWh	252,754.121
14	Energy consumption – sludge	MWh	74,696.242
15	Energy consumption – wholesale (Note 3)	MWh	327,450.363
16	Population resident in National Parks, SSSIs and Areas of Outstanding Natural Beauty (AONBs) (Note 4)	000s	153.651
17	Total sewerage catchment area	Km2	1,163
18	Designated bathing waters (Note 5)	nr	104
19	Number of intermittent discharge sites with event duration monitoring	nr	362
20	Number of monitors for flow monitoring at STWs	nr	48
21	Number of odour related complaints	nr	2,523
22	Volume of storage provided at CSOs, storm tanks, etc to meet spill frequency objectives (<i>Note 6</i>)	m3	400
23	Total volume of network storage (Note 7)	m3	2,633,857



4U - Non-financial data for properties, population and other for the year ended 31 March 2020 (continued)

- 1) The unmeasured base has reduced as expected due to customers opting for meters.
- 2) This is based on a study by Global Tourism Solutions (UK) Ltd (as per previous years) and has been updated for 2019-20.
- 3) Some of the increase in energy consumption is attributable to three wastewater sites i.e. Afan, Eign and also Five Fords, which has experienced some commissioning issues. The rest of the increase in energy consumption is attributable to pumping higher wastewater flows as a result of more rainfall within the year.
- 4) The figure of 153.651 has been calculated using Census data and Output areas to calculate the total population figure resident in National Parks, AONB and SSSI's. The figure reported has reduced from last year due to revised resident population projections provided by CACI.
- 5) The number of coastal bathing waters increased by 1 in the 2019 bathing season after Colwyn Bay Porth Eirias was designated for the first time.
- 6) One scheme, Burry Port SPS Outfall, with a completion certificate in March 2019, is being claimed in 2019/20 to align with the costs recorded in APR table 4M line 11.
- 7) Our reported figure is based on calculated volumes of our sewer network only (excluding manholes). We do not currently have volume data for our offline storage tanks. We have calculated volumes for our digitised public and transferred sewers and applied a pro-rata calculation to account for our non-digitised transferred sewers.



4V – Operating cost analysis for the year ended 31 March 2020 – water resources

Income Treated as negative expenditure (Note 2)		Impounding Reservoir	Pumped Storage	River Abstractions	Groundwater, excluding MAR water supply schemes	Artificial Recharge (AR) water supply schemes	Aquifer Storage and Recovery (ASR) water supply schemes	Other	Total
Power (Note 1)		£m	£m	£m	£m	£m	£m		£m
Income Treated as negative expenditure (Note 2)	Opex Analysis								
Abstraction charges/discharge consents (Note 3) Bulk supply 0.100	Power (Note 1)	1.088	0.027	5.102	0.321	-	-	-	6.538
Bulk supply 0.100 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	Income Treated as negative expenditure (Note 2)	(4.110)	(0.132)	(0.179)	(0.037)	-	-	-	(4.458)
Other operating expenditure Renewals expensed in year (Infrastructure) (Note 4) 16.735 0.571 0.320 -	Abstraction charges/discharge consents (Note 3)	2.611	0.710	5.390	0.383	-	-	-	9.094
Renewals expensed in year (Infrastructure) (Note 4) 16.735 0.571 0.320 - <	Bulk supply	0.100	-	-	-	-	-	-	0.100
Renewals expensed in year (Non-Infrastructure) (Note 5) -	Other operating expenditure								
Other operating expenditure excluding renewals - direct (Note 67) 3.643 0.131 0.130 0.216 - <	Renewals expensed in year (Infrastructure) (Note 4)	16.735	0.571	0.320	-	-	-	-	17.626
Other operating expenditure excluding renewals - indirect (Note 7) 1.833 0.322 0.531 0.295 - - - - Total functional expenditure (Note 8) 21.900 1.629 11.294 1.178 -	Renewals expensed in year (Non-Infrastructure) (Note 5)	-	-	-	-	-	-	-	-
Total functional expenditure (Note 8) 21.900 1.629 11.294 1.178 -	Other operating expenditure excluding renewals - direct (Note 67)	3.643	0.131	0.130	0.216	-	-	-	4.120
Local authority and Cumulo rates (Note 9) 0.315 0.261 0.104 0.122 - <td>Other operating expenditure excluding renewals - indirect (Note 7)</td> <td>1.833</td> <td>0.322</td> <td>0.531</td> <td>0.295</td> <td>-</td> <td>-</td> <td>-</td> <td>2.981</td>	Other operating expenditure excluding renewals - indirect (Note 7)	1.833	0.322	0.531	0.295	-	-	-	2.981
Total operating expenditure (excluding 3rd party) 22.215 1.890 11.398 1.300 -	Total functional expenditure (Note 8)	21.900	1.629	11.294	1.178	-	-	-	36.001
Depreciation (<i>Note 10</i>) 6.416 1.338 0.580 0.627	Local authority and Cumulo rates (Note 9)	0.315	0.261	0.104	0.122	-	-	-	0.802
	Total operating expenditure (excluding 3rd party)	22.215	1.890	11.398	1.300	-	-	-	36.803
Total operating costs (excluding 3rd party) 28.631 3.228 11.978 1.927 4	Depreciation (<i>Note 10)</i>	6.416	1.338	0.580	0.627	-	-		8.961
	Total operating costs (excluding 3rd party)	28.631	3.228	11.978	1.927	-	-	-	45.764



4V – Operating cost analysis for the year ended 31 March 2020 – water resources (continued)

		Water Resources	Raw water distribution	Water Treatment	Treated water distribution	Total
Other expenditure – Wholesale water						
Employment costs - directly allocated	£m	4.182	1.124	21.620	31.352	58.278
Employment costs - indirectly allocated	£m	2.854	0.361	5.153	10.060	18.428
Number FTEs - directly allocated	nr	111	21	405	660	1,197
Number FTEs - indirectly allocated	nr	41	5	75	146	267
Costs associated with Traffic Management Act	£m	-	-	-	-	-
Service charges						
Canal & River Trust service charges and discharge consents	£m	-	-	-	-	
Environment Agency service charges/ discharge consents	£m	9.094	-	0.252	-	9.346
Other abstraction charges / discharge consents	£m	-	-	-	-	-
Statutory water softening	£m	-	-	-	-	-



4V - Operating cost analysis for the year ended 31 March 2020 - water resources (continued)

- 1) Power in impounding reservoirs has increased by £1m due to some sites being allocated to water resources. The sites were: Lower Lliw, Alaw, Cefni, Preseli and Nantybwch, with a value of £969k. Conversely Sudbrook, with a value of £45k is now included as raw water transport which was previously reported within River Abstractions. River Abstractions has increased by 21% (£0.9m) and relates to increased price and additional pumping due to the extreme wet weather.
- 2) The increase in impounding reservoir relates to lower hydro income last year as a result of the summer drought.
- 3) There has been an increase in abstraction overall by 5% (£0.4m). £0.3m relates to impounding reservoir which relates in part to sites now being reported as impounding reservoirs.
- 4) Costs have increased by £8m since last year the main increase relates to some large schemes such as lower Neuadd Reservoir discontinuance (£4m) where costs are incurred to make the site safe, Measures in the interest of safety (MITIOS) is being rolled out and schemes amounting to £2.5m were incurred as well as tower rehabilitation schemes (£3m).
- 5) All these costs are included in maintaining the long-term capability of the asset non infra. This is the same treatment as previous year.
- 6) This has decreased by 19% (£0.8m) and relates mainly to lower costs in the year compared to last year which included costs of the summer drought.
- 7) This has decreased by 10% (£0.3m) and result in part to cost being lower than last year as a result of the summer drought in 2018.
- 8) This has increased by £9m since last year which relates mainly to increase in infrastructure renewals(£8m) and additional sites included in water resource.
- 9) The charge for the year is the same as last year. The charge has been split across activities using historic GMEAV- same as last year.
- 10) We have made the assumption that this relates to both the depreciation of tangible fixed assets (£8.211) and the amortisation of intangible assets (£0.751). The split across areas is based on Gross MEAV.



4W – Operating cost analysis for the 12 months ended 31 March 2020 - sludge transport, treatment and disposal

	Pipeline	Tanker	Truck	Total
	£m	£m	£m	£m
Sludge transport method				
Power (Note 1)	-	0.685	-	0.685
Income treated as negative expenditure (Note 2)	-	-	-	-
Discharge consents	-	-	-	-
Bulk discharge	-	-	-	-
Other operating expenditure				
Renewals expensed in year (Infrastructure)	-	-	-	-
Renewals expensed in year (Non-Infrastructure)	-	-	-	-
Other operating expenditure excluding renewals - direct	-	4.301	-	4.301
Other operating expenditure excluding renewals - indirect		1.001	-	1.001
Total functional expenditure	-	5.987	-	5.987
Local authority and Cumulo rates	-	-	-	-
Total operating expenditure (excluding 3rd party)	-	5.987	-	5.987
Depreciation	-	0.404	-	0.404
Total operating costs (excluding 3rd party)	-	6.391	-	6.391



4W – Operating cost analysis for the 12 months ended 31st March 2020 - sludge transport, treatment and disposal (continued)

	Untreate d sludge	Raw sludge liming	Conventional AD	Advanced AD	Incineration of raw sludge	Incineration of digested sludge	Photo conditioning/ Composting	Other	Total
	£m ⁵	£m	£m	£m	£m	£m	£m	£m	£m
Sludge treatment type									
Power (Note 3)	-	0.145	(0.211)	1.383	-	-	-	-	1.317
Income treated as negative expenditure (Note 4)	-	0.025	(0.067)	(3.885)	-	-	-	-	(3.927)
Discharge consents	-	-	-	-	-	-	-	-	-
Bulk discharge	-	-	-	-	-	-	-	-	-
Other operating expenditure									-
Renewals expensed in year (Infrastructure)	-	-	-	-	-	-	-	-	-
Renewals expensed in year (Non-Infrastructure)	-	-	-	-	-	-	-	-	-
Other operating expenditure excluding renewals - direct	-	0.162	0.279	5.340	-	-	-	-	5.781
Other operating expenditure excluding renewals - indirect	-	0.102	0.195	2.964	-	-	-	-	3.261
Total functional expenditure	-	0.434	0.196	5.802	-	-	-	-	6.432
Local authority and Cumulo rates	-	0.008	0.019	0.348	_	-	-	-	0.375
Total operating expenditure (excluding 3rd party)	-	0.442	0.215	6.150	-	-	-	-	6.807
Depreciation (Note 5)	_	0.421	3.102	15.705	-	_	_	-	19.228
Total operating costs (excluding 3rd party)	-	0.863	3.317	21.855	-	-	-	-	26.035





4W – Operating cost analysis for the 12 months ended 31st March 2020 - sludge transport, treatment and disposal (continued)

	Landfill, raw	Landfill, partly treated	Land restoration/reclamation	Sludge recycled to farmland	Other	
	£m	£m	£m	£m	£m	
Sludge disposal route						
Power (Note 6)	-	-	-	0.030	-	0.030
Income treated as negative expenditure	-	-	-	-	-	-
Discharge consents	-	-	-	-	-	-
Bulk discharge	-	-	-	-	-	-
Other operating expenditure	-	-	-	-	-	-
Renewals expensed in year (Infrastructure)	-	-	-	-	-	-
Renewals expensed in year (Non-Infrastructure)	-	-	-	-	-	-
Other operating expenditure excluding renewals - direct (Note 7)	-	-	-	3.017	-	3.017
Other operating expenditure excluding renewals - indirect	-	-	-	1.516	-	1.516
Total functional expenditure	-	-	-	4.563	-	4.563
Local authority and Cumulo rates	-	-	-	0.001	-	0.001
Total operating expenditure (excluding 3rd party)	-	-	-	4.564	-	4.564
Depreciation		-	-	0.006	-	0.006
Total operating costs (excluding 3rd party)	-	-	-	4.570	-	4.570





4W – Operating cost analysis for the 12 months ended 31st March 2020 - sludge transport, treatment and disposal (continued)

Other expenditure – Wholesale wastewater		Network plus sewage collection	Network plus sewage treatment	Sludge	Total
Other analysis					
Employment costs - directly allocated (Note 8)	£m	16.768	15.606	10.806	43.180
Employment costs - indirectly allocated (Note 9)	£m	7.814	7.200	4.680	19.694
Number FTEs - directly allocated (Note 10)	nr	407	327	235	969
Number FTEs - indirectly allocated (Note 11)	nr	113	104	68	285
Costs associated with Traffic Management Act	£m	0.025	-	-	0.025
Costs associated with Industrial Emissions Directive	£m	-	-	0.048	0.048
Service charges					
Canal & River Trust service charges and discharge consents	£m	0.015	-	-	0.015
Environment Agency service charges/ discharge consents	£m	1.556	3.301	-	4.857
Other service charges / permits	£m	-	-		-



4W - Operating cost analysis for the year ended 31 March 2020 - sludge transport, treatment and disposal (continued)

- 1) Fuel costs down overall within waste by 12%.
- 2) No sludge sales in 19/20.
- 3) Five Fords AAD operational during 19/20 resulting in only small amounts of liming during the year.
- 4) Three AAD sites were operating during 19/20.
- 5) The charge is higher than last year due to schemes being completed and therefore being depreciated. The depreciation charge includes depreciation of £16.906m and amortisation of intangibles of £2.322m.
- 6) All sludge recycled to farmland.
- 7) Year on year reduction mainly due to Five Fords AAD solids destruction reducing volumes of sludge to land.
- 8) Direct employment costs are £1.5m higher than last year (4%). Employment costs in sewage collection has decreased following a higher percentage providing NH customer information. Employment costs in sludge have increased as a result of increasing the team. Sewage treatment is higher as a result of increase in salary costs including incentives, other allowances and pay increases.
- 9) The salaries are in line with last year.
- 10) Overall FTE's have moved by 3, Sewage collection has reduced by 25 of which 24 are now reported in retail. Increase of 16 in sludge from other departments and outside DCWW.
- 11) Indirect employees have reduced by 4% in total. In line with last year the capital team is reported within indirect FTE.



Other – bidding activity – bioresources market for the year ended 31 March 2020

		Total	
Summary of market activity			
Total number of contracts held with a third party at end of the financial year	nr	10	
Total amount paid on contracts during the financial year	£000s	5,450.710	
Number of different suppliers at the year end	nr	8	
Number of contracts ended during the year	nr	1	
Number of contracts renewed during the year	nr	7	
Number of new contracts that have been agreed during the year	nr	-	
Formal tender process			
Number of formal tenders you issued during the year	nr	1	
Total number of bids received on all your tenders	nr	6	
Number of tenders you awarded during the year	nr	-	
Informal bidding process			
Number of offers made by a third party outside the formal tender process during the financial year	nr	-	
The number of successful offers	nr	-	
Treatment of sludge			
Total quantity of sludge produced in performance of the company's functions as a sewerage undertaker	ttds/year	77.03	
Quantity of sludge treated in-house	ttds/year	76.01	
Quantity of sludge treated by a third party	ttds/year	1.02	
Number of contracts to provide sludge treatment	nr	-	
Number of suppliers with contracts for sludge treatment	nr	-	



Other – Bidding Activity – Bioresources market for the year ended 31 March 2020(continued)

		Total
Sludge transported		
Total quantity of sludge transported by road	ttds/year	92.93
Quantity of sludge transported by road in-house by your own bioresources service	ttds/year	9.48
Quantity of sludge transported by road by a third party	ttds/year	83.46
Number of contracts to provide sludge transport services	nr	10
Number of suppliers with contracts for sludge transportation	nr	8
Sludge recycled or disposed		
Total quantity of sludge recycled or disposed	ttds/year	40.40
Quantity of sludge recycled or disposed in-house by your own bioresources service	ttds/year	39.02
Quantity of sludge recycled by a third party	ttds/year	1.38
Number of contracts held to provide sludge recycling or disposal services	nr	-
Number of suppliers with contracts for sludge recycling or disposal	nr	-



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, 2 and 4 are set out below. They have been prepared in accordance with International Financial Reporting Standards (IFRS) and IFRS Interpretations Committee (IFRIC) interpretations as adopted by the European Union and the Companies Act 2006 applicable to companies reporting under IFRS (Adopted IFRS) and IFRIC interpretations, 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.

IFRS 16 Leases

IFRS 16 revises the treatment of leases in financial statements and largely eliminates the accounting distinction between operating and finance leases. The Directors have assessed the impact of adopting IFRS 16 and have used the modified retrospective approach on first time adoption, and therefore the comparative information has not been restated and continues to be reported under IAS 17 and IFRIC 4. The application of IFRS 16 in the year to 31 March 2020 has resulted in the recognition of a £1.4m right-of-use asset (included in property, plant and equipment) and associated lease liability (included in other financial liabilities: borrowings) where previously under IAS 17 there were none, along with a small reduction in operating costs and increase in depreciation in the income statement (£0.2m).



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 2020 was £76.8m while amounts actually billed in 2019/20 totalled £74.8m. 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.



Notes to the regulatory accounts (continued)

Accounting policies (continued)

Revenue recognition (continued)

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.

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.



Notes to the regulatory accounts (continued)

Accounting policies (continued)

Charging policy (continued)

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.

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.



Notes to the regulatory accounts (continued)

Accounting policies (continued)

Accounting separation policy

The regulatory accounts have been drawn up in accordance with Dŵr Cymru's Accounting Methodology Statement¹. 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.

¹ Available on our website, www.dwrcymru.com.



Notes to the regulatory accounts (continued)

Accounting policies (continued)

Accounting separation policy (continued)

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.

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:



Notes to the regulatory accounts (continued)

Accounting policies (continued)

Accounting separation policy (continued)

Water and sewerage services (continued)

- 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 2020 the total value of tangible and intangible fixed assets has been revalued to the Company's 'shadow RCV', being the 31 March 2020 RCV published by Ofwat in its PR14 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.

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 1.08 para 1.6, in its regulatory financial statements the Company has dis-applied the IAS 16 requirement to capitalise applicable borrowing costs.



Notes to the regulatory accounts (continued)

Accounting policies (continued)

Capitalisation policy (continued)

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 60 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 (finance leases). 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.

All other leases are regarded as operating leases. Rental costs arising under operating leases are charged to the income statement on a straight-line basis over the period of the lease.



Notes to the regulatory accounts (continued)

Accounting policies (continued)

Capitalisation policy (continued)

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.

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 2.07 'Guideline for classification of costs across the price controls.

The tables presented in Parts 2 and 4 of the Annual Performance Report have been prepared in accordance with our Accounting Methodology Statement which can be found at www.dwrcymru.com. The methodology statement explains the bases for allocation of operating and capital expenditure and has been updated for changes to the requirements in the year. 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.



Notes to the regulatory accounts (continued)

Accounting policies (continued)

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.

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Notes to the regulatory accounts (continued)

Accounting policies (continued)

Pension costs

i) Defined benefit scheme

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

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 the plans assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit 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 income.

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 2020, none of the Company's derivatives qualified for hedge accounting under IFRS 9 (2019: none). These instruments are carried at fair value with changes in fair value being recognised immediately in the income statement.

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.



Notes to the regulatory accounts (continued)

Accounting policies (continued)

Deferred taxation (continued)

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)

1. 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 1.08 - Principles and guidelines for regulatory reporting under the 'new UK GAAP' (using IFRS, FRS101, or FRS102) regime defines treatment of particular items where Ofwat requirements differ from those normally required under IFRS and Companies Act legislation. Ofwat requires deviations from IFRS in the following areas:

Revenue recognition

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

- billed and recorded in turnover; or
- void properties

Companies should assume that for regulatory accounting purposes that where an amount is billed it is probable that cash will be collected. This is a deviation from requirement under IFRS where revenue is only recognised when it is probable that the economic benefits associated with the transaction will flow to the entity. RAG 1.08 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 ww.dwrcymru.com or on request from the Company Secretary, Dŵr Cymru Cyfyngedig, Pentwyn Road, Nelson, Treharris CF466LY.



Notes to the regulatory accounts (continued)

- 1. 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.

Reconciliation of statutory financial statements to regulatory accounting tables

2020	
£m	
(149.724)	
(14.400)	Ofwat's RAG override to disapply capitalisation of borrowing costs under IAS 23
2.700	Ofwat's RAG override to disapply capitalisation of borrowing costs under IAS 23
1.524	Deviation from IFRS 15 as no judgement applied to the probability of collections when recognising revenue
3.409	
(6.767)	
0.683	Regulatory tables prepared in respect of the appointed business only
(155.808)	
March 2020	
£m	
168.352	
0.908	Regulatory tables prepared in respect of the appointed business only
169.260	
	£m (149.724) (14.400) 2.700 1.524 3.409 (6.767) 0.683 (155.808) March 2020 £m 168.352 0.908



Notes to the regulatory accounts (continued)

Differences between statutory and RAG definitions (continued)

1C – Statement of financial position as at 31 March 2	2020	
	£m	
Net assets per statutory accounts	1,238.136	
Capitalisation of interest		
- Fixed assets	(77.891)	Ofwat's RAG override to disapply capitalisation of borrowing costs under IAS 23
- Intangible assets	(8.246)	Ofwat's RAG override to disapply capitalisation of borrowing costs under IAS 23
	(86.137)	
Trade and other receivables:		
- Measured income accrual	5.368	Ofwat's RAG override to deviate from IFRS15; no judgement to be applied to the probability of collections, and all is considered as collectable
	5.368	
Trade and other payables:		
- Deferred income	321.597	RAG requirement to report separately on face of statement
- Accrued interest	(48.739)	RAG requirement to include accrued interest in trade and other payables
- Overdraft	(2.434)	RAG requirement to include accrued interest in trade and other payables
	270.424	
Borrowings		
- Accrued interest	48.739	RAG requirement to include accrued interest in trade and other payables
- Overdraft	2.434	RAG requirement to include accrued interest in trade and other payables
	51.173	
Deferred income – adopted assets	(314.413)	RAG requirement to report separately on face of statement
Provisions	(7.184)	RAG requirement to include deferred income < 1 year to provisions
Deferred tax	15.989	Deferred tax impact on RAG deviation (above)
Net assets allocated to non-appointed activities	(45.705)	Regulatory tables prepared in respect of the appointed business only
Net assets per regulatory accounts	1,127.651	



Notes to the regulatory accounts (continued)

2. Revenues by customer type

Table 2G, "Revenues by customer type for the year ended 31 March 2020 – 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 categories it was reported in previous years Annual Performance Reports:

	Wholesale charges revenue	Retail revenue	Total revenue	Number of customers	Average non-household retail revenue per connection
	£m	£m	£m	0	£
Non-default tariffs					
Total non-default tariffs	-	-	-	-	-
Default tariffs					
Raw water < 50Ml (measured)	0.002	-	0.002	0.003	12
Partially treated water < 50Ml (measured)	0.002	-	0.002	0.003	16
Potable water < 50Ml (non-household) Measured	57.779	3.542	61.321	92.013	38
Potable water < 50Ml (non-household) Unmeasured	1.962	0.256	2.218	7.667	33
Raw water > 50Ml (measured)	1.929	0.021	1.95	0.008	2,614
Partially treated water > 50Ml	0.774	0.008	0.782	0.001	7,745
Water large user 50MI-99MI (measured)	4.383	0.048	4.431	0.051	938
Water large user 100Ml-249Ml (measured)	5.007	0.057	5.064	0.031	1,825
Water large user 250MI-499MI (measured)	3.318	0.038	3.356	0.01	3,846
Water large user 500Ml-1000Ml (measured)	3.416	0.042	3.458	0.006	7,040
Water large user > 1000Ml (measured)	-	-	-	-	-
Special agreement register – ref WSHNONPOT8	-	-	-	-	-
Special agreement register – ref WSHNONPOT9	1.859	0.023	1.882	0.001	22,576
Special agreement register – ref WSHPOT1	0.027	-	0.027	0.001	273
Special agreement register – ref WSHNONPOT10	0.773	0.008	0.781	0.002	3,852
Total default tariffs	81.231	4.043	85.274	99.797	41



Notes to the regulatory accounts (continued)

3. 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 £2,320,031 (2019: £2,511,211).

Company interest payable to Dŵr Cymru (Financing) Limited (DCFL), another member of the Glas Cymru Holdings Cyfyngedig group, was £141.9m during the year (2019: £144.8m). As at 31 March 2020 the balance outstanding on the intercompany loan from DCFL stood at £3,075.8m (2019: £2,577.3m). 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 loans to other members of the Glas Cymru Holdings Cyfyngedig group was an intercompany loan to Glas Cymru Anghyfyngedig of £2.0m (2019: £2.0m) and a loan received from Dŵr Cymru Holdings Limited totalling £2.8m which remains outstanding as at 31 March 2020. Interest payable on these loan has been waived.

As at 31 March 2020 intercompany trading balances owing to the Company were: Welsh Water Infrastructure Limited £2,400 (2019: £312,542), Welsh Water Organic Energy (Cardiff) Limited £149,259 (2019: £4,874), Cambrian Limited £4,265, Glas Cymru Anghyfyngedig £8,481 (2019: £8,481), Glas Cymru Holdings Limited £18,901 (2019: 3,759), Welsh Water Organic Waste £277,127 and Welsh Water Organic Energy Limited £9,675 (2019: £7,509).

During the year no dividends were paid or received (2018: 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)

3. Transactions with associates (continued)

RAG 3.11 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 b	usiness to associated businesses			
Staff secondments	Welsh Water Organic Energy (Cardiff) Ltd	2.371	Fully absorbed cost	0.349
	Welsh Water Organic Waste Ltd	0.380	Fully absorbed cost	0.165
Intercompany balances	Welsh Water Organic Energy Ltd	2.918	Intercompany loan from regulated business	0.067
	Welsh Water Organic Energy (Cardiff) Ltd	2.371	Intercompany loan from regulated business	0.621
	Welsh Water Infrastructure Ltd	-	Intercompany loan from regulated business	0.060
	Welsh Water Organic Waste Ltd	0.380	Intercompany loan from regulated business	0.188
Corporation tax group relief surrendered by regulated business	Dwr Cymru (Financing) UK PLC		Corporation tax group relief surrendered of £0.136m with a tax value of £0.026m (£0.136m x 19%) using the corporation tax rate applicable to the current period (see Note 7 – Taxation).	
Services provided by the associated	businesses to the regulated business			
Supply of power from AD plant to Cardiff Treatment works	Welsh Water Organic Energy (Cardiff) Ltd	2.371	Arm's length contract in 2014 with third party	0.647
Rental of appointed assets	Welsh Water Organic Waste Ltd	0.380	Arms length contract for rental of appointed assets	0.072



Notes to the regulatory accounts (continued)

4. 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 2019		309.9	166.2	764.5	68.0	1,308.6
Loss for the year	1A	-	-	-	(149.7)	(149.7)
Revaluation net of tax	1B	-	-	79.9	-	79.9
Actuarial gain net of tax	1B	_	_	_	(0.7)	(0.7)
Transfer to retained earnings		_	_	(65.7)	65.7	0.0
At 31 March 2020	1C	309.9	166.2	778.7	(16.7)	1,238.1

5. Financial derivatives (Table 41)

• 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 three-month LIBOR plus a margin to 5.67% fixed. Both the swap and the debt were originally agreed between Dŵr Cymru (Financing) Limited (DCFL) (the sister Company and financing arm of Dŵr Cymru Cyfyngedig (DCWW)) and the swap/loan counterparties. The funds were on-lent to DCWW and DCWW is ultimately responsible for ensuring payments of interest and principal are met. DCFL is registered in the Cayman Islands. During 2019/20 a new UK debt issuer was set up and all the assets and liabilities of DCFL were transferred to the new sister company, Dŵr Cymru (Financing) UK PLC ("DCF UK"). DCFL was transferred out of the whole business securitisation structure and is currently in the process of being liquidated.



Notes to the regulatory accounts (continued)

- 5. 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 DCWW receives floating rate LIBOR 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 fixed amount of 1.59% plus RPI of 2.25% and LIBOR of 1.03%.

As at 31 March 2020, £485m 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 £380m. The notional value of swaps allocated to the finance leases is £394m, 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 £91m have been reallocated to floating rate bonds, 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 one to nineteen years with a weighted average of 10.1 years.

- Swaps held in other group entities
 - DCF UK, the financing sister company of DCWW has entered into eight interest rate swaps:
- 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 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



Notes to the regulatory accounts (continued)

5. Financial derivatives (Table 41) (continued)

• Seven fixed to RPI swap which is a synthetic "RPI bond" style swap where the indexation is accreted and paid on the maturity of the swap (which will occur simultaneously with the maturity of the related bond). The swaps and the fixed rate bond liabilities have been on-lent to DCWW as a combined index-linked loan 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 6 to 37 years with a weighted average maturity of 13 years.

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

	Nominal value by maturity (net)	Total v		Interest rate (weighte average)		
Derivative type	Over five years	Nominal value (net)	Mark to market £m	Total accretion £m	Payable %	Receivable %
Interest rate swap (sterling) Fixed to index-linked Total	950 950	950 950	172.472 172.472	51.105 51.105	1.13	3.48

Credit breaks

None of the swaps in DCWW or DCF UK has credit breaks, with the longest-dated swap being in place until 2057. 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.



Notes to the regulatory accounts (continued)

5. Financial derivatives (Table 4I) (continued)

In February 2020 DCF UK entered into six swaps fixed to index linked (RPI) bond swaps with a combined notional value of £850m ("the new swaps"). All the new swaps will pay RPI accretion on maturity and the maturity profile of the notional is:

- £200 million maturing 2026
- £350 million maturing 2028
- £300 million maturing 2033

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

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 at 31 March 2020 100% of debt was hedged with approximately 74% being index-linked and 36% fixed.



Notes to the regulatory accounts (continued)

6. Return on regulated equity

Dŵr Cymru has a base return on regulated equity (RORE) of 5.6% for AMP6, set at the 2014 price review.

The Company delivered an actual RORE of 4.36% for the cumulative five year period ended 31 March 2020.

The Company's share of totex overspend adjusted for timing differences delivered a negative return of 1.03%. There is a penalty of £3.139m at the end of 2020 which delivers a negative return of 0.02%. The difference between the accrual and allowed average real interest rates on debt reduced the overall return by 0.19%.



RORE calculations are based on a notionally structured, efficient Company, and average RCVs. Tax has been assumed at the headline rate of 20%, in line with regulatory accounting guidance. RORE has been calculated cumulatively for the AMP as an average of the annual figures and recognises gains and losses made from the start of the AMP to 31 March 2020.

Totex performance

The Company share of underperformance has increased by £37m in the year with cumulative underperformance of £137m. Table 4B and 2C provides detailed analysis of the Wholesale and Retail totex performance.

ODI performance

Dŵr Cymru has 12 performance commitments (including the Service Incentive Mechanism) which have potential penalties or rewards attached to them. Rewards and penalties are included in the RORE calculations when they are recognised rather when collected. An ODI charge of £3.139 was accrued in 2019/20 on a cumulative basis which lowers RORE performance by 0.02%.



Notes to the regulatory accounts (continued)

6. Return on regulated equity (continued)

Financing performance

Actual interest paid divided by actual net debt gives an average nominal interest rate of 5.3%. Adjusting for the effects of inflation results in an average real interest rate of 2.7% which is 0.14% higher than the interest rate allowed for by Ofwat in PR14.

Impact of Customer Distribution Spend

Since the beginning of the AMP, £214m of additional customer value money has been spent, equivalent to 0.85% impact on RORE. This is included in the totex figures above as overspend.

Excluding customer value spend, the totex underperformance reduces to (0.18%) from (1.03%) and overall RORE is 5.21%.



Notes to the regulatory accounts (continued)

7. Taxation

Current tax	£m	Deferred tax	£m
Current period:		20.0	LIII
Surrender of tax losses - ECAs	(0.849)	Current periods	(25.764)
Surrender of tax losses – group relief		Prior periods	1.430
Corporation tax on R&D tax credit included	0.249	Effect of rate change	20.984
Prior periods	(1.290)	Total deferred tax credit	(3.350)
Total current tax credit	(1.890)		(3.330)
		Total tax credit	(5.240)

The current tax credit of £0.8m has arisen from the surrender of tax losses relating to energy efficient capital expenditure.

Operating expenditure includes a tax credit of £1.3m relating to R&D expenditure. The tax credit is taxable and the corresponding charge of £0.2m is shown above.

Tax trading losses carried forward as at 31 March 2020 are £nil as a result of disclaiming capital allowances in the current and prior periods. The Company had capital losses of £105,000 carried forward at 31 March 2020.

Current taxes in respect of prior years relate to tax credits for energy efficient capital expenditure and the remediation of contaminated land. A deferred tax charge in respect of prior years has arisen from claiming these tax credits and also from adjustments to deferred tax balances in respect of capital expenditure.



Notes to the regulatory accounts (continued)

7. Taxation (continued

Factors affecting future tax charges

The Company does not anticipate paying corporation tax during AMP7 due to the availability of capital allowances to shelter future trading profits. This is consistent with the Company's final determination (FD). A UK corporation rate of 19% (effective 1 April 2020) was substantively enacted on 17 March 2020, reversing the previously enacted reduction in the rate from 19% to 17%. This will increase the Group's future current tax charge accordingly. Deferred tax at 31 March 2020 has been calculated at 19% (2019: 17%). The effective rate of tax for the year is lower than the standard rate of corporation tax in the UK of 19%. The differences are explained below:

Current tax reconciliation Loss before tax and fair value movements on derivatives	£m (142.973)
Multiplied by standard rate 19% Expenses not deductible for tax purposes Non-taxable IFRIC 18 income Other timing differences – general provision Capital allowances in excess of depreciation Rate differences re ECA surrender and 19% Prior year tax credit	(27.165) 0.144 (1.368) (0.187) 27.565 0.411 (1.290) 1.890
Effective tax rate	£m
Corporation tax credit relating to current period Loss before tax and fair value movements on derivatives	(0.601) (142.973)
Effective corporation tax rate (current year)	0.42%



Notes to the regulatory accounts (continued)

7. 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:		
Movement in profit before tax pre fair value gains/losses (current year v PR 14 forecast)	(31.768)	Difference in profits from FD - mainly due to additional depreciation from the revaluation of fixed assets
Additional depreciation compared to FD	23.668	Decision to revalue fixed assets taken after FD
Movement in profit before tax pre fair value gains/losses excluding effect of revaluation of fixed assets	(8.100)	Restated so on comparable basis with FD in which fixed assets were not revalued
Disallowable expenditure	0.099	Disallowable expenditure marginally higher
Non-taxable income (IFRIC 18)	(1.368)	IFRIC 18 income higher than forecast in FD
General provisions and pensions	(0.205)	Pension contributions from FD increased
Capital allowances and tax losses	9.575	Capital allowances lower than FD and have been disclaimed to eliminate tax losses c/f
Adjustment re prior years	(1.290)	See analysis of current tax charge above
Surrender of tax loss re energy efficient expenditure	(0.824)	Surrender of tax losses relating to energy efficient capital expenditure. A tax credit was not included in the FD as it was uncertain whether expenditure would qualify
Group relief – tax losses surrendered	(0.026)	Surrender of tax losses to a group company. Not envisaged in the FD calculations and paid for using the current tax rate (19%)
Tax on R&D expenditure credit	0.249	Tax relating to an R&D expenditure credit which was not included in the FD as it was uncertain whether the expenditure would qualify
Current tax charge	(1.890)	• •



Notes to the regulatory accounts (continued)

7. Taxation (continued)

Deferred tax	£m
At 1 April	417.031
Credit to income statement	(3.349)
Charge to revaluation reserve	52.128
Credit to SOCI – re pensions	(0.172)
At 31 March	465.638
Analysis of amounts (credited)/charged to the statement of compre and revaluation reserve: Defined benefit pension schemes Reallocation of tax from income statement – pension payment in excess of service charge Increase in corporation tax rate Credit to SOCI – re pensions	(0.146) 1.629 (1.655) (0.172)
Revaluation of fixed assets	22.443
Increase in corporation tax rate	29.685
Charge to revaluation reserve	52.128
Effect of Tax allowances in excess of depreciation Deferred tax on revaluation of fixed assets Capital gains rolled over	£m 256.746 282.007 3.021 541.774
Deferred tax on capital losses c/f Deferred tax on losses of derivatives Pensions Other tax differences	(0.020) (57.316) (15.722) (3.078) 465.638



Notes to the regulatory accounts (continued)

7. Taxation (continued)

Tax charges for Statement 1A – Income Statement for the year ended 31 March 2020

	Statutory Accounts £m	RAG differences	Non appointed income £m	Reg accounts total £m
Loss before tax	(151.780)	(10.176)	0.908	(161.048)
Current tax				
Current period	0.849	_	-	0.849
Corporation tax on R&D tax credit included in operating costs	(0.249)	-	-	(0.249)
Prior periods	1.290	-	-	1.290
Total current tax	1.890	-	-	1.890
Deferred tax				
Current period	24.175	1.730	(0.141)	25.764
Prior periods	(1.365)	-	(0.065)	(1.430)
Effect of rate change	(22.644)	1.679	(0.019)	(20.984)
Total deferred tax	0.166	3.409	(0.225)	3.350
Total tax credit/(charge)	2.056	3.409	(0.225)	5.240



Notes to the regulatory accounts (continued)

7. Taxation (continued)

Our group tax strategy

Our approach to risk management and governance arrangements

Our Chief Financial Officer (CFO) 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 the Finance Director and CFO. 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.

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.



Notes to the regulatory accounts (continued)

7. Taxation (continued)

Our group tax strategy (continued)

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.

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 biannually 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 every year since the inception of the Business Risk Review process in 2009, and this was reconfirmed following a review during 2019-20.

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



Notes to the regulatory accounts (continued)

7. Taxation (continued)

Our group tax strategy (continued)

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.

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.

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 over 3,500 people and playing an important role in the regional economy.



Notes to the regulatory accounts (continued)

8. 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.

As a water and sewerage provider we have made a long-term commitment to our customers to provide high-quality and reliable services at the lowest possible cost. A key requirement to ensuring that we can deliver on this commitment is to safeguard our ongoing financial resilience for the years to come.

As set out on page 98 we have prepared this Annual Report as though we are a listed company, 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).

The nature of our business and our unique structure means that we are better placed than many other organisations to withstand financial shocks. Firstly, we are a monopoly supplier of an essential public service and demand for our water and sewerage services is not subject to the same scale of variation in customer demand as most other businesses. Secondly, we are a regulated business. Whilst the primary aim of regulation in the water sector is to protect customers from monopoly abuse, it also provides protections to safeguard the essential services. Thirdly, we have no shareholders – our focus on financial resilience is not compromised by shareholder demands for higher returns.

Our unique business model means that we are directly answerable to our customers for the decisions we make and all value we generate is returned to them, yet we have no ability to approach customers for assistance in the case of financial distress in the way that a traditionally-owned company could approach its shareholders. We are therefore wholly debt financed and raising debt at a low cost is a key part of our financial strategy, making it essential that we retain access to financial markets.

Our strategy since Glas Cymru acquired the business of Welsh Water in 2001 has been to reduce our gearing to the level at which the Board considers we would be able to obtain access to the most efficient level of debt funding. Over the past 19 years we have gradually reduced gearing from 93% to 60%, in line with the Board's target; consequently we have a high level of financial reserves (£2.4 billion) and strong credit quality.

OUR APPROACH

We are the custodian of a long term business and long-term viability is built into every aspect of our risk management and business planning processes, supported by a culture of open and honest challenge and mutual support that is endemic in the organisation and reinforced by clear direction from our leadership team. We ensure the continued robustness of our risk management controls and financial forecasting through regular Board challenge of our



Notes to the regulatory accounts (continued)

8. Long-term viability statement (continued)

risk identification and assessment and our forecasting assumptions.

We have reviewed our assessment of the most appropriate period over which to assess our ongoing financial viability and have had particular regard to the level of certainty afforded by the five-yearly regulatory price reviews. On 16 December 2019 we received Ofwat's Final Determination of price limits for AMP7, giving us clarity of allowed revenues until March 2025 and we have developed detailed cost plans for that period; we have also developed outline plans for the following period (AMP8) to 2030 in the context of our strategic planning document "Welsh Water 2050". We consider that forecasts beyond 2030 (AMP9), where allowed revenues will be the result of a further regulatory price review, are currently too speculative to allow us to draw reasonable viability conclusions. As a result, this viability statement covers a period of 10 years and the Board has considered the financial viability of the Group over the next two regulatory periods, to 31 March 2030.

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 72 to 77). The largest emerging risk during 2019–20 is the COVID-19 pandemic, the full impact of which is still uncertain and will present us with challenges throughout 2020–21 and potentially beyond (see "COVID-19 pandemic", below). Our risk identification and assessment processes are ongoing, with departmental risk registers subject to frequent review and update; these feed a central register that is reviewed by the Executive team on a monthly basis and key items are discussed regularly at Board level, with feedback provided to all parts of the organisation. We recognise that risk is a necessary part of business and our appetite is to maintain it at a low level; our processes are therefore designed to monitor inherent and existing risks and to capture emerging risks at the earliest level. We build our assessment of risks into our annual five-year detailed budgeting process, and at a broader level on a five-to-ten year horizon.

The Board remains focused on achieving our long-term objectives and carries out an annual review of the strength and effectiveness of our risk management framework based on a review of the processes, outputs and feedback from all areas of the business, as well as challenging the underlying assumptions and impact of mitigating activities. As part of its approval of the annual business plan, the Board discusses the likelihood of our principal risks arising and the impact on our forecasts, which in the case of our latest financial plan (the 2020 plan) principally cover the period to the end of AMP7 in March 2025 – although our financial forecasts stretch to 2030. Our 2020 plan is based on our final business plan submission to Ofwat in August 2019, modified in response to Ofwat's Final Determination.

Our viability assessment is based on exposing our forecasts to 2030 to a number of negative "stress" scenarios, which include the Board's view of the likelihood and impact of each of our principal risks and uncertainties occurring, both individually and in aggregate. We have also adjusted our core inflation assumptions to run these scenarios in both high (5% RPI) and low (0% RPI) inflationary environments, as well as reviewing the impact of other hypothetical



Notes to the regulatory accounts (continued)

8. Long-term viability statement (continued)

financial stresses including AMP7 revenue reductions (10%) and total expenditure (totex) overspends (10%). The estimated financial impacts are based on a combination of our own experience and other publicly available data, both industry-specific and UK-wide. We have chosen what we consider to be the most severe, yet ultimately plausible, negative scenarios 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. The use of stress testing allows us to forecast the impact of any given scenario on the covenants attaching to our existing funding (interest cover and gearing) as well as to the principal financial metrics used by rating agencies in assessing our credit ratings (adjusted interest cover and the ratio of funds from operations to net debt); for all scenarios we can then assess our future compliance with current obligations as well as our likely ability to obtain new debt.

The Board has reviewed the outputs of all stress scenarios being overlaid on the 2020 plan and has noted that none of these presents an overwhelming threat to the long-term viability of the Group. The combination of low gearing and a high level of liquidity mean 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 as all of our allowed revenues and around two-thirds of our debt are index-linked (broadly speaking, we benefit financially from a high inflation environment and come under pressure when inflation is low). Importantly, even in our most stretching scenario, which assumes that all of the principal risks crystallise during a 10- year period of zero inflation, our forecasts indicate that we would not hit our 85% gearing level trigger with our existing lenders; this is not a realistic scenario for planning purposes but it helps us to understand the level of future resilience inherent in our current financial position.

COVID-19 PANDEMIC

The biggest factor currently impacting on our viability assessment is the coronavirus pandemic. As part of the UK Government's ongoing assessment of the situation, the Office for Budget Responsibility (OBR) published a coronavirus analysis and reference scenario on 14 April 2020, predicting a large but temporary shock to the economy and public finances. Public borrowings and unemployment are expected to rise throughout 2020 with a gradual return to pre-COVID-19 budgeted levels by 2022. The OBR scenario assumes a three-month lockdown and a further three months with partial lifting of restrictions; however, the impact will depend upon the actual timing of these measures.

On 7th May 2020 the Bank of England (BoE) published its Monetary Policy Report and Interim Financial Stability Report assessing the UK economy and financial system's resilience to the impact of COVID-19. The BoE, like the OBR, recognises the reduction in jobs and income caused by COVID-19 and responds by keeping interest rates low to support households and businesses, and by helping banks to expand lending.



Notes to the regulatory accounts (continued)

8. Long-term viability statement (continued)

Our own COVID-19 impact modelling has been informed by these reports as well as by a more focused exercise commissioned by Water UK, specific to the water industry in England and Wales, which envisages two key scenarios:

- 1) Shortened peak: following an initial peak in April 2020, successful implementation of non-pharmaceutical interventions (NPIs) including testing, contact tracing, quarantine of cases and social distancing dampen the spread until a vaccine is available in 12 to 18 months' time. Antibody testing may enable a proportion of the population with immunity to return to the workforce. In this scenario, the estimated impact on the economy is a 4% drop in 2020–21 GDP, with unemployment peaking at 7% during 2020–21 and a period of some 18 months for the economy to recover.
- 2) Longer peak: weaker adoption of NPIs leads to a more prolonged peak in cases over summer 2020 (May to June). Variability in the success of the implementation of NPIs leads to ongoing but smaller peaks in the disease until the development of a vaccine in 12 to 18 months' time. In this scenario, the estimated impact on the economy is an 8% drop in 2020–21 GDP, with unemployment peaking at 8% during 2020–21 and a period of some two and half years for the economy to recover.

The biggest risks to revenues are in 2020–21: a decrease in non-household demand during lockdown and subsequent ongoing social distancing restrictions could have an adverse revenue impact of between £9 million (5% of non-household revenues) and £14 million (8%). However, this would be offset by increases in household revenues of £7 to £10 million and the net impact on revenues would be relatively small. The most difficult to risk to quantify is the impact of business failures i.e. those organisations which may not restart after lockdown is lifted. We have assumed a wide range of between 4,000 businesses (10% of closed businesses) and 18,000 (45%). This could result in a revenue loss of between £5 million and £17 million.

We expect to incur cash costs of around £5 million (predominantly PPE) during 2020–21, and have assumed that there will be some ongoing costs in future years of some £3 million per annum. Our cost base will also be impacted by a higher level of bad and doubtful debts: by examining historical data, we have established a correlation between our bad debt charge and levels of unemployment, albeit there has been a two-year lag between changes in unemployment levels and their impact on the charge. We have prudently assumed that, in light of the scale of the expected increase in unemployment in this recession, increases in unemployment will have an immediate impact on cash collection and the bad debt charge. The OBR estimates that unemployment rate will rise from 3.8% in 2019–20 to 7.3% in 2020–21, fall to 6.0% in 2021–22 and fall further to 4.5% in 2022–23. Our scenarios assume that these forecasts could be 1% lower or 2% higher. We therefore estimate that in the most severe downside scenario the bad debt charge in 2020–21 could be as high as £39 million compared our 2020 plan forecast of £19 million, as high as £34 million in 2021–22 (2020 plan: £18 million) and as high as £28 million in 2022–23 (2020 plan: £17 million).



Notes to the regulatory accounts (continued)

8. Long-term viability statement (continued)

In either of these scenarios we would experience a significant drop in revenues and an increase in costs, with high levels of unemployment being likely to impact on our collections performance over the next 12 to 24 months; we are nevertheless well-placed to absorb the impact of these financial stresses and will retain our strong liquidity position. It is also important to note that revenue lost in 2020–21 will be recoverable under regulatory mechanisms in 2022–23. Reduced cash flows would impact on our key financial metrics, in particular interest cover ratios. However, in the most severe downside scenario, gearing and interest covers retain significant headroom within the trigger levels specified in our borrowing covenants; and while the reduced cash flows weaken our financial metrics, they remain within rating agencies' guidance for our current ratings.

OUTLOOK

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, and it considers that these are appropriate and do not generate any sign of significant threats to the Group's viability over the next 10 years.

We expect COVID-19 to have a material adverse impact on our cash flows during 2020–21 and it is likely that a related economic recession will continue to impact on our cash flows for several years. However, the Board also has regard to the Group's strong financial position, with gearing in line with its target of 60% and strong liquidity. Our current liquidity position is very strong with cash on deposit and loan facilities totalling £837 million, a large amount resulting from a £500 million bond issue in February 2020. Some £670 million of cash is held on short-term deposits (35 days maximum) giving us easy access to a high level of liquidity.

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; we have relatively small refinancing needs after April 2021 (some £200 million in 2023–24 and 2024–25) and as bond markets currently remain active we do not currently envisage any funding risk. We currently expect 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 low level of commercial activity 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.



Notes to the regulatory accounts (continued)

8. Long-term viability statement (continued)

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 2020 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 inconsistencies with the financial statements set out on pages 166 to 208; none have been identified (see audit opinion on pages 158 to 164).

CONCLUSION

The Board considers that the risk management and forecasting controls in place are robust and that the 2020 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.



COMPANY PERFORMANCE AND DIRECTION STATEMENT 2019-20

Our commitment is to our customers, communities and wider stakeholders, for the long term.

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

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 2020-21
- 6. How we balance the relationship between delivering our services and rewarding Executives

1. Company Purpose

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 well-being 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 statements on our long term strategy, Welsh Water 2050, and our business plan for the period 2020-25.

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.



COMPANY PERFORMANCE AND DIRECTION STATEMENT 2019-20 (continued)

2. Our Longer Term Strategy

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 feed back 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:

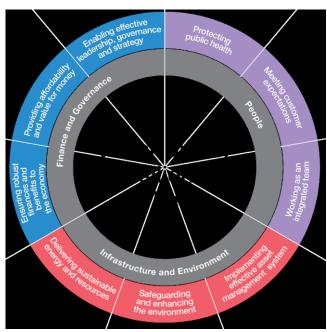
- Over 20,000 customer responses to our survey, through an innovative variety of digital and face to face methods;
- Detailed and ongoing input from customers through our online community, a range of customer focus groups and our Youth Board;
- · A very successful Stakeholder launch event, and another event involving around 50 of the Members of Glas Cymru; and
- · 17 detailed responses from Stakeholder Groups and other interested parties.

We worked closely with Arup and Cardiff University to study resilient cities across the world and to formulate our 18 strategic responses to the long term challenges, within the framework provided by the Wellbeing of Future Generations Act 2003.

We identified 8 foreseeable future trends which presented challenges and opportunities:

- Demographic change
- Climate Change
- Change in customer expectations
- Changes to the structure of the economy
- Environmental change
- Protecting essential infrastructure
- Policy and Regulatory change
- Protecting Public health

In response to these challenges, we developed our resilience framework which set out the key elements of our strategic plan.





COMPANY PERFORMANCE AND DIRECTION STATEMENT 2019-20 (continued)

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 which is an opportunity to revisit and update the conclusions we reached.

Our detailed business plan for the next 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) will be 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 are based on the regulatory settlement in the form of five year asset investment plans from Ofwat as our economic regulator. For 2019-20, the Annual Business Plan was based on the final year of the Final Determination of business plans by Ofwat for the AMP (Asset Management Plan) period 2015-20. In some cases, our internal business plan targets for the year were more stretching than the Ofwat Final Determination targets from the PR14 process.

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 particular 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.
 - For 2020-21, we have committed a further £11m in financial support for those customers who struggle to pay their water bills.
- Our Communities we have completed our pilot Water Resilient Community project, aiming to leave a positive lasting legacy in areas where we are doing major work, in the Rhondda Fach. We reached 2,000 children with lessons on the water cycle, as well as lessons on safety around reservoirs, water efficiency and how we dispose of waste safely. We were also able to save local customers £120,000 through promotion of our social tariffs, working in partnership with local groups to change the way we do things in order to benefit our customers.



COMPANY PERFORMANCE AND DIRECTION STATEMENT 2019-20 (continued)

Our Community Fund has provided support for more than 120 locally-based projects this year, with funding of up to £1,000 per project. Our Colleague fund also supports colleagues in their own fundraising efforts in the community.

As part of our response to COVID-19, we have doubled the size of the Community Fund to target immediate support to communities through partnering with Business in the Community Wales, the Community Foundation Wales, and the Trussell Trust.

- Our People As of 31 March 2020, we employed 3,514 people, making us on the biggest employers in Wales. Our success is fundamentally dependent upon our highly engaged and motivated people, and we are 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. During 2015-20 we have worked with our Alliance Partners for capital developments, and begun to develop Network Alliance which include key performance indicators that are closely aligned with our performance goals. Our Water Network Alliance combines the traditional repair and maintenance of our clean water pipes with long term capital investment including the laying of new water pipes in support of new developments. This approach provides greater integration with Welsh Water through aligned values and objectives, targeted improvements in customer experience and enhanced efficiency in the delivery of the services. 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 2015-20 we have developed 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.
- 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 20 – 31 of our Annual Report and Accounts 2019-20

https://www.dwrcymru.com/en/Library/Group-Annual-Report-and-Accounts.aspx

Our Section 172(1) Statement on pages 24 -25 of the Annual Report and Accounts sets out how we the Board balances the needs and interests of different stakeholders in its decisions making. Examples of where the interests of different stakeholders have had to be weighed include: where the Board has had to consider the desirability of longer term investment to secure customer service levels, against the increased cost and impact on bills in the short term, where we know a significant number of our customers struggle to pay our bills. The Customer Challenge Group ensures that the voice of customers are taken into account, through the input of the customer representative organisations who are members of it. The views of the Independent Environmental Advisory



COMPANY PERFORMANCE AND DIRECTION STATEMENT 2019-20 (continued)

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 13 occasions during 2019-20, including additional meetings to review and agree the company's inputs into the PR19 price review process. At each 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 6 occasions in 2019-20 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.

During 2019-20, the Board has challenged the Executive team on matters including the following:

- the speed and delivery of internal business review costs saving plans across the business;
- the progress and delivery of zonal studies programmes aimed to reduce trunk main bursts and improve acceptability of water quality to customers;
- costs management of capital projects;
- delivery of dam safety "pipes in dams" projects in a safe manner;
- the take-up of our social tariff support for customers struggling to pay their bills and communication with customers in debt; and
- the steps taken to pursue customers who choose not to pay their bills.

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 actions plans put in place to assist in monitoring improvement.

5. How we have performed

Performance highlights and challenges:

For 2019-20, we have reported the following:

- we achieved our regulatory target for reducing leakage from our pipes for the 5th consecutive year
- we were upper quartile on measures of service levels for Developer Services customers for the 5th consecutive year
- we achieved our target for reducing internal flooding incidents



COMPANY PERFORMANCE AND DIRECTION STATEMENT 2019-20 (continued)

- we saw a reduction of 26% in complaints from household customers
- we met our target for reductions in numbers of properties being subject to internal floods
- we exceeded our target for measurement of customer trust (87% against a target of 85%)

We did not meet our 5-year target for reductions in pollution incidents, however, nor our targets for customer acceptability for quality of water and reliability of supply (number of minutes lost). Our performance was influenced by a number of high impacting burst mains during the year such as, during November in the Hereford area when a burst occurred on a 15-inch trunk main which affected the reliability of supply for almost 7,300 households. Also, burst mains (or increased customer demand during hot weather) often causes issues through changes in the velocity of water flows which can loosen iron sediments from within the pipes, resulting in discoloured water which impacts on our performance for customer acceptability for quality of water. We know that we have to work harder in these areas and will be investing further to improve our performance in AMP7 (2020-25).

Full details of our performance are set out on pages 42 – 59 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 is intended to be simple and transparent and clearly links pay to performance. Remuneration includes a significant element of variable pay, with targets that our 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 an annual variable pay scheme, where awards are based on a range of measure relating to Customer, Compliance and Costs measures, a Strategic Focus element and Personal Objectives
- Long Term Variable Pay a three year rolling scheme based on performance against Customer Value (the creation of increases in reserves and transfers to Customer Reserves) and Customer Service (calculated on a three-year rolling average of performance in relation to Ofwat's Service Incentive Mechanism (SIM). For the final year of the scheme in 2019-20, the SIM measure was replaced with Ofwat's new C-MeX measure of customer satisfaction).

Further details of our Directors' pay policy and implementation are set out in the Directors' Remuneration Report (see pages 130 – 153 of the Annual Report and Accounts). This includes details of the proposed Executive Pay Policy for AMP7, which will be put to Glas Members for approval at the 2020 AGM.



COMPANY PERFORMANCE AND DIRECTION STATEMENT 2019-20 (continued)

Statement Approval

At the Board meeting on 2ndJuly 2020, the Board approved this statement on our direction and performance, and authorised the Chair to sign this statement.

Signed on behalf of the Board of Dŵr Cymru Cyfyngedig

Alastair Lyons

Chair of the Board

2 July 2020



RING-FENCING CERTIFICATE

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 I17 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, for at least the next twelve months, the Regulated Activities (including the investment programme necessary to fulfil the Company's obligations under the Appointment); and
- b) the Company will, for at least the next twelve months, have available to it management resources and systems of planning and control which are sufficient to enable it to carry out those functions.

The Directors also confirm 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.

A statement of the main factors that have led to the conclusion that resources are sufficient can be found at Appendix 1.



RING-FENCING CERTIFICATE (continued)

Approved on behalf of the Board of Dŵr Cymru Cyfyngedig,

Mauri Myco

Alastair Lyons

Chairman, Dŵr Cymru Cyfyngedig

2 July 2020

Sections I24 and I25 of Licence Condition I requires our independent auditors to produce a report that sets out:

- whether they are aware of any inconsistencies between the Director's Certificate and any of the accounting records; and
- the extent to which the Company has during the preceding 12 months complied with its obligations under Licence Condition I13.3 and I14.

A copy of the auditor's report can be found in our 2019-2020 Annual Performance Report available at www.dwrcymru.com.



RING-FENCING CERTIFICATE (continued)

APPENDIX 1

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 current liquidity position is very strong with cash on deposit and loan facilities totalling £837 million, a large amount resulting from a £500 million bond issue in February 2020.									
		The Group is in a strong financial position as at 31 March 2020 with gearing remaining on track at 60%.									
•	Performance against Final Determinations (FDs) set at the last price review	The 2019-2020 FD targets for most of our performance measures have been met. However, a net penalty of £3.1385m over this AMP period (2015-2020) has been reported with the Company missing FD target on some measures such as Mean Zonal Compliance, Customer Acceptability and Reliability of Supply.									
•	Credit related factors	As at 31 March 2020, the Group had committed undrawn borrowing facilities of £170m and cash and cash equivalents (excluding debt service payments account) of £657m.									
		There is also a £10m overdraft facility renewable on an annual basis. As at 31 March 2020 there was also a special liquidity facility of £135m.									
		Glas Cymru has 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 investment programme, both aimed at achieving improved performance and cost efficiency.									





AREA	MAIN FACTORS									
	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.									
Management resources Management skills, experience and relevant qualifications	The challenging PR19 Final Determination means that, once the Company is through the current period of unprecedented difficulty, the CEO'S immediate priority will be to implement the plan for 2020-2025. This will mean being tough with efficiency – the potential for big changes is in the world of innovation and working 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.									





AREA	MAIN FACTORS									
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 18: becoming an 'Employer of Choice'.									
	The workforce is surveyed every year about how they view the Company and their role. The high level 'employee engagement' score is an indicator of the emotional connection of employees to the organisation. In the last survey in November 2019, the employee engagement score was 84%, and of those, 85% confirmed that they believe in Welsh Water and what it stands for.									
	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 telephone conference calls 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 induction and other training and development 	All operational roles within the business have a dedicated training plan which incorporates a combination of elearning modules and 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.									
	At 31 March 2020, the Group had 3,514 employees. 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.									





AREA	MAIN FACTORS
	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 was delighted to win the award for Best Apprenticeship Scheme this year.
	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.
 Process for ensuring diversity of perspectives 	Regular employee "roadshows" take place. 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. It was therefore pleasing to achieve accreditation as a Disability Confident Employer this year.
	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.
Board or management activities, reports or	During the year the Board reviewed succession for senior management roles, in particular the appointment of the new CEO and CFO, and a new non-executive director.
statements	The Board also reviewed compliance with the 2018 UK Corporate Governance Code, in particular the workforce engagement provisions, and 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.





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AREA	MAIN FACTORS
	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 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 is reported to the Board via four formal committees; the Audit Committee; the Remuneration Committee; the Nominations Committee; and the Quality and Environment 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 business assurance 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 has responsibility for setting the risk appetite for the business and ensuring the adequacy and efficacy of the Group's systems of internal controls and risk management.





AREA	MAIN FACTORS								
	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.								
	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 continually 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 Business Assurance, updates at each meeting on progress against the internal audit plan, as well as other periodic quality reporting.								
	The Business Assurance 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 Business Assurance 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.								





AREA	MAIN FACTORS									
 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 cybersecurity, and on the progress of programmes to improve compliance and internal controls across the business, including compliance with ISO 27001 and implementation of an Information Security Management System.									
 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: Antibribery and corruption; Anti-fraud, Conflict of Interests; Gifts and Hospitality, and Anti-bullying and Harassment.									
	Since April 2015 the Company has operated 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 meeting with the Head of Business Assurance 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 2020-2021.									
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.									





AREA	MAIN FACTORS
	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 digital 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.
 Policies to encourage an integrated approached 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 polices are reviewed and approved annually by the Chief Executive and promoted within the business.
Planning systems	Investments are planned over five-year periods. The long-term plan sits alongside the five-year investment plan for 2020-2025, which sets out what the Company intends to do as first steps towards realising this vision. To gauge what customers thought of these plans, over the last 3 years the Company has been working with and listening to customers about the plans for the future – and 40,000 customers had a direct say on how the Company runs its water and wastewater services.
	External assurance has been received on the financing model used to generate the 2020 plan and stress scenarios via an "agreed-upon procedures" exercise, with no exceptions noted.



AREA	MAIN FACTORS								
Assets maintenance/insurance factors	The Company has returned over £440 million in value to customers since 2001 through lower bills, additional financial support for those struggling to pay, and accelerated investment to improve services to customers.								
	Record levels of capital investment (over £6bn since 2001).								
	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 £2.3 billion in capital investment.								
	In June 2019 the Company announced an extra £47m of investment over the next year (2018: £40m). The investment was confirmed as part of the "Return of Value", which sees investment going directly back into water and wastewater services for the benefit of customers.								
Contracting									
Position/status of key contracts in place	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.								
	There are contract arrangements in place which will ensure a smooth transition into the new regulatory period. 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.								
Compliance with licence provision on cross-subsidies between the Appointee and any Associated Company	Confirmation of compliance with licence provision on cross-subsidies between the Appointee and any Associated Company is contained within the Risk and Compliance Statement.								





AREA	MAIN FACTORS
(Condition I)	
 Guarantees or Cross-Default Obligations 	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 the current uncertainties due to the global spread of the COVID-19 pandemic, and while uncertainty about the immediate outlook has increased sharply, the Audit Committee concluded that the increased 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.



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 2020 Annual report and Accounts of Glas Cymru Holdings Cyfyngedig.

GLAS CYMRU

REMUNERATION COMMITTEE REPORT – EXTRACT TAKEN FROM THE ANNUAL REPORT AND ACCOUNTS 2019-2020

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

REMUNERATION

HOW WE APPLY THE PRINCIPLES OF THE CODE

- We have a Remuneration Committee whose report is set out in pages 130 to 153. The Committee is responsible for setting the remuneration policy for the Executive Directors and takes account of pay policy across the Company.
- Remuneration is designed to promote the long-term success of the Company it is aligned with the Company's purpose and values and is linked to the successful delivery of the Company's strategy.
- Performance-related elements are transparent, stretching and rigorously applied.
- There is a formal and transparent procedure for developing policy on Executive remuneration of individual Directors. The Glas Members approve the policy which sets the framework within which the Committee takes decisions on remuneration.
- Directors exercise independent judgement and discretion when authorising remuneration outcomes. No Director is involved in deciding his or her own remuneration.
- The Remuneration Committee receives advice from external consultants as required.

REMUNERATION COMMITTEE REPORT

INTRODUCTION: HEADLINES AND COMMITTEE CHAIR'S LETTER

"We have continued to focus on meeting the strategic long-term aims of the group."

Anna Walker

Chair of the Remuneration Committee



REMUNERATION COMMITTEE REPORT (continued)

FOCUS AREAS IN 2019–20

During the year, the Committee's activities have included:

- reviewing remuneration for Executive Directors and overseeing policy for the wider workforce, taking into account the Remuneration Principles (see page 134) and the views of wider stakeholders.
- following a benchmarking exercise which applied a 15% discount to the CEO remuneration to take into account the Company's not-for-shareholder structure, proposing an increase in the LTVP opportunity for the Chief Executive's remuneration, which was approved at the 2019 AGM.
- approving remuneration for members of the restructured Dŵr Cymru Executive team.
- appointing new Remuneration Consultants.
- agreeing the terms of the AMP7 Remuneration Policy for Executive Directors, taking into account feedback from Glas Members and the economic and geographic context in which the Group is operating.

MEMBERSHIP AND MEETING ATTENDANCE

Member	Attendance 2019–20
Anna Walker (Chair)	5/6
Alastair Lyons	6/6
Joanne Kenrick*	4/6
Menna Richards**	2/6
John Warren	6/6

^{*} Joanne Kenrick became a member of the Remuneration Committee from September 2019

The Company Secretary acts as Secretary of the Committee. By invitation of the Committee Chair, other individuals such as the Chief Executive Officer, the People and Change Director, other senior managers or external advisers may attend for all or part of any meeting, as and when appropriate. The Committee Chair had been a member of the Committee for three years prior to being appointed Committee Chair.

^{**} Menna Richards stepped down from the Committee in June 2019



REMUNERATION COMMITTEE REPORT (continued)

PRINCIPAL RESPONSIBILITIES

The role of the Committee is to recommend to the Board and to Glas Members for approval, and to keep under review, the Remuneration Policy (the "Policy") as it applies across the business as a whole. The Remuneration Committee also determines the Executive Directors' policy and sets remuneration for the Chair of the Board, the Executive Directors and the Executive Team, which includes the Company Secretary. In exercising this responsibility, the Committee has oversight of workforce remuneration policy and related policies, and of the alignment of incentives and rewards with the Company's purpose and values, taking these into account when setting the Policy.

ACTIVITIES DURING THE YEAR

This year the Remuneration Committee has met six times and has appointed new remuneration advisers, Deloitte LLP part way through the year, following a tender.

We have reviewed Executive pay implementing a 15% discount to the benchmark as the Committee agreed in 2018, to reflect our not-for-shareholder structure. We have also established a proposed Remuneration Policy for AMP7 which will be put to the Glas Members at the 2020 AGM. The new Policy links variable pay to stretching targets focused on customer service and our key Performance Commitments for AMP7, as well as to the Company's longer term strategic goals, and includes a wide discretion for the Committee to vary awards for variable pay where appropriate.

The fees for the Chair and Non-Executive Directors have been frozen for the second year to reflect the 15% discount to the benchmark.

AT A GLANCE

PERFORMANCE HIGHLIGHTS IN 2019–20

In 2019–20 the Company achieved first place in relation to Ofwat's shadow reporting of the new C-MeX measure of customer service, and has continued to increase scores for customer trust, which are the highest of any water company in England and Wales. Whilst we still need to reduce instances of flooding to customer properties and to improve water quality compliance, we have maintained progress on other targets, including reducing numbers of pollution incidents and meeting our leakage reduction and treatment works compliance targets for water. The numbers of customers who genuinely struggle to pay their water bills who have been assisted through our social tariffs programme and other financial support has increased to some 130,000.

This has been achieved against a background of dealing with Storms Ciara and Dennis (see detail of our response to these events on page 40) and ensuring we can continue to provide our essential services during the COVID-19 pandemic.

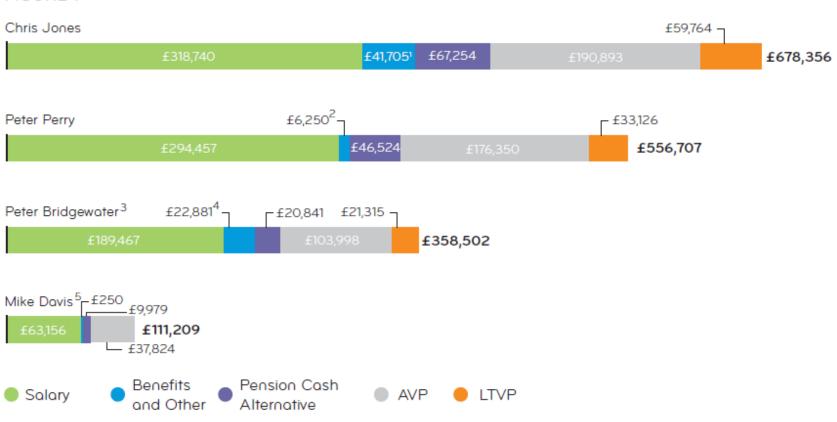
EXECUTIVE PAY IN 2019–20 (EXCLUDING PENSION ACCRUALS)

The table below sets out the Directors' emoluments in respect of the year ended 31 March 2020. Overall levels of pay for the Chief Executive Officer and Managing Director of the Regulated Business decreased from the previous year, largely as a result of a decrease in the award for the LTVP element. The total remuneration figures shown in this table differ from those in the single figure remuneration table (figure 2 on page 136) as they do not include pension accruals.



REMUNERATION COMMITTEE REPORT (continued)

FIGURE 1



- 1. This figure includes private health insurance and payment for annual leave accrued but not taken as at 31 March 2020
- This represents a £5,000 per annum car allowance
- 3. Peter Bridgewater stepped down from the Board and the role of Finance and Commercial Director on 31 December 2019
- This represents a £1,000 per month travel allowance (paid between 1 April 2019 and 31 December 2019) and payment for annual leave accrued but not taken as at 31 December 2019.
- 5. Mike Davis was appointed to the Board in the role of Chief Financial Officer on 1 January 2020



REMUNERATION COMMITTEE REPORT (continued)

REMUNERATION OVERVIEW

Dear Glas Members

On behalf of the Board, I am pleased to present the Remuneration Committee's report for 2020. In my final year as Chair of the Committee, the Committee has met six times and we have appointed new remuneration consultants (Deloitte LLP) following a tender process.

STRUCTURE OF THIS REPORT

This Report is split into sections:

(1) an Annual Report on Remuneration describing:

- how the Remuneration Policy was implemented during 2019–20 (Part 1 pages 135 to 140); and
- decisions taken for 2020–21 (Part 3 pages 146 to 149)

This will be put to an advisory Member vote at the 2020 AGM.

(2) a Report on Remuneration Policy (Part 2 - pages 141 to 145). This sets out the proposed Executive Remuneration Policy for 2020–25 and the way that this is planned to be implemented in 2020–21.

Members will be asked to approve the AMP7 Policy at the 2020 AGM for the five-year period 2020–25: the policy is very similar to the previous one. The main changes are set out below and in the table beginning on page 142.

BASIS FOR COMMITTEE'S DECISION-MAKING

In taking its decisions, the Committee follows the Objectives of Ofwat's Guidance on Leadership, Transparency and Governance, and the requirements of the FRC's UK Corporate Governance Code (the Code)¹. It also takes into account the Remuneration Principles (see text box on page 134) which are regularly discussed with Glas Members, and which will be reviewed again at the 2020 AGM with proposed amendments to take into account recent changes to the Code. In our decisions during 2019–20 we have continued to apply the 15% discount to the water sector benchmark we used in reviewing remuneration for both Executive and Non-Executive Directors in 2018-19. The 15% discount reflects our not-for-shareholder status. As a result, fees for the Chair have been frozen for the second year as have the fees for Non-Executive Directors (whose fees are reviewed by the Chair and Executive Directors) Executive Directors received a 2% inflationary salary increase in line with the rest of the workforce.

CHANGES TO THE EXECUTIVE DIRECTORS

The Committee has set the salaries for the new Executive Directors who have taken up their roles this year. Following Peter Bridgewater's departure as Group Finance and Commercial Director at the end of 2019, Mike Davis, previously our Director of Strategy and Regulation, was appointed to the role of



REMUNERATION COMMITTEE REPORT (continued)

Chief Financial Officer with effect from 1 January 2020. The Executive team was restructured from 1 January 2020 to work with the Group's new Chief Executive Officer, Peter Perry, from 1 April 2020.

NOTE:

1. In preparing the Annual Remuneration Report, the Committee has taken into account Ofwat's guidance on transparency in its Regulatory Accounting Guideline 3.11, including the requirement to include a note which describes the link between Directors' pay and standards of performance as required by Section 35A of the Water Industry Act 1991 (as amended by section 50 of the Water Act 2003) (see pages 141 to 151).

REMUNERATION IN 2019–20

The details of Directors' remuneration in 2019-20 are set out on pages 135 to 140.

The latter part of 2019–20 has seen the Company dealing with the impacts of Storms Ciara and Dennis, which caused a significant operational impact. Subsequently the Company has also had to deal with the huge challenge of the COVID-19 pandemic. Whilst the events of the year presented the Executive Directors with compliance and costs challenges, which were reflected in their achievement against these elements of the AVP, overall they led the Company exceptionally through these difficult conditions, hence the Committee awarding the maximum award for their achievement against their personal objectives. The Colleague Reward Scheme was also awarded at its maximum of £1,500 to reflect the huge commitment of front line colleagues.

REMUNERATION IN 2020–2021

The details of decisions taken by the Committee with regard to Directors' remuneration in 2020–21 are set out on pages 146 to 149).

AMP7 EXECUTIVE REMUNERATION POLICY

Part 2 of this Report (pages 141 to 145) sets out the proposed Executive Director Remuneration Policy for 2020–25. The new Policy maintains many of the key features of the AMP6 Policy. The major change relates to the performance measures which reflect the business targets set in Ofwat's stretching Final Determination for the Company for AMP7 and the long-term goals agreed for the company following public consultation on Welsh Water 2050.



REMUNERATION COMMITTEE REPORT (continued)

SAME AS AMP6?

- WHAT IS THE The key elements of remuneration (base salary, AVP, LTVP, pension cash allowance, health insurance benefit) all remain
 - Targets are still stretching, and focused on achieving improved operational performance and excellent customer service
 - The maximum opportunities for AVP (100% salary per annum) and LTVP (100% of salary for CEO, 60% for the Chief Financial Officer, per annum) have not changed and remain subject to meeting stretching "threshold", "target" and "maximum" measures
 - Remuneration continues to balance the key aspects of our corporate structure, ethos and values against the need to attract and retain key individuals
 - · Remuneration Policy for Executive Directors is aligned with the structure of pay for the wider workforce

WHAT HAS CHANGED?

- The Measures for AVP are linked to a larger number (14) of the key measures (related either to Customer Service or Operational Performance) against which penalties/rewards will be imposed/paid by Ofwat for company performance during the five-year AMP7 period
- The "Personal Objectives" element of AVP has been replaced with "Strategic Goals" which are selected by the Committee as areas of focus for each year of the scheme
- LTVP is a five-year scheme that measures performance across the entire 5 years of AMP7 (rather than the three-year rolling scheme for AMP6). It pays out on account every year, but will not pay any amount for performance above "target", holding any such sums on account against future underperformance until the final, fifth year
- Targets for LTVP are set at 50% for Totex (overall costs efficiency and spend over the AMP7 period 2020–25) and 50% for Performance Development linked to Welsh Water 2050 long-term goals
- Pensions benefits are aligned across the Company with everyone receiving the same employer contribution, in line with best practice
- The Committee has a wider discretion to vary award in both directions, to avoid formulaic outcomes, where these are unrepresentative of the overall performance of the Company



REMUNERATION COMMITTEE REPORT (continued)

COVID-19

The Glas Board is very conscious of the enormous impact of Covid 19 across Wales. At its Board meeting on 30 April 2020, members of the Board requested that their respective salaries and fees be reduced by 20% for the months of May, June and July 2020 to contribute to the Company's Community Fund. The Fund is providing immediate assistance to local communities most affected by the pandemic and is supporting Business in the Community Wales, the Community Foundation Wales and the Trussell Trust.

In conclusion, the Remuneration Committee remains satisfied that our decisions have incentivised strong performance whilst taking account of our not-for-shareholder status and not encouraging inappropriate risk taking by the Executive Directors, and that the policy we propose for 2020–25 will continue to achieve these objectives. The inclusion of short and long-term variable elements of pay also ensures that remuneration is sufficiently competitive to attract and retain high calibre employees, whilst aligning remuneration policy with the long-term success of Welsh Water and the interests of its customers.

Anna Walker CB

Chair of the Remuneration Committee

5 June 2020



REMUNERATION COMMITTEE REPORT (continued)

REMUNERATION PRINCIPLES

The Chair of the Committee regularly discusses with Glas Members the key Principles that apply to the Committee's work. These are set out below, including the final Principle added by the Committee in 2019.

Proposed amendments to the Principles, to be discussed with Members at the 2020 AGM, are shown highlighted below.

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

THE ROLE OF GLAS MEMBERS

Glas Members perform an essential governance function for the Group in the approval of remuneration policies.

The 2019–20 Annual Report on Remuneration, setting out how the policy was implemented in 2019–20 and decisions taken in 2020–21, will be subject to an advisory vote by Members at the forthcoming 2020 AGM. The vote is "advisory" because it doesn't change the decisions taken but the Committee will take it into account in its future decision-making.

Members approve the Remuneration Policy of the Board by 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 current Remuneration Policy at the 2015 and



REMUNERATION COMMITTEE REPORT (continued)

2018 AGM, and reapproved it with a change to the LTVP scheme for the CEO, at the 2019 AGM. At this year's AGM, the Members will be asked to approve the Remuneration Policy for 2020–25 (AMP7) (as summarised in Part 2 of this Remuneration Report, pages 141 to 145).

For details of voting at previous AGMs, please see page 151.

The Terms of Reference of the Committee are available on our website: dwrcymru.com/AR2020-terms

PART 1: IMPLEMENTATION IN 2019–20

This section sets out the details of the Executive Directors' and Non-Executive Directors' remuneration for 2019–20. It explains how the Remuneration Policy has been implemented in 2019–20. As well as disclosing remuneration figures for the Executive Directors, it also includes details on performance and the resulting levels of AVPS and LTVPS payout. Certain disclosures of the detailed information about the Executive Directors' remuneration below have been audited by the Group's independent Auditors, KPMG LLP (as indicated against the relevant tables).

APPLICATION OF REMUNERATION POLICY AMP6 – SUMMARY

While overall performance in 2019-20 has been good, awards under the AVP and LTVP scheme are lower than in 2018-19.

• Base salaries were increased by 2.1% for the Executive Directors in April 2019. This was the same as the pay award for the rest of the workforce, which had been agreed with our recognised Trade Unions.

AVPS

- Under the AVPS, up to 100% of salary can be earned in any year (maximum 20% of salary for each element). For 2019–20, awards have been made equivalent to:
- 14.9% of base salary for performance against the Customer element,
- 11% for performance against the Compliance element;
- 2.6% for the Costs element;
- 11.3% against the Strategic Annual Focus element;
- between 15% and 20% against Personal objectives.
- This gives a total award for AVPS of between 54.9% and 59.9% of base salary. This compares with total awards of 62.3% and 67.3% in 2018–19, and includes pro-rata awards for Peter Bridgewater, who left the business at the end of December 2019, and Mike Davis, who became an Executive Director from 1 January 2020.



REMUNERATION COMMITTEE REPORT (continued)

LTVPS

- Under the LTVPS, the overall maximum that could be awarded in the AMP6 five-year regulatory period is 300% of salary (ie 60% per annum). From 2019–20, in the case of the Chief Executive Officer, the maximum award is 100% per annum.
- LTVPS awards for AMP6 were based on Customer Value (increases in reserves and transfers to Customer Reserves) and Customer Service (calculated on a three-year rolling average of performance).
- For the Customer Service element of LTVPS targets, measured on a rolling three-year basis Ofwat no longer uses the SIM measurement and has moved to a new C-MeX measure (see Glossary on page 210 for definition) which is a more wide-ranging measure of customer views. A provisional award for the Customer Service element for 2019–20 has been based on the new C-MeX measure, to be confirmed when the Ofwat C-MeX league table for 2019–20 is published later in the summer. As Welsh Water has been rated 1st in the sector under the new C-MeX measure, a provisional award of 18.8%/11.3% of salary has been awarded for this objective, calculated on the rolling three-year basis.
- For the Customer Value element of the scheme measured for the year to 31 March 2020, a payment of 0% of salary has been awarded.
- The Committee also concluded that the Chair of the Board's fee should also be subject to the 15% discount against the benchmark, and this was implemented in 2019–20, so that the Chair's fee was frozen at the previous year's amount. The Chair of the Board and the Executive Directors reviewed the fees paid to Non-Executive Directors and concluded it was appropriate to freeze the Non-Executive Director fee.



REMUNERATION COMMITTEE REPORT (continued)

FIGURE 2
PAYMENTS AND BENEFITS EARNED BY DIRECTORS IN 2019–2020 (AUDITED)

											Per	ision Cash		Pension		
	9	Salary/Fees		Benefits ¹		Other		AVPS ³		LTVPS ⁴	Α	lternative		Accruals ⁵		Total
	2018-19	2019-20	2018-19	2019-20	2018-19	2019-20	2018-19	2019-20	2018-19	2019-20	2018-19	2019-20	2018-19	2019-20	2018-19	2019-20
	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
Chris Jones	306,186	318,740	1,250	1,250	_	40,4552	206,063	190,893	45,928	59,764	64,605	67,254	(16,574)	7,039	607,458	685,396
Peter Perry	288,400	294,457	1,250	1,250	5,000	5,0006	194,093	176,350	43,260	33,126	45,567	46,524	243,927	(10,295)	821,497	546,412
Peter																
Bridgewater7	247,427	189,467	1,250	1,250	12,000	21,6318	154,147	103,998	37,114	21,315	27,217	20,841	_	_	479,155	358,502
Mike Davis9	_	63,156	_	250	_	_	_	37,824	_			9,979	_	_	_	111,209
Alastair Lyons	221,900	221,900	_	_	_		_	_	_	_				_	221,900	221,900
Menna																
Richards	72,950	72,950	_	_	_		_	_	_	_				_	72,950	72,950
Anna Walker	61,650	61,650	_	_	_		_	_	_	_				_	61,650	61,650
John Warren	61,650	61,650	_	_	_		_	_		_				_	61,650	61,650
Graham																
Edwards	61,650	61,650	_	_	_		_	_	_	_				_	61,650	61,650
Joanne																
Kenrick	61,650	61,650	_	_	_		_	_	_	_				_	61,650	61,650
Thomas Crick	61,650	61,650	_	_	_									_	61,650	61,650
Debra Bowen																
Rees10	_	15,413	_	_	_									_	_	15,413
Total	1,445,113	1,484,333	3,750	4,000	17,000	67,086	554,303	509,065	126,302	114,205	137,389	144,598	227,353	(3,256)	2,511,210	2,320,031

- 1. Taxable benefits relate to private health cover.
- 2. This figure represents payment for annual leave accrued but not taken as at 31 March 2020.
- 3. Please see determination of AVPS scheme outcome on page 138. Performance against AVPS targets on 2019–20 resulted in a lower payment than in 2018–19.
- 4. Please see determination of LTVPS outcome on page 139.
- 5. Accrued pension benefits for 2019–20 in respect of the (closed) Defined Benefit pension scheme for Chris Jones and Peter Perry are also disclosed separately in Figure 4.
- 6. This represents a £5,000 per annum car allowance.
- 7. Peter Bridgewater stepped down from the Board and the role of Finance and Commercial Director on 31 December 2019. He received £109,308 redundancy pay based on 5 years' complete service in accordance with the Company's redundancy policy, plus payment in lieu of notice of £146,206 (equal to six months' base salary and benefits) as per the terms of his service agreement and a contribution towards legal fees and outplacement services of £6,500. He was treated as a good leaver for the purposes of the AVPS and LTVPS for 2019-20 and awarded a pro-rata payment under both plans, as detailed above.
- 8. This represents a £1,000 per month travel allowance (paid between 1 April 2019 and 31 December 2019) and payment for annual leave accrued but not taken as at 31 December 2019.
- 9. Mike Davis was appointed to the Board in the role of Chief Financial Officer on 1 January 2020.
- 10. Debra Bowen Rees was appointed to the Board on 1 January 2020.



REMUNERATION COMMITTEE REPORT (continued)

FIGURE 3 EXECUTIVE DIRECTORS' BASE SALARIES

	Effective 1 April
	2019
Chief Executive Officer	£318,740
Managing Director	£294,457
Finance and Commercial Director	£252,623

Notes:

- Chris Jones stepped down from the Chief Executive position on 31 March 2020 but continued as a member of the Board of Directors for a temporary period from 1 April until 15 May 2020, on a lower salary of £300,346.
- Peter Bridgewater stepped down from the Board and the Finance and Commercial Director position on 31 December 2019.
- Mike Davis was appointed to the Board and the Chief Financial Officer position on 1 January 2020. Salary at appointment matched to salary for outgoing Finance and Commercial Director.

FIGURE 4 PENSION BENEFITS

The pension benefits earned by the Chief Executive Officer and Managing Director during the year are shown below (audited).

Pensions 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 which Chris Jones and Peter Perry participate in. From 1 April 2020, Executive Directors receive a pension cash allowance equivalent to 11% of salary less employer NI payments.

				Revalued		Capitalised value	Pension Inpu		
			Capitalised value	capitalised value		of accrued	Member	Amount (net of	
		Accrued pension	of accrued	of accrued	Accrued pension	pension at	contributions	member	
		at	pension at	pension at	at	31 March	paid during the	contributions	
	Normal	31 March 2018	31 March 2018	31 March 2018	31 March 2019	2019	year 2019	2019)	
	Retirement Age	£	£	£	£	£	£	£	
Year ending 31 March 2	019 (re-stated)								
Chris Jones	60	148,824	2,976,480	3,065,774	152,460	3,049,200	_	(16,574)	
Peter Perry	60	154,855	3,097,100	3,190,013	171,697	3,433,940	_	243,927	
Year ending 31 March 2	020								
Chris Jones	60	152,460	3,049,200	3,122,381	156,471	3,129,420	_	7,039	
Peter Perry	60	171,697	3,433,940	3,516,355	175,303 ¹	3,506,060	_	(10,295)	

¹ Peter Perry has a longer period of service with the Group, hence the higher value of his accrued pension.



REMUNERATION COMMITTEE REPORT (continued)

FIGURE 5 AVPS OUTTURN 2019–20

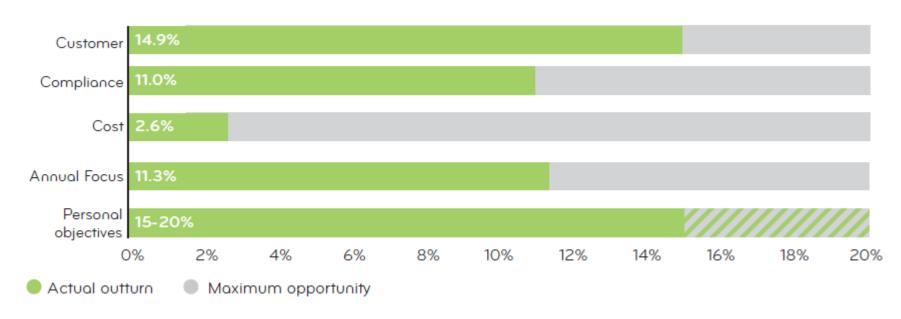
For 2019–20, the Remuneration Committee measured performance against each target as follows in the table below. Performance in 2019–20 resulted in an AVPS award of between 54.9% and 59.9% compared with an award of between 62.3% and 67.3% for the Executive Directors in 2018–19.

Measure	Weighting	Target payouts (% of salary)	Result	% of maximum	
Customer					
 Business Customer 					
Satisfaction					
 Customer Acceptability 		Threshold 5%			
 Reliability of Supply 	20%	Target 12.5%	14.9%	75%	
 Properties Flooded in the 		Stretch 20%			
Year					
 Net Promoter Score 					
 Complaints 					
Compliance					
 Safety of Drinking Water 		Threshold 4%			
 Treating Used Water 	200/	Target 12.5%	11.0%	55%	
 Preventing Pollution 	20%	20% Stretch 20%		55%	
 Leakage 					
 Asset Serviceability 					
Cost		Threshold 4.8%			
 Total Company Totex 	20%	Target 14.4%	2.6%	13%	
Bad Debt		Stretch 20%			
Annual focus		Threshold 4%		_	
 Reliability of Supply 					
 Customer Acceptability 	20%	Target 12% Stretch 20%	11.3%	57%	
 Treating Used Water 	g Used Water		Stretch 20%		
Personal	20%		15–20%	75–100%	
Total	100%				



REMUNERATION COMMITTEE REPORT (continued)

FIGURE 5 AVPS OUTTURN 2019–20



Notes to table:

Personal Objectives: The personal objectives (worth up to 20% of base salary) of the Executive Directors were aligned to the delivery of Welsh Water's key strategic objectives and the delivery of the business plan for 2019–20.

- Chris Jones' primary personal objective was to obtain the best possible outcome for the Company from the PR19 process and to effect a smooth handover to the new CEO. The Committee assessed that Chris Jones had achieved an outstanding performance against his personal objectives and the payout awarded was 20% of salary.
- Peter Bridgewater's primary personal objective was to oversee the production of an agreed Digital Framework and IT Delivery Plan, and a costs reduction plan for 2020–25. The Committee deemed that good progress had been made towards fulfilling both objectives and awarded him 15% of salary pro-rata.
- Peter Perry's primary personal objectives were to lead the overall business change plan for AMP7 and to progress the succession and development plans for his direct reports. The Committee assessed that Peter had achieved an outstanding performance against his primary personal objectives and the payout awarded was 20% of salary.
- Mike Davis' key objectives for his first three months in post were to secure bond funding for AMP7 and to establish his new team structure. The Committee noted that both objectives had been achieved within this three-month period and awarded him 20% of salary, pro-rata for this period.



REMUNERATION COMMITTEE REPORT (continued)

LTVPS OPPORTUNITY

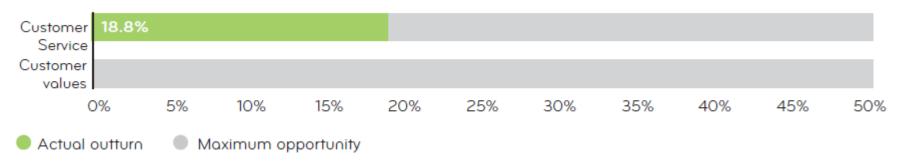
For AMP6, the LTVPS opportunity was linked to performance against two measures:

Customer Service: based on a rolling three-year average of comparative customer service based on Ofwat's SIM (Service Incentive Mechanism) measure of success. Ofwat has moved to a new measure for Customer Service in AMP7 – C-Mex. Performance for 2019-20 has been assessed against C-MeX performance in this "shadow" reporting year; and

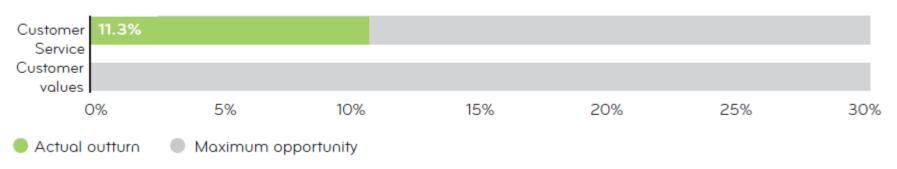
Customer Value: based on actual customer value created (increase in Reserves and transfers to Customer Reserves) at 31 March 2020 compared to targets.

FIGURE 6 LTVPS OUTTURN 2019–20

CHIEF EXECUTIVE



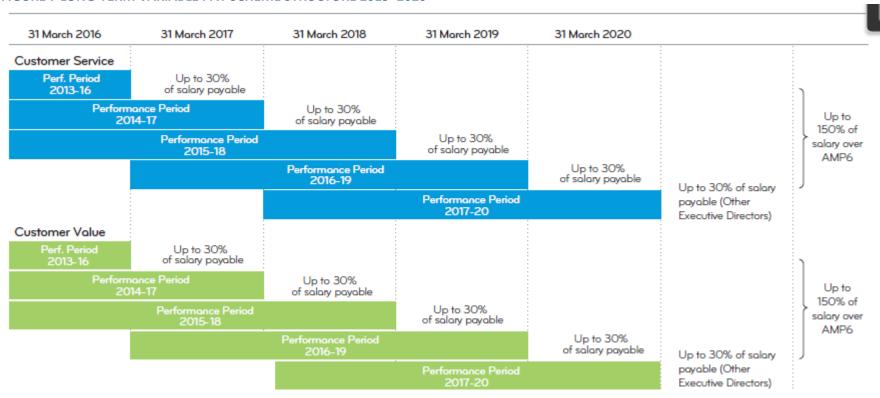
OTHER EXECUTIVE DIRECTORS





REMUNERATION COMMITTEE REPORT (continued)

FIGURE 7 LONG-TERM VARIABLE PAY SCHEME STRUCTURE 2019–2020



For 2019–20 onwards, the maximum potential opportunity for the CEO under the LTVPS increased to 100% of salary per annum.



REMUNERATION COMMITTEE REPORT (continued)

FIGURE 8 OVERALL PAY AND PERFORMANCE (INCLUDING PENSION ACCRUALS)

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total remuneration for Managing Director									
(Nigel Annett)	£677,770	£590,210	£709,890	-	-	-	-		
Total remuneration for Chief Executive (Chris									
Jones)	-	-	£741,569	£973,688	£746,430	£629,102	£678,522	£607,458	£685,396
AVPS award (Nigel Annett)	77.6%	60.6%	49.9%	-	-	-	-		
AVPS award (Chris Jones)	-	-	51.1%	79.4%	70.3%	75.4%	64.6%	67.3%	59.9%
LTVPS for AMP5	40%	50%	78.6%	90.6%	-	-	-		
LTVPS for AMP6	-	-	-	-	65%	65.4%	26.7%	25%	18.8%

FIGURE 9 RELATIVE IMPORTANCE OF SPEND ON PAY

ge
%
2.7%
1.6%
17.5%
(10.8)%

^{1.} Operational expenditure, capital expenditure and financing costs.

^{2.} See Glossary section page 210 for definition.



REMUNERATION COMMITTEE REPORT (continued)

PART 2: REPORT ON REMUNERATION POLICY

This section sets out the structure of the Remuneration Policy which will be put to Glas Members for approval at the 2020 AGM. The aim of Welsh Water's Remuneration Policy is to promote the long-term success of the Company and to retain and incentivise the Executive Directors to deliver strong and sustainable performance aligned with the Company's long-term strategy and objectives.

The new Policy intends to ensure that:

- Levels of base salary and total remuneration (when assessed periodically against the market) are fair and competitive having regard to an individual's experience and responsibility, in order to attract and retain necessary skills and talent;
- Performance improvement is encouraged by ensuring that a significant proportion of the total remuneration opportunity is linked to performance;
- AVPS incentives are focused on the outcomes which are considered important for customers and calibrated against the prior year's performance assessed by Ofwat and other regulators, in order to incentivise sector-leading performance in a transparent and accountable way;
- The LTVPS is focused on Totex performance (overall costs efficiency and spend over the period 2020–25) and performance measures which support the long-term strategic goals of the company as set out in Welsh Water 2050, and linked to the overall reward/penalty position in relation to Ofwat's Outcome Delivery incentives for those measures over 2020–25.

CHANGES IN THE REMUNERATION POLICY FOR AMP7

While there is continuity with the structure of the AMP6 scheme, the AVP scheme for AMP7 will not include Personal Objectives as one of the objectives for the AVPS but will instead incentivise a focus on delivering a suite of Strategic Goals reflecting our regulatory targets. This reflects the Executive Directors' overall responsibility for the performance of the business in the round, rather than the achievement of specific personal contributions towards that performance.

For the LTVP element, the targets will be set over a five-year period but will pay out "on account" on an annual basis according to achievement against planned performance towards the 5-year objectives. The objectives will be linked to Totex spend (50%), and to a basket of Performance Development measures (50%) which will be linked to the long- term strategies set out in the Group's Welsh Water 2050 strategy. No amount will be paid for performance above "target" in a single year, but any such sums will be held on account against future underperformance.

Other changes are summarised in the table on page 133.

The Committee began considering the various elements of the Executive Remuneration Policy for AMP7 in 2018-19. In developing this to be implemented for 2020-25, the Committee has aimed to:

- reflect the decision by the Committee to apply a 15% discount to benchmark data on base salary;
- improve the clarity and simplicity of variable pay schemes to increase transparency;



REMUNERATION COMMITTEE REPORT (continued)

- balance incentivising good performance with guarding against encouraging inappropriate risk taking; and
- achieve reasonable predictability of outcome, while giving the Committee discretion to vary awards to ensure proportionality against the Company's overall performance.

The measures against which performance under the Schemes is assessed are based on a set of performance targets closely linked to the regulatory targets which the Company has to meet and to the longer-term strategies set out in Welsh Water 2050. Through engagement with stakeholders and through taking into account workforce remuneration and related policies, the Committee has sought to ensure that the Executive Remuneration Policy is closely aligned with the Company's culture.

SUMMARY OF REMUNERATION POLICY FOR AMP7

The AMP7 Remuneration Policy reflects our stakeholders' views on remuneration and strikes a balance between the need to attract and retain Executive Directors and the key focus on efficiencies and costs savings which we are committed to for AMP7. The individual components of the Executive Directors' Remuneration Policy for 2020–25 (which will be put to the Glas Members for approval at the 2020 AGM) are set out in the table on the following pages:

SUMMARY REMUNERATION POLICY FOR AMP7

BASE SALARY	PURPOSE AND LINK TO STRATEGY To help attract, retain and motivate high- calibre employees.	Operation 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	Opportunity 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. Current salaries are disclosed in Part 4.	Performance metrics Annual Performance Reviews.
BENEFITS	To provide a market competitive benefits package to help		Value of benefits is based on the cost to the Company and is not predetermined	



	attract and retain employees. Healthcare benefits promote business continuity.	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.		
PENSION	To help attract and retain high-calibre employees. Discrete post-retirement planning provision.	From 1 April 2020, all employees, including Executive Directors, will be 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%. 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 which Peter Perry participates in. 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
AVPS	delivery of strategic goals.	AVPS targets reviewed annually by the Committee. Measured against a benchmark setting threshold, target and maximum performance levels. Outturn against targets is determined by the Remuneration Committee after	salary, for the achievement of g stretching performance targets.	Measures aligned to the Business Plan themes of Customer Service (40% weighting), Operational Performance (40% weighting) and Strategic Goals (20% weighting).



the year end based on performance against targets Paid as cash	For AMP7, the scheme has been amended to focus on the key performance objectives of the
Not pensionable	business plan. The personal objectives have been replaced
 Clawback provisions apply in the following circumstances: 	with a suite of Strategic Goals which are selected by the
 Restatement of accounts 	Committee each year.
 Material misrepresentation 	
 Gross misconduct or caused reputational damage to the Company or Group Company 	

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.
	To aid attraction and
	retention.

performance year. Cash awards based on stretching performance targets. Performance is measured against threshold, target and maximum targets. Performance against the measures is assessed over the five-year period of AMP7. Interim payments are made on the five-year regulatory period to 31 n 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

AVPS awards may be varied (either increased or decreased) at the

the award for a particular

discretion of the Committee or clawed back either prior to the payment of

performance year or in the following

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 outcomes for performance over annum). For other Directors, the maximum potential award is 300% of salary over March 2020 (to a maximum potential award of 60% per annum).

50% based on Totex performance and 50% based on overall reward/penalty a range of performance development measures. Objectives are linked to a range of performance measures which are relevant to achieving the Company's long-term goals in Welsh Water 2050.



		the award for a particular	
		performance year or for a period of s	ix
		years from the date of payment.	
NON-EXECUTI	VE Provides an	The Remuneration Committee	Non-Executive Directors do not receive Annual Review
	appropriate level of	determines the fee payable to the	any additional fees for chairing
	fixed fee to attract	Chair of the Board and, separately, th	ne committees.
	and retain individuals	Executive Directors and the Chair	
		f approve the fee payable to the Non-	
	experience and skill	Executive Directors.	
		All Directors may be paid for	
	in the delivery of its	additional expenses incurred in	
	duties.	connection with their role on the	
		Board and are responsible for any	
		taxable benefit implications that may	
		result.	the individual, tested against market benchmarking data and internal
APPOINTMEN	relativities. If it is of series of increases	considered appropriate to appoint a ne	ew Executive Director on a below market salary, they may be subject to a l timeframe subject to performance in post. This approach will apply to
	could be setting d the five-year regu	ifferent measures or implementing tra	cipate in the remuneration structure detailed above. Exceptions to this nsitional arrangements should an Executive Director join part way throug to Executive Director, entitlement to previously accrued AVPS, up to the
		•	e DCWW Group Personal Pension Plan with a maximum employer eceive a cash allowance of 9.7% (11% less employer NI contribution).
	forfeit on leaving		considers it necessary to buy out incentive pay which an individual would ation, where possible, will be structured so that the terms of the buyout g replaced.
POLICY FOR PAYMENTS TO DEPARTING EXECUTIVES	compensation to l may be paid base	pe payable in the event of early termin	ubject to a 12-month notice period and which do not provide for ation by the Company. At the Company's discretion, an Executive Directo ant element of mitigation is built into the contract should the Company of notice.



- When an Executive Director leaves via redundancy and is not required to work his/her notice period, he/she will be entitled to
 Statutory Redundancy and Enhanced Redundancy in line with the Company's redundancy policy plus up to 12 months' pay in lieu of
 notice together with pay in lieu of accrued but untaken holidays. In addition, and consistent with market practice, in the event of
 the termination of an Executive Director, the Company may make a contribution towards that individual's legal fees and fees for
 outplacement services as part of a negotiated settlement. Any such fees will be disclosed as part of the detail of termination
 arrangements.
- Should an Executive Director resign, he/she will be expected to work their notice period unless an alternative arrangement such as garden leave or a reduced notice period is agreed.
- In the event that the Company terminates the Executive's employment, the Company will take legal advice and will pay to the Executive only such amount as the Executive is legally entitled to receive. In the event of cessation of employment AVPS and LTVPS awards will be treated in line with the relevant scheme rules which describe the treatment of any payment with reference to 'good' or 'bad' leaver terms.



REMUNERATION COMMITTEE REPORT (continued)

PART 3: IMPLEMENTATION 2020-21

This section sets out the detail of the way that the Remuneration Committee is applying the Remuneration Policy in 2020–21. The Remuneration Principles (see page 134) emphasise that the remuneration structure for the Executive Directors and the wider Executive team should align with the interests of the Group, and in particular with the interests of customers, as well as being consistent with our values and policies. This will continue to govern our approach in 2020–25. Decisions taken by the Committee in relation to the implementation of the Policy in 2020–21 are:

- Basic salary in light of restructuring of the Executive team and the appointment of the new CEO and CFO.
- The AVPS will focus on Customer Service, Operational Performance and Strategic Goals.
- The LTVPS will focus on Totex Performance and Performance Development across a range of measures.

THE GRAPHS BELOW SHOW THE OPPORTUNITIES FOR EACH EXECUTIVE DIRECTOR FOR 2020-21:

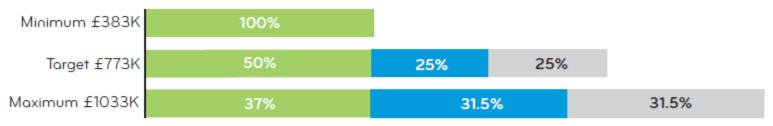
- The minimum level of remuneration payable. This comprises basic salary, any travel and car allowances, health insurance benefits and pension;
- The expected level of remuneration, reflecting a typical level of performance against targets for the AVPS and LTVPS. This represents 60% of the maximum payout for each of AVP and LTVP; and
- The maximum level of remuneration, if all AVPS and LTVPS performance targets were fully achieved.

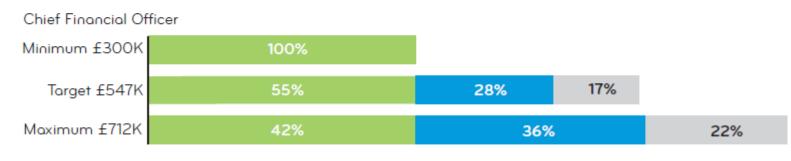


REMUNERATION COMMITTEE REPORT (continued)

FIGURE 10









NOTES:

The maximum award payable to the Chief Executive under the LTVPS scheme was increased from 60% of base salary to 100% of base salary from 2019–20 onwards.

BASE SALARY 2020–21

Following the appointment of Peter Perry as Chief Executive Officer with effect from 1 April 2020 and the appointment of Mike Davis as Group Financial Officer with effect from 1 January 2020, the Remuneration Committee set the base salaries for each Executive Director (effective 1 April 2020) as shown in Figure 11 below. These figures include a 2% inflationary increase with effect from 1 April 2020 which mirrors the increase awarded to employees on 1 April 2020 in accordance with a five-year pay deal agreed with the Group's three recognised Trade Unions (GMB, Unison and Unite) and also awarded to those employees not covered by trade union agreements.



REMUNERATION COMMITTEE REPORT (continued)

FIGURE 11 EXECUTIVE DIRECTORS' BASE SALARIES YEAR ON YEAR

	Effective	Effective	%
	1 April 2019	1 April 2020	change
	£	£	1 April 2020
Chief Executive Officer	318,740	325,115	2.0%
Managing Director	294,457	n/a	
Finance and Commercial Director/Chief Financial Officer	252,623	257,675	2.0%

Notes:

Peter Perry was appointed as CEO with effect from 1 April 2020. His salary at appointment was matched to the salary for the outgoing CEO. but from 1 April 2020 he received the same inflationary increase as the rest of the workforce – 2%.

Mike Davis was appointed as CFO with effect from 1 January 2020. His salary on appointment was matched to the salary for the outgoing Finance and Commercial Director and he also received a 2% inflationary increase from 1 April 2020.

Chris Jones stayed on as an Executive Director (on a lower salary) at the request of the Board, having stepped down as CEO on 31 March 2020, but retired from the Board on 15 May 2020.

FEES PAYABLE TO THE CHAIR OF THE BOARD

The fees payable to the Chair of the Board were reviewed in March 2020 and the Committee resolved that the Chair of the Board's fee should remain unchanged for a second year at £221,900 for 2020–21 in accordance with the decision taken in March 2019 to discount the Chair of the Board fee from the benchmark by 15% to recognise the non-shareholder structure of the Group. Fees and benchmark comparators will be reviewed again by the Committee in 2020–21 when the benchmark data for 2019–20 will be available.

FEES PAYABLE TO NON-EXECUTIVE DIRECTORS

In March 2020, the Chair of the Board and Executive Directors resolved that the fees for Non-Executive Directors should remain unchanged at £61,650 for a further year in accordance with the decision taken in March 2019 to discount the fees for Non-Executive Directors from the benchmark by 15% to recognise the non-shareholder structure of the Group. The fee for the Senior Independent Director will also remain unchanged at £72,950 for a further year. Fees and benchmark comparators will be reviewed by the Chair of the Board and Non-Executive Directors in 2019–20 when the benchmark data for 2019–20 will be available.

COVID-19

In response to the impact of the COVID-19 pandemic on the Company's customers and communities, the Executive Directors, Chair of the Board and Non-Executive Directors requested that their respective salaries and fees be reduced by 20% for May, June and July 2020, in order that the value of this reduction could be added to the Company's Community Fund which has funded immediate aid to communities via our supported charities (see page 83).



REMUNERATION COMMITTEE REPORT (continued)

ANNUAL VARIABLE PAY SCHEME (AVPS)

The maximum pay that Executive Directors can earn under the AVPS in 2020–21 equates to 100% of base salary. The award of variable pay is assessed across three components under the new scheme, as illustrated in Figure 12.

FIGURE 12 AVPS PERFORMANCE MEASURES

TIGGRE 12 AVI 31 ENI ONIMAN	Customer Service	Operational Performance	Strategic Goals
Performance Measures	 C-MeX and D-MeX (Ofwat's measures of customer service for household and developer customers); and Business Customer Satisfaction. Outcome is based on regulatory reward/penalty achieved against Ofwat's Outcome Delivery Incentives for these measures over the year. 	Outcome based on total financial rewards/penalties achieved against Ofwat's Outcome Delivery Incentives for 11 measures of inyear performance: Tap water quality Reliability of supply Treatment works compliance Pollution incidents Bioresources disposal Bioresources product quality Sewer flooding to customer properties (internal) Sewer flooding to customer properties (external) Total Complaints Unbilled properties Water process unplanned outages	Performance against up to 5 performance commitments from the final determination. For 2019–20 these will be: Employee engagement Customer trust Tap water quality Priority services for customers in vulnerable circumstances Company level of bad debt
Rationale for selected measures	Linked to the 2020–25 business plan.	Linked to the 2020–25 business plan.	Linked to the 2020–25 business plan.



Performance Period	One year	One year	One year
Performance target	Three measures with total maximum 40% award.	11 measures with total maximum 40% award.	Five measures with total maximum 20% award.

The performance targets under each of the LTVPS awards are described more fully in Figure 13.

FIGURE 13 LTVPS PERFORMANCE MEASURES

	TOTEX performance	Performance Development
Performance Measures	Outturn totex (total expenditure - operating costs and investments).	Total financial performance (the outcome of regulatory rewards/penalties) for 17 measures comprising continuous service measures and investment programme measures.
Rationale for selected measures	Achieving the target totex and the associated efficiency savings for the period is essential to achieving the Company's long-term goals.	These measures are essential to achieving the long- term goals set out in Welsh Water 2050.
Performance Period	1 April 2020 – 31 March 2025 Payment will be made "on account" in each of the first four years of the scheme, depending on progress against the phased profile of the AMP7 plan. No payment will be made for performance above Target, but would be accrued for payment in the final year.	
Performance target	50% of total LTVPS maximum opportunity.	50% of total LTVPS maximum opportunity.

CONTINUOUS SERVICE MEASURES:

- Acceptability of drinking water (zonal studies)
- Water mains bursts
- Leakage
- Sewer collapses
- Community education
- Visitors to recreational facilities
- Per capita consumption



REMUNERATION COMMITTEE REPORT (continued)

INVESTMENT PROGRAMME MEASURES:

- Lead supply pipes replaced
- Km of river improved
- Surface water removed from sewers
- Combined sewer overflow storage
- Delivery of our reservoir infrastructure safety programme
- Delivery of our Zonal studies programme
- Delivery of outline business case for new Merthyr WTW
- Delivery of full business case for new Merthyr WTW
- Delivery of a new visitor centre in Llanishen, Cardiff
- Delivery of the South Wales water grid scheme

DISCRETIONS RETAINED BY THE REMUNERATION COMMITTEE

The targets may be amended in certain circumstances at the discretion of the Committee. When determining the level of any award the Committee may, at its discretion, defer or vary all or part of an award to reflect the overall performance of the Company and avoid formulaic outcomes. The scheme rules allow for clawback of variable pay from Directors, either as the withdrawal of an award before it has vested, or as clawback after awards have vested.

The range of individual measures comprising each of the Continuous Service Measures and the Investment Programme Measures for the purposes of assessing LTVPS performance are shown below.

STRATEGIC ALIGNMENT OF PAY

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. The purpose is set out as follows:

The purpose of the company is to provide high-quality and better value drinking water and environmental services so as to enhance the wellbeing of its customers and the communities it serves, both now and for generations to come.

LINKING REMUNERATION POLICIES TO THE GROUP'S STRATEGY AND PURPOSE

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, as well as being mindful of the impact of our not-for-shareholder-dividend corporate structure and our geographical location, which are both of importance to our wider stakeholder group and aspects taken into account by the Committee.



REMUNERATION COMMITTEE REPORT (continued)

Pay must be sustainable and must encourage a focus on achieving the longer-term strategy of the Company. It must also be fair to individuals and the wider workforce. Our stakeholders are concerned that remuneration should not reward poor performance and that we should be transparent about the reporting of such performance. This is closely aligned to the Group's vision To Earn the Trust of our Customers Every Day.

ALIGNMENT WITH WIDER WORKFORCE PAY AND COLLEAGUE ENGAGEMENT

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. The Remuneration Committee closely followed the negotiations of these Agreements during 2019–20 led by the People and Change Director, Peter Perry in his former role of Managing Director (Regulated Business) and the Managing Directors of Water Services, Wastewater Services and Household Customer Services.

The Annual General Salary Award is agreed with our recognised Trade Unions and salaries are uplifted consistently across the workforce. Effective 1 April 2020, the Committee approved a 2% inflationary uplift to the Executive Directors and Executive team, consistent with the award across the wider workforce.

The performance measures which form the basis of the AVPS for Executive Directors are also the basis of variable pay arrangements throughout the Company.

Pensions benefits are aligned across the Company with everyone receiving the same employer contribution, in line with best practice.

Employees are not specifically consulted on Executive remuneration, however, all employees are encouraged to participate in our annual Employee Engagement survey, which provides valuable insight to the Board on a range of topics, including pay and benefits. Relevant feedback is shared with the Remuneration Committee. In addition, Board and Remuneration Committee members regularly meet with Employee Engagement champions and these meetings provide an opportunity for any issues to be raised with Non-Executive Directors. See page 112 for other examples of Board engagement and site visits undertaken.

LINK TO THE ANNUAL VARIABLE PAY SCHEMES AND THE COLLEAGUE REWARD SCHEME

The Annual Variable Pay Scheme (for colleagues below Executive Director level) and the Colleague Reward Scheme utilise a smaller number of these key measures – those linked to Customer, Compliance and Cost. 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 affected/impacted by the same key targets, to a greater or lesser degree.

ANNUAL VARIABLE PAY SCHEMES AVP FOR SENIOR COLLEAGUES

The Annual Variable Pay scheme for colleagues in more senior roles includes an element of opportunity based on achievement of personal objectives, as well as on Company performance. Maximum opportunity ranges from 10% to 100% of base salary.



REMUNERATION COMMITTEE REPORT (continued)

Colleague Reward Scheme

The Colleague Reward scheme 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 in 2019–20: £1,500 (Actual Pay-out 2018–19: £1,000). The payout for the Colleague Reward Scheme in 2019–20 takes account of the efforts of frontline teams in dealing with extreme weather events and COVID-19 impact.

ENGAGEMENT WITH GLAS MEMBERS

The Remuneration Committee regularly engages with Glas Members on remuneration policy issues and in 2019-20 discussed remuneration in detail with the Members at the AGM before proposing an amendment to the LTVPS to increase the maximum opportunity for the Chief Executive to 100% of base salary. This followed a benchmarking exercise which showed that the Chief Executive salary was significantly below the benchmark, even allowing the 15% discount for our not-for-shareholder corporate structure. In 2019-20, the Board discussed the existing remuneration policy and the proposed changes in detail with Members at the July 2019 AGM, and updated Members at their December 2019 Members' Meeting.

VOTES AT RECENT ANNUAL GENERAL MEETINGS

2019 AGM	
Members present in person or by proxy who voted in favour of the Annual Report on Remuneration	92%
Members who approved the changes to the Remuneration Policy for 2019–20	82%
2018 AGM	
Members present in person or by proxy who approved the Annual Report on Remuneration	98%
Members who re-approved the Remuneration Policy for a further period	98%
2017 AGM	
Members present in person or by proxy who approved the Annual Report on Remuneration	100%

ENGAGEMENT WITH OTHER STAKEHOLDERS

The Remuneration Committee is conscious of the Company's position as one of the largest companies in Wales and of the geographic and socio-economic context in which the Company operates. The Committee closely follows guidance from the Financial Reporting Council on the requirements of the UK Corporate Governance Code and from Ofwat on the key objectives of its guidance on Board Leadership, Transparency and Governance.



REMUNERATION COMMITTEE REPORT (continued)

The Board as a whole is also conscious of the need to balance societal concern around the amount and basis for executive remuneration with the need to attract and retain key individuals in senior management roles. Engagement with other relevant stakeholders includes the Customer Challenge Group, Ofwat and other regulators, DEFRA and Welsh Government and the Consumer Council for Water, and we take account of the views of these bodies where relevant.

REMUNERATION IN CONTEXT GENDER PAY GAP

When we produced our figures for the Gender Pay Gap this year, we were surprised to see a significant increase on our findings for 2019 compared to 2018. As a result, we reviewed how we were calculating the figures. Our review showed that there were parts of our previous calculations that were incorrect as we were not taking account of salary sacrifice (voluntary deductions from individuals' gross salary under various incentive schemes). To rectify this, this year we have published both the figures for 2019 and revised figures for 2018. The re-calculated 2018 gap was 12.1% (median) and 11% (mean). Our gap (both median and mean) had narrowed by April 2019 primarily due to progression of women into more senior roles in the Company.

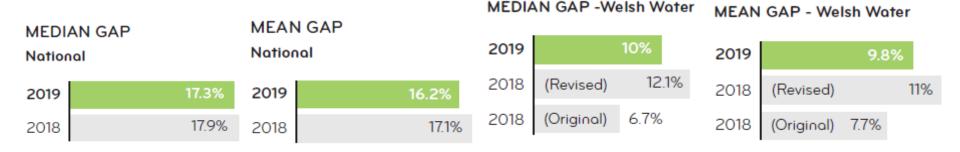
The gender pay gap is defined as the overall median and mean gender pay and bonus gap (based on hourly rate of pay at the snapshot date of 5 April 2019 and bonuses paid in the year to 5 April 2019) regardless of role or seniority. We have seen a decrease in both our median and mean Gender Pay Gaps over the year to March 2019 and it is encouraging that our gender pay gap remains significantly lower than the national average.

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 86 within our Responsibility section.

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

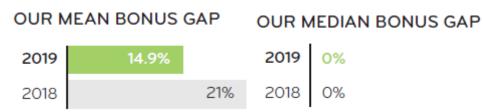




REMUNERATION COMMITTEE REPORT (continued)

BONUS PAY GAP

For this reporting period 88.6% of men and 80.3% of women received a bonus. This was an increase from 86.6% and 76.8% of women, respectively, in the previous reporting period. The mean bonus gap has been reduced in 2019 compared to 2018 narrowing from 21% to 14.9% this year.



Full details of our gender pay reporting are available on our website dwrcymru.com/AR2020-genderreport

FUTURE FOCUS

Our people are our greatest asset and we are passionate about creating a workforce that reflects the diversity within the communities we serve. We are committed to work to increase the diversity of our workforce and ensure the Company is an inclusive environment where everyone can be themselves at work, and there are no barriers to men and women undertaking any role.

We have sought to ensure that greater numbers of women in senior roles take leading roles as mentors and as role models in the business, including taking part in our International Women's Day and International Women in Engineering Day events.

As part of a wider strategy to promote careers at Welsh Water in local schools and community groups, we have rolled out more work experience placements. We are working with the Welsh Baccalaureate resources, as well as representation at high-profile events such as the STEM Women Careers Fair. We have developed a strong partnership with Education and Engineering Scheme Wales (EESW) in addition to our work with Chwarae Teg to provide opportunities to young women and female leaders at Welsh Water.

We are continuing our membership of the Equality and Human Rights Commissions' Working Forward initiative a network committed to making workplaces the best they can be for pregnant women and new parents. The introduction of Inclusivity Ambassadors will help to promote and assist with the ongoing development and achievement of our Inclusivity Action Plan.

CHIEF EXECUTIVE'S PAY RATIOS

In previous years we disclosed an illustrative CEO pay ratio comparing CEO pay to average employee pay. This is the first year that we have applied the new CEO Pay Ratio Reporting requirements for UK listed companies which compare CEO's pay to the 25th percentile, median and 75th percentile employees. As part of these requirements we have applied methodology A from the UK Government guidance.



REMUNERATION COMMITTEE REPORT (continued)

The pay ratio uses the CEO total payments and benefits included in figure 2, page 136.

		25th percentile	Median	75th percentile
Year	Methodology	pay ratio	pay ratio	pay ratio
2019–2020	A	22:1	18:1	14:1

The 25th percentile, median and 75th percentile employees were determined on 29th April 2020 using total pay for the year ended 31st March 2020 for all employees as at 31st March 2020. Pay details for the individuals on a full-time equivalent basis are set out below:

	25th percentile	Median	75th percentile
Year 2019 - 2020	pay ratio	pay ratio	pay ratio
Salary	28,963	35,037	45,722
Total pay	30,598	38,854	49,361

Methodology notes

- Other than for the Executive Directors, the variable pay elements have been estimated for the wider workforce, as individual payments are not finalised until July 2020.
- Other than for the Executive Directors, 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.

The pay ratios reflect our remuneration principles and our approved Remuneration Policy. Total remuneration is considered to be fair and competitive and reflect wider economic conditions, enabling us to attract and retain skills and talent.

COMMITTEE INDEPENDENCE

The Board considers that all the members of the Remuneration Committee are independent and, in the case of Alastair Lyons, that he was considered to be independent on his appointment as Chair of the Board of the Company.

The Chief Executive Officer and the People and Change Director attend meetings of the Remuneration Committee by invitation (except where their own remuneration is discussed). The Remuneration Committee was convened on six occasions in 2019–20.



REMUNERATION COMMITTEE REPORT (continued)

During 2018–19, the Committee received independent advice from Mercer and Deloitte LLP. Each of these firms 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 Mercer for the period 2019–20 were £11,050 and to Deloitte LLP were £4,250.

Dates of the service contracts of the Executive Directors and letters of appointment of the Non-Executive Directors in place at 31 March 2020 are as follows:

Chris Jones	Alastair Lyons	Tom Crick	Anna Walker	
4 July 2013	1 May 2016	1 October 2017	3 March 2011	
Peter Perry	Menna Richards	Graham Edwards	John Warren	
3 June 2020	22 November 2010	1 October 2013	3 May 2012	
Mike Davis	Debra Bowen Rees	Joanne Kenrick		
3 June 2020	5 December 2019	1 November 2015		

Enquiries for the inspection by Members of the above service contracts and letters of appointment during the COVID-19 pandemic should be made via email to the Company Secretary at company-secretary@dwrcymru.com

For more information on the roles and responsibilities of the Board of Directors, please see page 114.