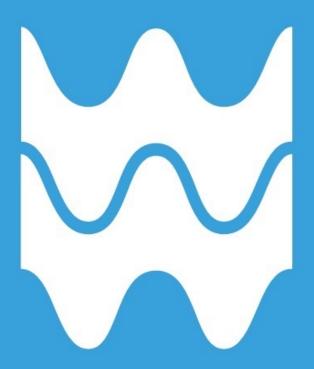
Commentary Parts 4-11

APR 2023/24





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2. Introduction

In line with the Ofwat Regulatory Accounting Guidelines (RAG), and in particular, RAG 3.14 'Guidelines for the format and disclosures for the Annual Performance Report' and RAG 4.12 'Guideline for the table definitions in the Annual Performance Report', this Annual Performance Report (APR) document provides supporting commentary to help explain certain lines of data within <u>APR Tables parts 4 - 11</u>. We only provide commentary where we are specifically required to do so by Ofwat, or where there are key changes from the previous year that require explanation. As such, only some tables and lines will have commentary associated with them.

The information captured within these tables is summarised below:

Port	Content
4 - Additional regulatory information - service level	Additional financial and non-financial information, including (but not limited to) analysis of debt, totex analysis, major project expenditure, and properties, customers and population – non-financial information.
5 - Additional regulatory information - water resources	Additional financial and non-financial information, including (but not limited to) asset and volumes data plus operating cost analysis for water resources.
6 - Additional regulatory information - water network plus	Additional financial and non-financial information, including (but not limited to) raw water transport, raw water storage, water treatment data, treated water distribution mains analysis, communication pipes, metering and leakage activities.
7 - Additional regulatory information - wastewater network plus	Additional financial and non-financial information, including (but not limited to) load, costs and number of sewage treatment works within size bands, sewer and volume data, and energy consumption data.
8 - Additional regulatory information - bioresources	Additional financial and non-financial information, including (but not limited to) bioresources sludge data, operating expenditure analysis, bioresources energy and liquors analysis and sludge treatment and disposal data.
9 - Additional regulatory information - innovation competition	Additional financial and non-financial information, including (but not limited to) revenue collected for the purposes of the innovation competition.
10 – Additional regulatory reporting – green economic recovery additional impacts reporting, performance reporting and scheme delivery	This section of APR is not applicable to Dŵr Cymru Welsh Water.
11 – Additional regulatory information – operational greenhouse gas emissions reporting	Additional non-financial information, including (but not limited to), Scope one, two and three emissions, Gross operating emissions location and market based and Greenhouse Gas intensity ratios.

In addition to the Ofwat APR Excel tables and this document, the following standalone APR documents covering parts 1, 2 and 3 can be accessed on our <u>website</u>.

- Annual Performance Report Part 1 Regulatory financial reporting
- Annual Performance Report Part 2 Price review and other segmental reporting
- Annual Performance Report Part 3 Performance summary commentary
- Annual Performance Report Part 3 Performance summary tables



3. Summary of data to be restated

We have provided a summary below of where we are restating figures from our Annual Performance Report Parts 4-11. You can find further details on the values being restated within each section.

RAG	Description	Reason for change
5A.L18	Total number of water reservoirs	Values updated for 2020-2023 following review of data.
		See section 5.1 for more information.
5A.L19	Total volumetric capacity of water	Values updated for 2020-2023 following to reflect changes to 5A.L18.
SA.LI9	reservoirs	See section 5.1 for more information.
5A.L29	Water resources capacity (measured	Values updated for 2020-2023 following review of data.
	using water resources yield)	See section 5.1 for more information.
6A.L17-18	Water treatment – W4 works and W5 works	Values updated for 2020-2023 following review of data.
	WOTKS	See section 6.1 for more information.
6C.L3	Total length of potable mains renewed	Values updated for 2020-2023 following change in methodology to include mains repairs.
		See section 6.3 for more information.
6C.L4	Total length of new potable mains	Updated value for 2022/23 following review of data.
		See section 6.3 for more information.
6C.L24	Event Risk Index	Updated value for 2022/23 following completion of investigation by DWI.
		See section 6.3 for more information.
7C.L22	Length of formerly private sewers and lateral drains (s105A sewers)	Values updated for 2020-2023 following change in methodology to include Private Sewer Transfer rising mains.
		See section 7.2 for more information.
7D.L21	Population equivalent treatment capacity enhancement	Updated for 2022/23 following review of data.
	capacity emigricement	See section 7.3 for more information.
9A.L10	Innovation project 2 Hyvalue	Updated for 2022/23 following review of data.
		See section 9.1 for more information.



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

Table Number ¹	Table Description
Pro forma 4A	Bulk supply information for the 12 months ended 31 March 2024
Pro forma 4B	Analysis of debt
Pro forma 4C	Impact of price control performance to date on RCV
Pro forma 4D	Totex analysis for the 12 months ended 31 March 2024 – wholesale water resources and water network plus
Pro forma 4E	Totex analysis for the 12 months ended 31 March 2024 – wholesale wastewater
Pro forma 4F	Major project capital expenditure by purpose for the 12 months ended 31 March 2024 – wholesale water
Pro forma 4G	Major project capital expenditure by purpose for the 12 months ended 31 March 2024 – wholesale wastewater
Pro forma 4H	Financial metrics
Pro forma 41	Financial derivatives
Pro forma 4J	Base expenditure analysis for the 12 months ended 31 March 2024 - water resources and water network+
Pro forma 4K	Base expenditure analysis for the 12 months ended 31 March 2024 – wholesale wastewater
Pro forma 4L	Enhancement expenditure for the 12 months ended 31 March 2024 - water resources and water network plus
Pro forma 4M	Enhancement expenditure for the 12 months ended 31 March 2024 - wastewater network plus and bioresources
Pro forma 4N	Developer services expenditure for the 12 months ended 31 March 2024 - water resources and water network plus
Pro forma 40	Developer services expenditure for the 12 months ended 31 March 2024 - wastewater network plus
Pro forma 4P	Developer services non-price control expenditure for the 12 months ended 31 March 2024
Pro forma 4Q	Developer services - new connections, properties and mains
Pro forma 4R	Non-financial information - Properties, customers and population
Pro forma 4V	Mark-to-Market of financial derivatives analysed based on payment dates
Pro forma 4W	Defined Benefit pension Scheme – Additional Information

¹ Tables 4S, T, U, X and Y do not apply to Welsh Water so are not listed above.



4.1 Table 4A – Water bulk supply information for the 12 months ended 31 March 2024

Line	Line Description	Comments
4A.L26	Total bulk supply exports	The description for each bulk supply matches the description used on the bulk supply register.
4A.L52	Total bulk supply imports	33% increased operating costs YOY largely driven by Severn Trent Mitcheldean power costs.

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

Line	Line Description	Comments
4C.L2	Actual totex (excluding business rates, abstraction licence fees, grants and contributions and other items not subject to cost sharing)	This line reports the actual totex subject to cost sharing, the guidance outlines that income offset payments reported in 2E should be deducted from actual expenditure. We do not report an income offset in 2E as the Developer Services Charges Rules in England do not apply in Wales. The income offset is applied to the Requisition charges and as such the requisition income in lines 2E.1 (water) and 2E.22 (wastewater) is net of an income offset of £3.399m (Water), £0.158m (Wastewater). The income offset values applied to requisition charges are deducted from the actual expenditure subject to cost sharing to align to our PR19 Final Determination.
		The cumulative actual expenditure subject to cost sharing has been update for 2022-23 for an additional £0.043m of actual expenditure on innovation projects.
4C.L4	Disallowable Costs	Disallowable costs are costs for which it is inappropriate to share any over (or under) spend with customers. This includes £1.704m for compensation claims, £0.332m for leakage reporting investigation costs and £15.440m of 'return of value' (discretionary expenditure to benefit customers), as a result of our not-for-shareholder model.
4C.L7	Variance due to timing of expenditure	Water: The positive timing variance for water is largely driven by recovery of prior year delays on the capital programme for example meeting lead standards. The programme of work was initially delayed to COVID-19 lockdowns.
		Wastewater: The positive timing difference is due to recovery of prior year delays on the capital programme for storage schemes to reduce spill frequency at CSOs, flow to full treatment, phosphorous removal, sanitary determinants and storm tank (NEP quality programme). The programme of work was initially delayed to COVID-19.
4C.L8	Variance due to efficiency	Water: The positive variance is driven by additional expenditure on the leakage capital programme and high levels of reactive maintenance expenditure. Additional power and chemical costs have also been incurred due to higher market prices.
		Wastewater: The positive efficiency variance for waste is largely driven by high levels of reactive maintenance expenditure, cost increases at Queensferry and the sewer collapse at Cwmbwrla. Additional power and chemical costs have also been incurred due to higher market prices and higher levels of annual rainfall which has increased power demand.
4C.L24	Variance - 100% company allocation	A positive variance of £19.331m is reported for totex not subject to cost sharing, £15.440m of this is due to the disallowable costs reported in line 4C.4.



4.3 Table 4D – Totex analysis for the 12 months ended 31 March 2024 – Water resources and water network+

Line	Line Description	Comments
	Base Operating Expenditure	No atypical costs reported in year.
4D.L1		For more detailed variance explanation in respect of the table please refer to 2B in the Methodology Statement.
4D.L8	Base Capital Expenditure	For more detailed variance explanation in respect of the table please refer to 2B in the Methodology Statement.

4.4 Table 4F – Major project expenditure for wholesale water by purpose for the 12 months ended 31 March 2024

Line	Line Description	Comments
	Cwm Taf Scheme	Year 4 total spend was £4.731m for direct costs. The expected outturn expenditure for DPC in AMP 7 is currently circa £16.802m.
4F.L1		Public opposition to the proposed location for the single WTW continued to increase following the planning non-statutory consultation in March 2022. The Capex estimate had also increased significantly since the PR19 submission. The decision was taken in March 2023 to not proceed with planning statutory consultation for the single WTW solution. DCC decided to review whether the proposed single works is still the best value option for our customers. Since 2023, DCC has undertaken a thorough review of alternative multi-site engineering options to achieve the water quality and resilience improvements required by the DWI Notice to ensure we continue to supply customers with a wholesome and reliable supply of water.
		In February 2024, the Board DPC sub-committee took the decision to proceed with a multi-site solution. DCC are now seeking to deliver the Cwn Taf Water Supply Strategy through two projects under one DPC framework, namely:
		 Project 1 - Build a replacement for Pontsticill WTW at Dan y Castell farm (adjacent to Gurnos Farm) - 100Mld Project 2 - Expand on land adjacent to Llwynon WTW and abandon Cantref WTW - 80Mld Public consultation will re-commence in July 2024.

4.5 Table 4J – Base expenditure analysis for the 12 months ended 31 March 2024 – Water resources and water network+

Line	Line Description	Comments
	Total Base Operating Expenditure	No atypical costs reported in year.
4J.L14		For more detailed variance explanation in respect of the table please refer to 2B in the Methodology Statement.
4J.L17	Total Base Capital Expenditure	For more detailed variance explanation in respect of the table please refer to 2B in the Methodology Statement.



4.6 Table 4L - Enhancement expenditure for the 12 months ended 31 March 2024 – Water resources and water network+

Line	Line Description	Comments
4L.3	Ecological improvements at abstractions	Expenditure for Ecological improvements at abstractions are £9.7m higher than the allowed expenditure. The overspend is mainly due to the additional expenditure to complete the Prioress Mill Habitat Screen. Investment is also ongoing for an ecological monitoring plan for Leintwardine SSSI.
4L.6	Eels Regulations (measures at intakes)	The expenditure for AMP to date is broadly in line with the Final Determination allowance.
4L.9	Invasive Non Native Species	Expenditure for invasive Non-Native species is below our Final Determination allowance, however the outcomes have been met through expenditure on our wastewater plan.
4L.12	Drinking Water Protected Areas (schemes)	The expenditure for the year is £1.6m and an AMP to date of £2.6m against a Final Determination allowance of £13.5m. Schemes in this investment cases were delayed due to Covid-19. However, we remain on track to meet the related outcome Performance Commitment to reduce the number of DWPA to 5 by the end of AMP7.
4L.15	Water Framework Directive measure	We have incurred £0.3m during the year with an AMP to date expenditure of £1.8m against a Final Determination of £2.8m. In the year we have delivered Heavily Modified Water Bodies projects including Carno to Shon Sheffrey pumping stations and improvements to Nant Fawr Weir.
4L.18	Investigations	The cumulative expenditure to date shown here reflects the reversal of an accrual.
4L.22	Supply-side improvements delivering benefits in 2020-2025	Expenditure in the year has been incurred on Canaston Bridge Raw Water Pumping Station, the Vowchurch source resilience and Tywyn Aberdyfi resilience scheme. The Tywyn Aberdyfi Resilience modelling has demonstrated that the existing source is more resilient than first through with no additional work require. Expenditure has also been undertaken on the Bretton Supernatant Return scheme which is in the final stages of commissioning. The overspend is due to increased costs on these projects over the Final Determination allowance.
4L.25	Demand-side improvements delivering benefits in 2020-2025 (excl leakage and metering)	The Cartref Programme offers services to customers centred around plumbing losses, supply pipe leakage and water efficiency. The programme was significantly impacted by Covid-19 due to limited access to customers' properties in years 1 and 2.AMP to-date expenditure is below the Final Determination allowance as capital expenditure has been reallocated to alternative leakage activities that are reported as base maintenance (£62m for 2023/24).
4L.31	Internal interconnectors delivering benefits in 2020-2025	The Vowchurch interconnector scheme has been delayed due to a need to additional investigations and modelling work that have been undertaken on the scheme. The scheme has been reprofiled.
4L.34	Supply demand balance improvements delivering benefits starting from 2026	Hydrological field work and modelling studies have been undertaken for the Tywyn Aberdyfi resilience scheme which has demonstrated that less investment is required than originally anticipated.
4L.63	Total metering expenditure	The expenditure for AMP to date is broadly in line with the Final Determination allowance.



		Despite the underspend to date we remain on track to meet the 17 DWI
4L.66	Improvements to taste, odour and colour	improvement notices. Of the 17 zones, construction is complete in 6, construction is underway in 8 zones and a further 3 are due to start this year.
		The underspend is due to expenditure that has been rephased into 2024/25 and some efficiencies achieved in the programme.
4L.75	Addressing raw water deterioration	Work on the Brecon Beacons Mega Catchment programme is ongoing. Schemes in this investment case were impacted by Covid-19 which significantly curtailed the programme until winter 2022.
4L.78	Improvements to river flow	The underspend to date is as a result of decisions taken to prioritise meeting outcomes elsewhere in the capital programme.
4L.81	Enhancing resilience to low probability high consequence events	The decision has now been taken not to pursue delivery of South Wales Grid during AMP7. The reasons in brief are: results of detailed design revealed that the scheme would not deliver the intended resilience outcomes; price inflation in elements of the scheme significantly increased projected costs; a tentative alternative scheme design with a different route would take significantly longer and additional cost to deliver. As required by the South Wales Grid performance commitment we will return a total of £13.7m to customers, including a £1m delay penalty.
4L.93	Meeting lead standards	In-year expenditure of £6.5m and an AMP to date expenditure of £12.8m against the Final Determination allowance of £14.1m. To date the lead programme has delivered 2,981 pipe replacements to the end of 2023/24, significantly below the 5,600 targets targeted to be replaced from the allowed expenditure.
		To date the unit cost of a lead pipe replacement has significantly exceeded the allowance in the Final Determination. This is due low detection rate of lead pipes upon investigation.
4L.96	Security - SEMD	Expenditure of £2.5m has been undertaken in the year with cumulative expenditure for the AMP of £7.2m compared to the Final Determination allowance of £3.7m. Meeting priority SEMD security provisions has resulted in an overspend in the AMP to date.
4L.99	Security - Non-SEMD	No expenditure has been incurred on security Non-SEMD in the year. Security expenditure has been focused on meeting SEMD provisions.
4L.100-101	Additional Line- Impounding Reservoirs	We have 26 commitments at impounding reservoirs to meet by the end of AMP7, plus another 3 by December 2025. To date we have completed a total of 21 schemes which is ahead of our planned target. We plan to deliver 5 more by the end of Year 5 and an additional 3 by the end of 2025. Capital work continues in this field to deliver Reservoir Safety Improvements.
4L.102-103	Additional Line- Cwm Taf Water Supply	At PR19 the Cwm Taf Water Supply Strategy scheme proposed the abandonment of three existing works (Cantref, Llywnon and Pontsticill) and the construction of a single new 'Superworks' (sized to treat 225Mld), to replace them. The scheme was designated for delivery via Direct Procurement for Customers (DPC).
		Based on the results of extensive public consultation in 2022, local opposition and challenge, and escalating construction costs we are now are proposing a revised solution, that better reflects the best interest of our customers.
		The overspend is due to additional design, investigation and DPC project costs incurred to date over the FD19 allowance.



		The project will recommence public and stakeholder consultation in July 24, with an anticipated planning submission date of mid-2025.
4L.104-105	Additional Line- Visitor Centre	The overspend against the final determination allowance includes: 'return of value' funding rolled over from AMP6 for the new visitor centre at Llys y Fran; external grant funding secured for a wide range of projects across the visitor attraction and community partnership sites; and expenditure on the completion of the new visitor centre at Lisvane and Llanishen reservoirs (Cardiff).
4L.106-107	Additional Line- LOW PRESSURE	There was no allowance in the PR19 final determination for low pressure enhancement. The overspend results from actual enhancement expenditure incurred earlier in the AMP.
4L.107-108	Additional Line- Water Growth Scheme	The cumulative expenditure to date reflects the reversal of an accrual.

4.7 Table 4M - Enhancement expenditure for the 12 months ended 31 March 2024 – Wastewater network+ and bioresources

Line	Line Description	Comments
4M.L3	Conservation drivers	We have expenditure of £0.06m in the year with an AMP to date expenditure of £0.4m against a Final Determination allowance of £1.5m. Expenditure for the remaining outputs have been reprofiled into year 5.
4M.L6	Event Duration Monitoring at intermittent discharges	We have had expenditure of in the year of £6.4m and an AMP to date expenditure of £13m against a Final Determination allowance of £5.6m. We are overspent AMP to date due to installing more EDMs than planned and higher unit costs at some sites due to complex installations.
4M.L9	Flow monitoring at sewage treatment works	We have incurred expenditure of £0.9m in the year with total costs to date for the AMP of £21.4m against a FD allowance of £23.7m. The programme is currently £2m underspent due to the programme being reprofiled.
4M.L12	Schemes to increase flow to full treatment	In the year we have expenditure of £5.5m, with a total spend for the AMP to date of £8.5m against a FD allowance of £16.7m. The programme has been reprofiled due to a rigorous design phase in years 1-3.
4M.L15	Schemes to increase storm tank capacity	During the year we had expenditure of £1.2m with an AMP to date expenditure of £2.3m compared to the Final Determination allowance of £8.7m. We are currently underspent the allowance due to a reprofiling of schemes.
4M.L18	Storage schemes to reduce spill frequency at CSOs, storm tanks, etc	During the year we have had expenditure of £4.5m and have had expenditure for the AMP to date of £9.2m against a FD allowance of £48.2m. Original implementation of the SOAF framework was delayed because of COVID restrictions. Schemes have been re-profiled with feasibility and investigations in Years 1-3 with delivery being completed towards the end of the AMP.
4M.L31	Chemicals monitoring/ investigations/ options appraisals	During the year we had expenditure of £0.5m with an AMP to date expenditure of £1.9m compared to the Final Determination allowance of £1.9m. The expenditure for the AMP to date is broadly in line with our Final Determination.



4M.L37	Phosphorus removal	During the year we have had expenditure of £42m with an AMP to-date expenditure of £91m against an FD allowance to-date of £74.8m. The majority of the Phosphorous programme will be in construction during years $4 \& 5$. Construction at Rotherwas and Leominster was undertaken this year. We are currently overspending our Final Determination due to additional cost pressures and additional expenditure for Backstop Mitigation and Phosphate Monitoring Programme .
4M.L40	Reduction of sanitary parameters	During the year we've had expenditure of £4.9m with an AMP to date expenditure of £11m against a Final Determination of £13m. We had taken the approach of undertaking more detailed root cause analysis upfront of scheme release, and therefore re-profiled feasibility and investigations in Years 1-2, leaving design and construction for Years 3-5. However, we are now broadly on track to spend the FD allowance by the end of year 5.
4M.L46	Investigations	During the year we have expenditure of £8m with an AMP to date expenditure of £19.6m compared to the Final Determination allowance of £6.1m. Expenditure is higher than our Final Determination allowance due to an additional 200 investigations being undertaken. The cost of investigations has also increased above the assumptions made in the allowance due to additional modelling and flow monitoring requirements.
4M.L56	First time sewerage	During the year we have had expenditure of £0.5m with an AMP to date expenditure of £3.7m compared to a Final Determination allowance to date of £4.5m. The final scheme is in detailed design but has been delayed due to unexpected ground conditions.
4M.L59	Sludge enhancement (quality)	Expenditure of £0.5m was incurred in the year with an AMP to date expenditure of £4.4m against a Final Determination allowance of £5.6m. Additional enhancement storage at Moreton-On-Lugg was completed in the year. At Five Fords an existing storage pad had some improvement work to increase storage capacity. Additional storage at Five Fords has been reprofiled.
4M.L62	Sludge enhancement (growth)	The allowance for growth has been included in Base, however for consistency with our business plan submission we have included our costs within the enhancement table. Expenditure here is primarily for Cogmoors where an element of Growth has been allocated.
4M.L65	Odour	We have incurred expenditure of $\pm 0.2m$ during the year with expenditure of $\pm 3.2m$ for the AMP to date against the FD Allowance of $\pm 3.1m$. Our expenditure is broadly in line with the Final Determination allowance.
4M.L68	Enhancing resilience to low probability high consequence events	As a result of cost pressures elsewhere in the programme, the Power Resilience WWTW will not be delivered this AMP.
4M.L71	Security - SEMD	We have incurred expenditure of £0.4m during the year with an AMP to date expenditure of £1.6m compared to the Final Determination allowance of £0.7m. We are expecting to deliver the programme of work by the end of the AMP.
4M.L74	Security - Non-SEMD	We have incurred expenditure of £0.4m during the year with expenditure of £1.1m for the AMP to date against a Final Determination allowance of £0.4m. Additional expenditure has been incurred for Cyber security.
4M.L75	Additional Line-DWMPs	Development of the DWMPs have continued in the year for cycle 1 and the development of cycle 2. Expenditure for the AMP to date is broadly in line with the Final Determination allowance.



4M.L77	Additional Line- Loughor	The allowance includes transition expenditure of £25.752m incurred in 2019-20. Expenditure of £1.5m has been incurred in the year, expenditure is ahead of the Final Determination.
4M.L79	Gowerton/Llonelli LlWWTD	We have incurred expenditure of £2.3m for the AMP to data against no Final Determination allowance. The schemes under this line have all been completed."

4.8 Table 4Q - Developer services - New connections, properties and mains

Line	Line Description	Comments
4Q.L8	New residential properties served by NAVs	The new residential properties connected are on a new NAV water only site in our area. The reported figure, of 84, includes five properties from 2022/23 that were not reported to us by the NAV until October 2023 and January 2024.

4.9 Table 4R - Connected properties, customers and population

Line	Line Description	Comments
4R.L28	Resident Population	Our population data reflects the Census 2021 results and therefore the resident population reported in L28 for Water and Waste have shown a significant drop of -76.905 and -51.141 respectively. This 'step-change' adjustment has meant the population has a new baseline for this, and following years.
		This year we have seen an increase in our resident Household population of 2.36k, roughly in line with growth expectations. Our resident Non-household population has decreased by 3.14k due to reduced commercial activity linked to both industry and tourism. Therefore overall, we have seen a population decrease of 776 total this year.
4R.L30	Household population	This year we have seen a decrease in Household Non-Resident Population of ca. 15k. This is due to the reducing visitor numbers (commercial and tourism) to Wales post Covid-19.



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

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

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

5.1 Table 5A - Water resources asset and volumes data for the 12 months ended 31 March 2024

Line	Line Description	Comments
5A.L18	Total number of water reservoirs	In preparing our APR 2023/24 data we have identified that in previous years 10 reservoirs were incorrectly reported as being used for public water supply. The restated figures for previous years are, 2020/21 – 64, 2021/22 – 64 and 2022/23 - 63.
5A.L19	Total volumetric capacity of water reservoirs	The change in the number of reported reservoirs stated in line 5A.18 means there is a reduction in capacity. We are therefore restating the restated figures for previous years: 2020/21 – 455,104, 2021/22 – 455,104 and 2022/23 – 454,847.
5A.L21	Total installed power capacity of intake and source pumping stations	A reduction of 449 KW due to the removal of a 450kW pump at Valley Court and an increase of 0.6kW at Whitbourne.
5A.L23	Average pumping head – raw water abstraction	In last year's commentary we provided an update that our data improvement exercise will continue with the aim to increase the number of sites calculated using live pressure data. We are pleased to report that a total of 180 loggers were installed during the year, and for 2023/24 we calculated 84% of the overall Average Pumping Head (APH) value using measured data. All sites reported in this line have live flow data, so 100% of the APH figure for this line is calculated using live flow data. In 46% of the sites reported for this line we have used live pressure data, which equates to 93% of the APH value for this line being calculated using measured data. We have excluded bulk supply exports in line with RAG 2.09 reporting guidance on the definition of APH.
5A.L24	Energy consumption - water resources (MWh)	Electricity consumption was lower this year due to high levels of rainfall (27% higher in 2023/24) and this follows two dry years. This has resulted in a reduction in electricity consumption for raw water abstraction. High rainfall means that gravity water resources were in a healthy state and so less electricity was used to pump water from more energy intensive sources.
5A.L27	Total number of raw water abstraction exports	This relates to the abstraction of raw water from Elan Valley to Severn Trent Water



5A.L29	(measured using water	We have identified a very minor error whereby the Whitbourne yield was incorrectly included in the yield calculations as 5.5 MI/d rather than 5.6 MI/d. We are therefore restating the reported total water resources yield as 921.19 MI/d in 2022-23 rather than 921.29 MI/d.
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Additional financial and non-financial information, including (but not limited to), raw water transport, raw water storage, water treatment data, treated water distribution mains analysis, communication pipes, metering and leakage activities. In total there are five tables within part 6 of the APR as listed below:

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

6.1 Table 6A - Raw water transport, raw water storage and water treatment data for the 12 months ended 31 March 2024

Line	Line Description	Comments
6A.L3	Total number of raw water transport stations	A reduction of one as Alwen raw water transfer station has been decommissioned.
6A.L4	Total installed power capacity of raw water transport pumping stations	See 6A.3. A reduction of 8kW as a result of Alwen being decommissioned.
6A.L6	Average pumping head ~ raw water transport	In last year's commentary we provided an update that our data improvement exercise will continue with the aim to increase the number of sites calculated using live pressure data. We are pleased to report that a total of 180 loggers were installed during the year, and for 2023/24 we calculated 84% of the overall Average Pumping Head (APH) value using measured data.
		All sites reported in this line have live flow data, so 100% of the APH figure for this line is calculated using live flow data. 58% of the sites reported for this line have live pressure data, which equates to 99.9% of the APH value for this line being calculated using measured data.
		We have excluded bulk supply exports in line with RAG 2.09 reporting guidance on the definition of APH.
6A.L8	Total number of raw water transport imports	Import from United Utilities at Heronbridge
6A.L17-18	Water treatment – W4 works W5 works	In APR 2022/23 we restated our Water Treatment Works (WTW) treatment categories following a detailed review. We then resubmitted this data again in August 2023 following feedback from Ofwat. Following this submission, we have subsequently identified several sites where we incorrectly lowered the treatment category. Our restated position back to 2020/21 is shown in Appendix 2. This has resulted in two ground water WTW moving from W4 to W5 and a surface water WTW moving from W4 to W5.



		One site, Carno, is commissioned for use but was not used during the year.
6A.L21	WTWs in size band 2	As in previous years we have included one import works from Severn Trent in this line.
6A.L24	WTWs in size band 5	As in previous years we have included one import works from Severn Trent in this line.
6A.L25	WTWs in size band 6	As in previous years we have included two import works from Severn Trent in this line.
6A.L32	Number of treatment works requiring remedial action because of raw water deterioration	No schemes have been delivered.
	Average pumping head – water treatment	In last year's commentary we provided an update that our data improvement exercise will continue with the aim to increase the number of sites calculated using live pressure data. We are pleased to report that a total of 180 loggers were installed during the year, and for 2023/24 we calculated 84% of the overall Average Pumping Head (APH) value using measured data.
6A.L34		All sites reported in this line have live flow data, so 100% of the APH figure for this line is calculated using live flow data. 13% of the sites reported for this line have live pressure data, which equates to 44% of the APH value for this line being calculated using measured data.
		We have excluded bulk supply exports in line with RAG 2.09 reporting guidance on the definition of APH.
6A.L36	Total number of water treatment imports	As in previous years this is the water treatment import from United Utilities at Heronbridge.
6A.L38	Total number of water treatment exports	As in previous years these two water treatment exports are to Severn Trent at Elan Valley and to Albion at Shotton Mill.

6.2 Table 6B – Treated water distribution – assets and operations for the 12 months ended 31 March 2024

Line	Line Description	Comments
6B.L21	Total number of service reservoirs	A reduction of 10 from last year. 11 service reservoirs have been decommissioned and we have identified one site has two service reservoirs.
I $hBI/4$ I	Average pumping head – treated water distribution	In last year's commentary we provided an update that our data improvement exercise will continue with the aim to increase the number of sites calculated using live pressure data. We are pleased to report that a total of 180 loggers were installed during the year, and for 2023/24 we calculated 84% of the overall Average Pumping Head (APH) value using measured data.
		All sites reported in this line have live flow data, so 100% of the APH figure for this line is calculated using live flow data. 57% of the sites reported for this line have live pressure data, which equates to 80% of the APH value for this line being calculated using measured data.
		We have excluded bulk supply exports in line with RAG 2.09 reporting guidance on the definition of APH.



68179 I	Peak 7 day rolling average distribution input	For the 2023-24 reporting period the 'Peak' 7-day rolling average distribution input has been assessed as 987.68 Mld and occurred during the 7-day period beginning the 10th June 2023. This was a month earlier than 2023 given the warm spell also occurred earlier in 2023 and was not as prolonged. We also experienced a warmer spell during early September causing a smaller peak in DI.
6B.L35	Total annual leakage	See APR part 3 (En4 Leakage)

6.3 Table 6C – Water network plus - Mains, communication pipes and other data for the 12 months ended 31 March 2024

Line	Line Description	Comments
6C.L1	Total length of potable mains as at 31 March	Due to rounding to 1 decimal place, there is a variance of 0.1 when compared to the sum of values reported in 6C.5 to 6C.8 and 6C.9 to 6C.17.
6C.L3	Total length of potable mains renewed	The reported figure does not include mains which have been laid and are awaiting commissioning, these will be reported in the year in which they are commissioned. In previous years we have not included mains which have been renewed following repairs. We are therefore restating previously reported figures to account for these repairs. In addition, in 2022/23 we incorrectly included 1.8km for work completed at Dee Crossing in 6C.4 rather than this line so we have also accounted for this in our restatement.
		Our restated figures for previous years are 2018/19 – 49.km, 2019/20 – 60.7km, 2020/21 – 43.4km, 2021/22 – 24.2km and 2022/23 – 28.4km. See 6C.3. In 2022/23 we incorrectly included 1.8km for work completed
6C.L4	Total length of new potable mains	See 6C.3. In 2022/23 we incorrectly included 1.8km for work completed at Dee Crossing in this line rather than 6C.4. Our restated figure for 2022/23 is 46.6km.
	Total length of potable mains laid or structurally refurbished pre-1880	Only recently constructed mains have a very high confidence of age recorded on our system (around 40%). Other mains have been allocated to age bands based on local knowledge, evidence on surrounding properties or the years that the pipe material was available. For the mains allocated the earliest year the pipe material was available, the
	Total length of potable mains laid or structurally refurbished between 1881 and 1900	
	Total length of potable mains laid or structurally refurbished between 1901 and 1920	
6C.L9 to 17	Total length of potable mains laid or structurally refurbished between 1921 and 1940	
	Total length of potable mains laid or structurally refurbished between 1941 and 1960	midpoint of the year has been applied.
	Total length of potable mains laid or structurally refurbished between 1961 and 1980	
	Total length of potable mains laid or structurally refurbished between 1981 and 2000	



	Total length of potable mains laid or structurally refurbished between 2001 and 2020	
	Total length of potable mains laid or structurally refurbished during and after 2021	
6C.L18	Number of lead communication pipes	We have continued to use the lead predictor model to estimate the number of lead communication pipes.
6C.L19	Number of galvanised iron communication pipes	We have continued to use the predictor model to estimate the number of galvanised iron communication pipes.
6C.L23	Compliance Risk Index	Provisional data provided by DWI. See APR Part 3 (Wt1 Water quality compliance (CRI)).
6C.L24	Event Risk Index	Provisional data provided by DWI. See APR Part 3 (Wt6 Tap water quality event risk index). In APR 2022/23 we reported a value of 1,313.064 which included estimated scores for two outstanding events. One event has been finalised and one is still outstanding. Based on this the restated figure for 2022 is 1,102.316. This includes an estimate for the one outstanding event (Neath discolouration), we will restate again, if required, when DWI have completed their assessment. The current DWI score without the estimate for the Neath event is 906.083.
6C.L25	Properties below reference level at end of year	Last year we provided an update that we will be undertaking a review of processes used by the Operations teams to monitor and report on low pressure. The aim of this review is to improve consistency and effectiveness of the processes, by using permanent pressure loggers and increased automation of monitoring. This work is still ongoing and will be completed during 2024/25. This will improve data quality and we will provide an update in the 2024/25 APR. A reduction from last year as 372 properties in the Bryn area have been removed following installation of a temporary pumping station on the 150mm supply main into the area. This has been highlighted for investment for a permanent installation.

6.4 Table 6D - Demand management – Metering and leakage activities for the 12 months ended 31 March 2024

	Line	Line Description	Comments
•	6D.L6	·	Metering Water Resource Management Plan (WRMP) forecast of household metered properties reflects our AMP7 metering policy namely metering any new connections and our household meter option programme. Throughout the year we have seen an increase in customers applying for a water meter due to the cost-of-living crisis, as more customers are trying to save money. Also, there is an increase in meter installations due to the direct billing by us of 40,000 customers that were previously billed by local authorities. As a result of this communication, a large percentage of these customers requested a meter. As a result of this meter optant volumes have risen, which is a 27% increase on last year
			i i



		Our focus has been on installing AMR meters to enable drive by meter readings, instead of installing basic meters.
		Smart metering
		There is currently no wide-scale smart meter programme across AMP7 and this aligns with our current WRMP and business plan. Manually read meters are the current policy option, but smart meters are chosen for specific situations. AMR meters will tend to be used where there is access or health and safety concerns and where drive-by meter reading retrieval is preferred. The company also uses a smart meter option on new connections which require a domestic fire sprinkler. In the context of the definition, whilst we have some smart (AMR/AMI) meter installations in our metering estate, these are for specific purposes. The meters are not read on an increased frequency nor is consumption information offered back to the customer. As such, there is no supply demand benefit in the retrieval of meter readings through AMR or AMI through the current policy.
6D.L7	New selective meters installed for existing customers	During the year we have installed 1,468 Individual Household Monitor (IHM) meters to improve the reporting of per capita consumption of unmeasured domestic customers.
6D.L9	Residential meters renewed	An increase as a result of our focus on replacing stopped or damaged meters. Our focus has been on installing AMR meters to enable drive by meter readings, instead of installing basic meters.
6D.L11	Replacement of basic meters with smart meters for residential customers	Our focus has been on installing AMR meters to enable drive by meter readings, instead of installing basic meters.
6D.L13	Replacement of basic meters with smart meters for business customers	Our focus has been on installing AMR meters to enable drive by meter readings, instead of installing basic meters.
6D.L22	Cwm Taf Scheme	Increased leakage expenditure YOY in line with our service commitment plans.

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

Line	Line Description	Comments
		WRMP Schemes excluding interconnectors
		For APR 2023/24 we are reporting a value of 16.46 MI/d for supply and demand side improvements to the supply demand balance under both the dry year annual average and/or critical period planning scenarios.
6F		Crai Water Treatment Works (WTW) supernatant return is a project that has saved up to 1 MI/d from 2023/24 and will continue providing benefits in the rest of the AMP7 (2020-2025).
OI .		Since the start of AMP7 (2020-2025) to the end of this reporting year, Project Cartref has delivered 1.86 MI/d of savings in water demand across our supply area. Cartref was a funded enhancement programme from 2020-2021 financial year for AMP7 (2020-2025) only.
		The Tywyn Aberdyfi zone is currently supplied from two small stream sources which feed the Penybont water treatment works. The updated hydrological inflows that were derived for our WRMP24 during 2022-23 indicated that the existing sources may be more resilient under extreme



drought conditions than first thought. Based on the outputs of this work we are confident that we do not need to develop a new source of supply from the Afon Dysynni anymore. No benefits associated with the scheme have therefore been reported against this line since APR23.

In 2023/24 we achieved nearly full commissioning of our WRMP scheme to increase our ability to transfer raw water between Llysyfran impounding reservoir and Preseli WTW. Testing has confirmed a capability of 8 MI/d with further commissioning planned for 2024/25 to enable delivery of the full 10 MI/d.

The permanent upgrade to our Canaston Bridge pumping station is still in commissioning and is due to complete in 2024/25. These schemes work together to provide an overall benefit to the Pembrokeshire Water Resource Zone of 13.6 MI/d which reflects the maximum forecast deficit the scheme will resolve. The benefit is therefore shown in 2024/25.

Interconnectors only: WRMP Vowchurch

In APR 2023/24, we are reporting a value of 0 MI/d for the supply demand benefits derived from the delivery of internal interconnections. In AMP7 we have just one planned interconnector scheme which is looking at the feasibility of connecting our Vowchurch zone with the Hereford zone, delivering up to 3 MI/d. Detailed optioneering and design work is ongoing.



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

Table Number	Table Description
Pro forma 7A	Wastewater network plus - Functional expenditure for the 12 months ended 31 March 2024.
Pro forma 7B	Wastewater network plus - Large sewage treatment works for the 12 months ended 31 March 2024.
Pro forma 7C	Wastewater network plus - Sewer and volume data for the 12 months ended 31 March 2024.
Pro forma 7D	Wastewater network plus - Sewage treatment works data for the 12 months ended 31 March 2024.
Pro forma 7E	Wastewater network plus - Energy consumption and other data for the 12 months ended 31 March 2024.
Pro forma 7F	Wastewater network plus – WINEP phosphorus removal scheme costs and cost drivers.

7.1 Table 7B – Wastewater network+ - Large sewage treatment works for the 12 months ended 31 March 2024

Line	Line Description	Comments
7B.L1	Works name	We have amended the names of some of the Large Sewerage Treatment Works in the list, so they are consistent with previous years names. There is one additional Large Works this year, Newlands (Coleford). The PE has breached the 25,000-threshold due to an increase in Trade Effluent this year at one of our customers sites. Newlands has been classified as a large works in previous years.
	Suspended solids consent	Consistent with previous years for lines 7B.4 to 7B.8 where there is n permit level or maximal limit, we have inserted a zero into the table.
	BOD₅consent	
7B.L4-8	Ammonia consent	
	Phosphorus consent	
	UV consent	
7B.L5	BOD _s consent	Consistent with previous years we have reported the tighter consent of the UWWTD or WRA permits.

7.2 Table 7C – Wastewater network+ - Sewer and volume data for the 12 months ended 31 March 2024

Line	Line Description	Comments
7C.L1	Connectable properties served by s101A schemes completed in the report year	No schemes delivered.



7C.L2	Number of s101A schemes delivered in the report year	No schemes delivered.
7C.L4	Number of network pumping stations	There is an overall increase of 14 from last year. This is as a result of adding 18 the year - 17 have been adopted by developer services and there was one newly built to eventually replace a Wastewater Treatment Works (both the works and Pumping station operational at present). In total, four have been removed - three are no longer in use and one has been identified as a pump to an individual property to prevent sewer flooding.
7CL6	Total number of gravity sewer collapses	See APR Part 3 Rt3 - Sewer collapses.
7C.L8 - 10	Number of combined sewer overflows Number of emergency overflows - sewage pumping stations Number of settled storm overflows	Where Storm Overflows are hydraulically linked, we no longer count them separately if there is only one overflow point, to be consistent with the permit. This has resulted in reduction of 21 Overflows.
7C.L11	Sewer age profile (constructed post 2001)	The total length of Private Sewer Transfer (PST) sewers currently held within GIS represents approximately 28% of the total PST sewers estimated by the Water Research Centre (WRC). In order to account for the remaining PST sewers, the percentage of Public sewers constructed Post 2001 and up to Oct 2011 was calculated and an equal percentage of PST sewers added to the total. Length includes sewers constructed during 2001 to maintain consistency with previous years reported figures
7C.L14	Length of gravity sewers rehabilitated	We are currently unable to report the majority of gravity sewer repairs, as they are not evidenced by CCTV surveys. We are exploring alternative methodologies for reporting in 2024-25 (and whether repair totals for earlier years in AMP7 can be evidenced and restated).
7C.L15	Length of rising mains replaced or structurally refurbished	Our reported value of 2km includes one rising main rehabilitation scheme at Bretton (1.9km) and a further 216m as a result of reactive repairs on rising main failures. We interpret 'structural refurbishment' as mains that have been subject to relining, our reported numbers are typically all replacements and as such we have not claimed any lengths as being relined.
7C.L22	Length of formerly private sewers and lateral drains (s105A sewers)	For previous years we have reported this value as 17,175, which is the modelled length based on the Water Resource Centre model. We have identified this year, that Private Sewer Transfer rising mains are not included within the Water Resource Centre model. We have included these in the calculation this year and our restated figures for previous years are 2020/21 – 17,245, 2021/22 – 17,246 and 2022/23 – 17,247.
7C.L25	Number of storm overflows - other (as at 1 January)	All our storm overflows are reported in lines 7C.23 and 7C.24, we have no other storms overflows that are not included in these lines.
7C.L26	Number of storm overflows - pending investigation (as at 1 January)	As this is a new line for APR 2023/24, we did not keep records for this in 2023 so have reported zero for this line.
7C.L27	Number of permitted storm overflows closed in the previous reporting year (as at 1 January)	The data reported in this line has been based on the date of permit surrender rather than when the work on the storm overflow was completed.



7C.L29	Number of storm overflows closed in the previous reporting year - (as at 1 January)	Two permitted overflows were closed with permit surrenders not confirmed by the end of the reporting year.
7C.L30	Number of storm overflows with event duration monitors installed (as at 1 January)	The data for this line has been calculated from the Environment Agency and Natural Resources Wales Event Duration Monitors regulatory returns.
7C.L31	Proportion of the time that event duration monitors on storm overflows were operational (from 1 January to 31 December)	The data for this line has been calculated from the Environment Agency and Natural Resources Wales Event Duration Monitors regulatory returns.
7C.L32	Number of spills from storm overflows (from 1 January to 31 December)	The data for this line has been calculated from the Environment Agency and Natural Resources Wales Event Duration Monitors regulatory returns.
7C.L35	Number of emergency overflows - other (as at 1 January)	We have assumed "Emergency overflows - other" to mean emergency overflows at Wastewater Treatment Works as all our other emergency overflows have been reported in 7C.33 and 7C.34.
7C.L37	Number of emergency overflows with event duration monitors installed (as at 1 January)	The data for this line has been calculated from the Environment Agency and Natural Resources Wales Event Duration Monitors regulatory returns.
7C.L38	Number of emergency overflows with an MCERTS certified event duration monitors installed (as at 1 January)	The programme of installations has not yet started. It has been planned to start from 2025.
7C.L39	Proportion of the time that event duration monitors on emergency overflows were operational (from 1 January to 31 December)	The data for this line has been calculated from the Environment Agency and Natural Resources Wales Event Duration Monitors regulatory returns.
7C.L40	Number of spills from emergency overflows (from 1 January to 31 December)	The data for this line has been calculated from the Environment Agency and Natural Resources Wales Event Duration Monitors regulatory returns.

7.3 Table 7D – Wastewater network+ - Sewage treatment works data for the 12 months ended 31 March 2024

Line	Line Description	Comments
7D.L17	served by STWs with tightened/new P consents	We have completed five schemes during the year, these were all primarily delivered by a capex solution. We have followed the same methodology to calculate population equivalent as used in table 4R.
	conneity enhancement	In APR 2022/23, we incorrectly claimed for the Weobley phosphorus scheme. This was completed in 2023/24 so has been included in this year's APR submission. Our restated figure for 2022/23 is 0.472.

7.4 Table 7E – Wastewater network+ - Energy consumption and other data for the 12 months ended 31 March 2024

Line	Line Description	Comments
7E.L1	Total sewerage catchment area	Private and Inset Area Catchments have been removed.
		An increase of two as Ogmore-By-Sea and Watch House Bay have been confirmed as designated bathing waters.



7E.L6	Energy consumption - sewage collection	There has been a significant increase in sewage energy costs as a result of rainfall that was was 27% higher than the previous year. Further, some SPS were previously classed under treatment and this reallocation has also exaggerated the difference between collection and treatment.
7E.L9	Cumulative shortfall in FFT addressed by WINEP / NEP schemes to increase STW capacity	No regulatory schemes claimed during the year.
7E.L10	Number of sites with an increase in sewage treatment works capacity delivered to address a shortfall in FFT	No regulatory schemes claimed during the year.
7E.L11	Additional storm tank capacity provided at sewage treatment works (grey infrastructure)	No regulatory schemes claimed during the year.
7E.L12	Additional effective storm storage capacity at sewage treatment works (green infrastructure)	No regulatory schemes claimed during the year.
7E.L13	Additional volume of network storage at CSOs etc to reduce spill frequency (grey infrastructure)	No regulatory schemes claimed during the year.
7E.L14	Additional effective storage in the network delivered through green infrastructure	No regulatory schemes claimed during the year.
7E.L15	Total number of sewage treatment works sites where additional storage has been delivered (grey infrastructure)	No regulatory schemes claimed during the year.
7E.L16	Number of sewage treatment works sites where additional storage has been delivered with pumping (grey infrastructure)	No regulatory schemes claimed during the year.
7E.L17	Number of sewage treatment works benefitting from green infrastructure replacing the need for storm tank storage	No regulatory schemes claimed during the year.
7E.L18	Number of sites delivering additional network storage (grey infrastructure)	No regulatory schemes claimed during the year.
7E.L19	Number of sites delivering additional network storage including pumping (grey infrastructure)	No regulatory schemes claimed during the year.
7E.L20	Number of sites delivering additional network storage through green infrastructure	No regulatory schemes claimed during the year.



7E.L25	Number of storm overflows where improvements have been made to reduce harm or reduce spill frequencies.	No regulatory schemes claimed during the year.
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7.5 Table 7F – Wastewater network+ - WINEP phosphorus removal scheme costs and cost drivers

Line	Line Description	Comments
7F.3	Llandrindod Wells WwTW	Reduced from 1.25mg/L as currently in the NEP. Modelling of the SAC rivers has resulted in a tighter permit for AMP8, the AMP8 limit is being used for design for efficiency and to prevent any abortive spend from having phosphorous removal schemes in consecutive AMPs. The river modelling which has been completed has been externally audited and agreed with the Regulator. A change control is pending.
7F.4	Norton	Scheme to transfer to pump station. Reporting a 2.1km and 2.03km rising main. Based on Handover Document (CAF609) confirmed 2.03km of rising main installed.
7F.5	Pontyberem WwTW	Reduced from 1.0mg/L currently in NEP as the NEP is yet to be updated following Gwili Gwendraeth investigation results and subsequent phosphorous permit change. The 0.5mg/L is the permit limit being used for design and therefore Capex and opex expenditure.
7F.7	Rhayader WwTW	Increased from 0.7mg/L currently in NEP as modelling completed during feasibility produced an amended requirement for phosphorous used for design, and therefore for capex and opex expenditure. The river modelling which has been completed has been externally audited and agreed with the Regulator. A change control is pending.
7F.9	Spittal WwTW	Reduced from 1.0mg/L as currently in the NEP. Modelling of the SAC rivers has resulted in a tighter permit for AMP8, the AMP8 limit is being used for design for efficiency and to prevent any abortive spend from having phosphorous removal schemes in consecutive AMPs. The river modelling which has been completed has been externally audited and agreed with the Regulator. Change control is pending. Agreed change control and scheme is now delivering 0.6 mg/l AMP8 limit.
7F.15	Crosshands WwTW	Reduced from 6.0mg/I currently in NEP as the NEP is yet to be updated following Gwili Gwendraeth investigation results and subsequent phosphorous permit change. The 0.65mg/L is the permit limit being used for design and therefore Capex and opex expenditure.
7F.12	Llanarth WwTW	Increased from 0.5mg/L in the NEP as this scheme's driver was assessed for cost benefit and found to be non-cost beneficial which would have removed this driver. However, due to an increase in DWF, a phosphorous limit was needed and the driver re-applied. Modelling during feasibility resulted in the more relaxed phosphorous limit which has been used for design. Change control agreed.
7F.13	Rhiwlas WwTW	Our PR19 NEP was to deliver a consent level of 0.5mg/L, the SAGIS model now shows a consent value of 2.2mg/L. Change Control is signed off by NRW. Claimed output of 2.2 mg/l.



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7F.22	Weycock Cross	See above, receiving works has no P consent so Opex updated for sludge.
7F.23	Eign and Rotherwas	Scheme was originally split for 0.4 mg/l at both sites, however on review a load-based permit was agreed and costs associated with the scheme was split 60:40 Rotherwas to Eign based on receiving load at the works. Scheme output claimed 31/03/2024
7F.30	No Mans Heath	Rising main is installed but work completing still ongoing. Scheme delayed due to issues at receiving works (Malpas WwTW). Awaiting resolution of FPF scheme to install a new scheme. Due to this, the hydraulics at Malpas have been compromised so agreement was reached to keep treating wastewater at No Mans Heath until FPF scheme complete.
7F.32	Whitchurch	AMP7 WINEP limit of 0.3 mg/l reduced to 0.25 mg/l due to increase of Dry Weather Flow (DWF) to 3220 m3/d from existing permit of 2592 m3/d that the original WINEP would have modelled. This is due to significant growth within the catchment. Update 01/05/2024 – Significant amount of dry weather infiltration has been removed from the catchment, no dry weather flow permit required, so limits will stay as per AMP7 WINEP.
7F.34	Brecon WwTW	Growth led scheme. Not in the AMP7 NEP but is an AMP8 requirement following the completion of the modelling on the SAC rivers. The AMP8 limit is being used for design for efficiency and to prevent any abortive spend from having capital removal schemes in consecutive AMPs. Also due to a planning embargo enforced by the council due to high phosphorous levels in the receiving water course, the growth would not be enabled unless a phosphorous permit limit is applied. There is no AMP7 commitment ID.
7F.36	Cog Moors WwTW	Added to the table to note that there is an opex increase here due to the pump away scheme from Weycock Cross. No capex required.
7F.37	Clyro WwTW	Increased from 1.7mg/L, currently in NEP as modelling completed during feasibility produced an amended requirement for phosphorous used for design, and therefore for capex and opex expenditure The river modelling which has been completed has been externally audited and agreed with the Regulator. Change control is pending. Very late Year 4 update, scheme is now removed from NEP by regulator, however assessment underway on increased DWF and likely future limit. Confirmed at 2.7 mg/l. This has been removed from table 7F.
n/a	Monmouth WwTW	Monmouth has been removed from the table as its a Growth led scheme. Its not in the AMP7 NEP but is an AMP8 requirement following the completion of the modelling on the SAC rivers. The AMP8 limit is being used for design for efficiency. Whilst a significant growth scheme is required here during AMP8, this scheme will allow compliance until then. Also due to a planning embargo enforced by the council due to high phosphorous levels in the receiving water course, the growth would not be enabled unless a phosphorous permit limit is applied.
n/a	Carway	Carway has been removed from table 7F as there is no phosphorus driver within the NEP, only sanitary dets tightening.



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

Table Number	Table Description
Pro forma 8A	Bioresources sludge data for the 12 months ended 31 March 2024.
Pro forma 8B	Bioresources operating expenditure analysis for the 12 months ended 31 March 2024.
Pro forma 8C	Bioresources energy and liquors analysis for the 12 months ended 31 March 2024.
Pro forma 8D	Bioresources sludge treatment and disposal data for the 12 months ended 31 March 2024.

8.1 Table 8A – Bioresources sludge data for the 12 months ended 31 March 2024

Line	Line Description	Comments
8A.L2	Total sewage sludge produced, treated by 3 rd party sludge service provider	A reduction from last year as there have been no significant outages at our advanced anaerobic digestion sites, allowing us to treat most of the sludge ourselves. When needed we have utilised a third party Biosolids Assurance Scheme (BAS) approved contractor to lime treat sludge.
8A.L4	Total sewage sludge produced from non-appointed liquid waste treatment	The recorded value of 2.0 ttds/year is the domestic tankered waste we receive from private companies. This volume is included in line 3.
8A.L7	Total sewage sludge disposed by 3 rd party sludge service provider	See 8A.2
8A.L9	Total measure of intersiting 'work' done by pipeline	This is the value transported between Rotherwas and Hereford Eign WWTWs.
8A.L11	Total measure of intersiting 'work' done by truck	An increase this year as a result of the addition of Tenby as a Sludge Treatment Centre and issues at Cog Moors where material from the export silo was being retreated through advanced anaerobic digestion. We have utilised google maps to calculate actual road distance.

8.2 Table 8C – Bioresources energy and liquors analysis for the 12 months ended 31 March 2024

Line	Line Description	Comments
8C.L1		As per the company query response, we have converted the total column into an input in the final Excel table template. This is so the total can account for energy used in transport which isn't accounted for here.
	hioresources that is usused	In bioresources, total energy consumption has increased by 12% compared to previously reported values. The main reason for this is an increase in the heat consumed, with imported increasing. The volume



		of sludge treated by advanced digestion increased by 5% over the previous year which explains some of the increase. The remaining increase may be due to a reduction in efficiency.
8C.L6	Energy bought from grid or third party and used in bioresources control	

8.3 Table 8D – Bioresources sludge treatment and disposal data for the 12 months ended 31 March 2024

Line	Line Description	Comments
8D.L2		See 8A.2. When needed we have utilised a third party Biosolids Assurance Scheme (BAS) approved contractor to lime treat sludge.
8D.L11	% Sludge disposal route -	All sludge is recycled to agriculture. For some sludge we have utilised a Biosolids Assurance Scheme (BAS) approved contractor to lime treat sludge and disposal (see 8D.2).



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

Table Number	Table Description
Pro forma 9A	Innovation competition.

9.1 Table 9A – Innovation competition

Line	Line Description	Comments
9A.L9	Innovation project 1 Reservoir water community monitoring for algal risk assessment	This project was completed in January 2023. The reservoir monitoring project developed new methods for sampling and eDNA analysis to identify cyanobacteria that are responsible for taste and odour forming compounds.
9A.L10	Innovation project 2 Hyvalue	This project is completed. The HyValue project looked at making Cardiff Wastewater Treatment Works a hydrogen hub. The project entailed a desk top study by Costain to look at the feasibility of a hydrogen hub. Unfortunately, we did not win a further phase of the project in the Ofwat bids. In 2022/23 APR the figure submitted did not include overheads and included a misallocated cost. Therefore, the restated figures for 2022/23 are: • £0.177m for actual expenditure on innovation fund projects in year and cumulative actual expenditure on innovation fund projects (columns 4 and 7); and • £0.013m for in year expenditure on innovation projects funded by shareholders of the lead water company (column 10).
9A.L11	Innovation project 3 Background Leakage	This project is ongoing. Its aim is to attempt to quantify background leakage and identify the causes by employing a variety of novel monitoring techniques.
9A.L12	Innovation project 4 Artificial Intelligence for Algal Monitoring	This project is ongoing and is investigating the use of Al in identifying algal species. At present this is done by a highly trained analyst looking down a microscope and counting different species.



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

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

10.1 Table 11A – Greenhouse gas emissions reporting for the 12 months ended 31 March 2024

Line	Line Description	Comments
11A.L13	Purchased electricity (market-based)	There is a significant decrease this year as there have been updates to Carbon Accounting Workbook to align with latest RAG4.12. This now means this line deducts the carbon credits associated with our purchased electricity. Note there is a corresponding reduction report in 11A.39 – exported renewables.
11A.L29	Chemicals	This year we have a more complete data set as we've been able to collect information from all our suppliers which has led to the significant increase in the reported carbon. While we collected data from the majority of suppliers last year, we were unable to collect data from a small number and these accounted for the majority of emissions reported this year.
11A.L34	Scope three emissions; GHG type $\mathrm{CH_4}$	Digested sludge to land CH4 emissions have been reported in this line.
11A.L35	Scope three emissions; GHG type N2O	Digested sludge to land N2O emissions have been reported in this line.
		This line requires us to split Greenhouse Gas (GHG) emissions from the goods and services we purchase into emissions from Waste and emissions from Water. The current methodology uses spend data from our procurement system to estimate GHG emissions from our Purchased Goods and Services. We must use Procurement data as the Procurement system assigns each Purchase Order (PO) a product category depending on the contract we have with each supplier. This product category is used to inform models that assigns the correct emissions factors to Waster or Water.
11A.L51	Purchased goods and services	Our reporter raised a material issue here as the Procurement data only provides us with the total PO value, and not the actual spend within that PO. This leads to us overstating our emissions estimates as we are presuming maximum spend within every PO.
		The actual spend data against every PO is held in our separate Finance Systems but this does not have the product category so we cannot split between Waste and Water.
		We are working to develop a solution to this and resolve this material issue for APR2024/25.
		Broad categories of goods and services are included



We have set out in the table below the five SIC codes categories that
comprise the majority (63%) of emissions for Goods and Services:

SIC Code	Description
Rest of repair; Installation - 33.11-14/17/19/20:	These are specialised repair services, not classified elsewhere. Relevant services include solar, hydro, wind and CHP maintenance activities as well as fire protection, electrical, generator, grounds and operational maintenance.
Other manufactured goods:	This category encompasses a wide range of products that are not classified under specific manufacturing categories. For DCWW this grouping largely consists of protective safety equipment and clothing, stationary and miscellaneous items.
Remediation services and other waste management services:	This class includes decontamination of soils and groundwater at the place of pollution.
Machinery and equipment n.e.c. (not elsewhere classified):	This category includes manufacturing machinery and equipment and parts, not elsewhere classified, such as the supply of plant, vehicle, workshop machinery and specialist tool and equipment.
Architectural and engineering services; technical testing and analysis services:	This class includes the provision of architectural consulting activities; engineering design; environmental consulting activities; geophysical, geologic; seismic surveying; hydraulic modelling and leakage detection.

For clarity, the list below sets out the categories excluded from the reporting in line 11A.L51:

- Chemicals emissions
- Disposal of Waste
- Process and Fugitive Emissions
- Outsourced Activities
- Purchased Electricity
- Purchased Heat
- Purchased Fuels
- Capital Projects
- Capital Maintenance



Appendix 1 - Additional Regulatory Information

Notes to regulatory accounts

1.1 Accounting Policies

Basis of preparation

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

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

Basis of consolidation

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

Appointed and non-appointed businesses

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

Leases

At inception of a contract the Company assesses whether a contract is, or contains, a lease. Where a lease is present, a right-of-use asset and lease liability is recognised at the commencement date. The lease liability is measured at the present value of future lease payments due over the term of the lease, with the right-of use asset recognised as property, plant and equipment at cost. This is generally equivalent to the initial measurement of the lease liability.

Lease payments are discounted using the interest rate implicit in the lease or, if that is not readily available, the Company's incremental rate of borrowing. Generally, the Company uses its incremental borrowing rate as the discount rate. After the commencement date, the lease liability is increased for the accretion of interest (being the unwinding of the discounting applied to future lease payments) and reduced by lease payments made. In addition to this the carrying amount is updated to reflect any remeasurement or lease modifications. Remeasurements are typically required as a result of rent reviews or changes to the lease term. In these cases a corresponding adjustment to the right-of-use asset is made.

Depreciation of right-of-use assets is charged on a straight-line basis over the term of the lease. Where leases have a term of less than 12 months from the commencement date and do not have a purchase option, the group applies the short-term lease recognition exemption available under IFRS 16. The Company applies the low value recognition exemption permitted by the standard to leases of assets with a value of less than £2,500. Payments for short-term and low value leases are instead charged to operating costs on a straight-line basis over the period of the lease.

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

Revenue recognition

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



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

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

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

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

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

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

Charging policy

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

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

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

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

Bad debt policy

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

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

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

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

Accounting separation policy

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

Water and sewerage services

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

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

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

Retail service

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

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

Fixed assets

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

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

Capitalisation policy

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

As at 31 March 2024 the total value of tangible and intangible fixed assets has been revalued to the Company's 'shadow-RCV' (Regulatory Capital/Asset Value), being the 31 March 2024 RCV published by Ofwat in its PR19 Final Determination as adjusted for the impact of any totex over/underspend and the 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 1.09 para 4.8 and 4.9, in its regulatory financial statements the Company has dis-applied the IAS 16 requirement to capitalise applicable borrowing costs.

Infrastructure assets

Infrastructure assets comprise principally impounding reservoirs and a network of underground water and wastewater systems. For accounting purposes, the water system is segmented into components representing categories of asset classes with similar characteristics and asset lives. The wastewater system is segmented into components representing geographical operating 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 average economic lives of the infrastructure components range principally from 35 to 150 years, with a small number representing approximately 4% of the total number of infrastructure assets falling outside of this range. *Other assets*

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.

Intangible assets

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

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

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

Right of use assets

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

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

Grants and customer contributions

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

Capital expenditure programme incentive payments

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



Price control units

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

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

Trade receivables

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

Cash and cash equivalents

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

Pension benefits

Defined benefit scheme

The asset recognised in the balance sheet in respect of defined benefit pension plans is the fair value of plan assets less the present value of the defined benefit obligation at the end of the reporting year. The fair value of these assets has been estimated based on the latest available observable prices, updated with reference to movements in comparable observable indices to the reporting date, and adjusted for judgements to reflect differences in the liquidity and credit components of the asset pricing. The defined benefit obligation is calculated annually by an independent actuary using the projected unit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension obligation.

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

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

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.

Financial liabilities

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

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

Derivative instruments utilised by the Company are interest rate swaps, inflation swaps and power hedges. Derivative instruments are used for hedging purposes to alter the risk profile of existing underlying exposures within the Group. Derivatives are recognised initially and subsequently re-measured at fair value. During the year to 31 March 2024,



one of the Company's derivatives qualified for hedge accounting (2023: none), but the Company elected not to apply hedge accounting. These instruments are carried at fair value with changes in fair value being recognised immediately in the income statement.

Taxation

Income tax for the year comprises current and deferred tax. Tax is recognised in the income statement, except to the extent that it relates to items recognised in other comprehensive income or directly in reserves. Current tax is the expected tax payable on the taxable income for the year using rates substantially enacted at the balance sheet date, and any adjustments to tax payable in respect of prior years.

Deferred taxation

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

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

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

Provisions

Provisions 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. More information is provided in note 17. Provisions are not recognised for future operating losses.

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

1.2 Differences between statutory and RAG Definitions

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

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

Revenue recognition

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

- billed and recorded in turnover; or
- void properties



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

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

Reconciliation of statutory financial statements to regulatory accounting tables

1A – Income statement for the year ended 31 March 2024				
	£m			
Loss for the year per statutory accounts	(181.144)			
Capitalisation of interest	(18.586) Ofwat's RAG override to disapply capitalisation of borrowing costs under IAS 23			
Depreciation on capitalised interest	23.012 Ofwat's RAG override to disapply capitalisation of borrowing costs under IAS 23			
Revenue recognition - measured income accrual adjustment	0.624 Deviation from IFRS 15 as no judgement applied to the probability of collections when recognising revenue			
Innovation fund	2.500 Innovation fund provision removed from operating expenditure as it's not an operating expense			
Deferred tax	(1.897)			
	5.653			
Non-appointed loss (net of tax)	(0.489) Regulatory tables prepared in respect of the appointed business			
Loss for the year per regulatory accounts	(175.980)			

1D - Statement of cash flows for the year ended 31 March 2024				
	£m			
Decrease in net cash per statutory accounts	; (215.352)			
Non-appointed profit for the year	(0.652) Regulatory tables prepared in respect of the appointed business only			
Increase in net cash per regulatory accounts	s (216.004)			



1C – Statement of financial position as	at 31 March 2	024
	£m	
Net assets per statutory accounts	1,490.777	
Capitalisation of interest		
- Fixed assets		Ofwat's RAG override to disapply capitalisation of porrowing costs under IAS 23
- Intangible assets	11.3.36(1)	Ofwat's RAG override to disapply capitalisation of porrowing costs under IAS 23
_	(126.536)	
Trade and other receivables:		
- Measured income accrual	4.924 ji	Ofwat's RAG override to deviate from IFRS15; no udgement to be applied to the probability of collections, and all is considered as collectable
	4.924	
Trade and other payables:		
- Deferred income	1.50 0.59	RAG requirement to report separately on face of statement
- Accrued interest		RAG requirement to include accrued interest in trade and other payables
- Innovation provision		Removal of accrual for innovation competition as it's not an operating expense
	695.291	
Borrowings		
- Accrued interest		RAG requirement to include accrued interest in trade and other payables
	44.501	
Deferred income		
Deferred income – adopted assets	(714.392) F	RAG requirement to report separately on face of statement
-	(714.392)	
Provisions	(15.007)	RAG requirement to include deferred income > 1 year to provisions
Deferred tax	28.001 [Deferred tax impact on RAG deviation (above)
Net assets allocated to non-appointed activities	(43 () / /)	Regulatory tables prepared in respect of the appointed pusiness only
Net assets per regulatory accounts	1,363.827	



1.3 Revenues by customer type

Table 2G, "Revenues by tariff type for the year ended 31 March 2024 – non-household water", reports customers using greater than 50Ml are reported as customer group 2, consistent with our approach to PR24 table PD2. For these customers we have applied a retail margin of 1%, below the 3.3% allowed by the PR19 determination.

	Wholesale charges revenue	Retail revenue	Total revenue	Number of connections	Average non-household retail revenue per connection
	£m	£m	£m	000s	£
Non-default tariffs					
Raw water > 50Ml (measured)	2.463	0.023	2.486	0.010	2,300
Partially treated water > 50MI	0.923	0.009	0.932	0.001	9,000
Water large user 50MI-99MI (measured)	5.217	0.052	5.269	0.050	1,040
Water large user 100MI-249MI (measured)	6.422	0.064	6.486	0.032	2,000
Water large user 250MI-499MI (measured)	3.701	0.037	3.738	0.009	4,111
Water large user 500MI-1000MI (measured)	3.647	0.036	3.683	0.005	7,200
Water large user >1000Ml (Measured)	-	-	-	-	-
Special agreement register – ref WSHNONPOT9	1.973	0.022	1.995	0.001	22,000
Special agreement register – ref WSHNONPOT10	0.859	0.008	0.867	0.002	4,000
Total non-default tariffs	25.205	0.251	25.456	0.110	2,282
Default tariffs					
Raw water < 50Ml (measured)	0.005	0.000	0.005	0.003	-
Partially treated water < 50MI (measured)	68.769	3.464	72.233	91.493	38
Potable water < 50MI (non-household) Measured	2.200	0.268	2.468	7.096	38
Potable water < 50MI (non-household) Unmeasured	0.004	-	0.004	0.003	-
Special agreement register – ref WSHPOT1	-	-	-	0.001	-
Total default tariffs	70.978	3.732	74.710	98.596	38



1.4 Transactions with associates

The Directors of Dŵr Cymru Cyfyngedig (DCWW) are also Directors of other companies within the Glas Cymru Holdings Cyfyngedig group; however, their emoluments are paid in full by the Company as their activities are predominantly related to the regulated water and sewerage business. During the year the Directors' emoluments amounted to £1,555,000 (2023: £1,695,000).

Company interest payable to Dŵr Cymru (Financing) Limited (DCFL), another member of the Glas Cymru Holdings Cyfyngedig group, was £181.4m during the year (2023: £223.7m) as well as £89.1m (2023: £187.4m) for bond swap indexation. As at 31 March 2024 the balance outstanding on the intercompany loan and accrued interest from DCFL stood at £3,514.5 (2023: £3,226.9m). In addition the bond swap indexation outstanding on the bonds owed to DCFL amount to £433.7m (2023: £344.7m). All borrowings raised by DCFL are immediately on-lent to the Company on an arms-length basis. The intercompany loan is subject to the terms and conditions of the whole business securitisation structure of Glas Cymru Holdings Cyfyngedig and its subsidiaries. DCWW, in its capacity as debtor, repays such principal and interest as is due on each borrowing on the due date plus 0.01%. Further intercompany balances with other members of the Glas Cymru Holdings Cyfyngedig group comprised a loan from Glas Cymru Anghyfyngedig of £2.0m (2023: £2.0m) and a loan from Dŵr Cymru Holdings Limited totalling £2.8m which remains outstanding as at 31 March 2024. Interest payable on these loans has been waived.

As at 31 March 2024 intercompany trading balances owing to the Company were: Welsh Water Infrastructure Limited £nil (2023: £3,560), Welsh Water Organic Energy (Cardiff) Limited £3,647,719 (2023: £2,098,786), Welsh Water Organic Energy Limited £36,000 (2023: £13,655), Cambrian Limited £25,419 (2023: £25,419), Glas Cymru Anghyfyngedig £8,481 (2023: £8,481), Glas Cymru Holdings Limited £33,063 (2023: £74,290) and Welsh Water Organic Waste £123,397 (2023: £480,661).

During the year no dividends were paid or received (2023: 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.



Services provided	by the regulated	business to	associated	businesses
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Service	Company	Turnover of associate £m	Terms of supply	Value £m
Staff secondments	Welsh Water Organic Energy (Cardiff) Ltd	2.640	Fully absorbed cost	0.653
	Welsh Water Organic Waste Ltd	1.059	Fully absorbed cost	0.287
Other costs	Welsh Water Organic Energy (Cardiff) Ltd	2.640	Fully absorbed and support cost	0.067
	Welsh Water Organic Waste Ltd	1.059	Fully absorbed and support cost	0.080
Loan interest	Dŵr Cymru (Financing) Limited	-	Loan interest payable at 0.01% mark up	181.419
	Dŵr Cymru (Financing) Limited	-	Loan interest payable relating to bond swap indexation ²	89.078
Intercompany balances	Welsh Water Organic Energy Ltd ¹	3.213	Intercompany balances; net increase of £0.022m.	0.036
	Welsh Water Organic Energy (Cardiff) Ltd	2.640	Intercompany balances; net increase of £1.549m.	3.648
	Welsh Water Organic Waste Ltd ¹	1.059	Intercompany balances; net decrease of £0.357m	0.124
	Welsh Water Infrastructure Ltd ¹	-	Intercompany balances; decrease of £0.004m	0.000
	Glas Cymru Anghyfyngedig¹	-	Intercompany balances; no movement in year	0.008
	Cambrian Ltd ¹	-	Intercompany balances; no movement in year	0.025
	Glas Cymru Holdings Ltd¹	-	Intercompany balances; net decrease of £0.041m	0.033
	Welsh Water Holdings Ltd ¹	-	Intercompany balances; no movement in year	0.017
	Dŵr Cymru (Financing) Limited	-	Loan interest outstanding; net increase of £37.451m	36.244
Intercompany Ioan to	Glas Cymru Anghyfyngedig¹	-	Intercompany loan; no movement in year	1.971
	Dŵr Cymru Holdings Limited ¹	-	Intercompany loan; no movement in year	2.812
Intercompany Ioan from	Dŵr Cymru (Financing) Limited	-	Intercompany loan which includes bond swap indexation2; net increase of £413.149m	(3,984.514)

Services provided by the associated businesses to the regulated business

Service	Company	Turnover of associate £m	Terms of supply	Value £m
Supply of power costs from AD plant to Cardiff Treatment works	Welsh Water Organic Energy (Cardiff) Ltd	2.640	Arm's length contract in 2014 with third party	(0.800)
Rental of appointed assets	Welsh Water Organic Waste Ltd	1.059	Arm's length contract for rental of appointed assets	0.072



Service	Basis of recharge made by the appointed business	Value £m
Treatment of tankered waste	The recharge is based on the strength of waste and volume received using the Mogden formula	2.409
Treatment of external sludge	The recharge is based on a model prepared by an external consultant- the costs transferred is at arms length. The profit margin is shared equally with the appointed business	0.407
Visitor centres	Fully absorbed cost of Visitor Centres	3.957
Search fees	Cost of team supporting this activity	0.220
Support costs for non regulated activity	Support costs based on FTE of non appointed activity	1.115

1.5 Statement of changes in equity (Company level)

	Ref Sh	are capital	Capital redemption Reva	luation reserve	Retained Tearnings	otal equity
		£m	£m	£m	£m	£m
At 1 April 20	23	309.9	166.2	1,267.0	(197.7)	1,545.4
Loss for the year	1A	-	-	-	(181.1)	(181.1
Revaluation net of tax	1B	-	-	106.6	-	106.6
Actuarial gain net of tax	1B	-	-	-	19.8	19.8
Transfer to retained earn	nings	-	-	(102.2)	102.2	
At 31 March 2024	1C	309.9	166.2	1,271.4	(256.8)	1,490.



1.6 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 3-month SONIA plus a margin to 5.67% fixed.

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

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

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

As at 31 March 2024, £300m of swap notionals are held in DCWW. Please note notionals are used but the table headers state nominal. These swaps were taken out to hedge floating rate leasing liabilities and follow the amortising profile of the finance leases. The "year on year" index-linked swaps convert the floating rate leases to index-linked liabilities. Due to the swaps being Pay as you go in relation to indexation, they fall under the '(A) Super-senior swaps with breaks of accretion paydowns' and as such are reflected in that table.

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

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

Credit breaks

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

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, with its present debt instruments, has been to hedge at least 85% of its total outstanding financial liabilities into either RPI or fixed-rate obligations. To comply with this policy and in order to keep debt costs as low as possible we will raise debt at the lowest interest rate commensurate with the maturity of the debt. There is no specific optimum mix of RPI and fixed rate debt. As of 31 March 2024, 94% of our debt is either fixed or index-linked.

Other financial derivatives

The other financial derivatives detailed in line 41.27 are power hedges which swap the price of floating rate electricity into fixed rate. The notional is derived by calculating the total number of hours hedged multiplied by the fixed price per hour. As these swaps fix commodity prices, there is no applicable interest rate to include in columns O and P.

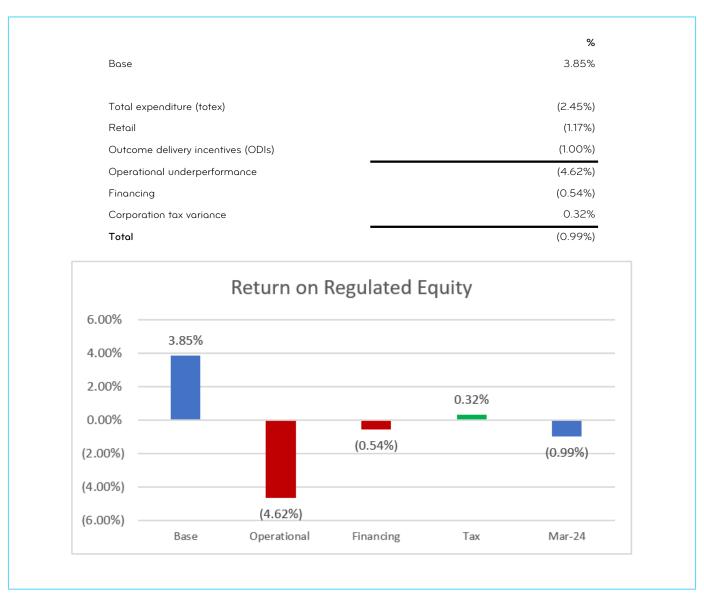


1.7 Return on regulated equity

Dŵr Cymru has a base actual return on regulated equity (RORE) of 3.85% for 2023/24, based on the allowance set at the 2019 price review.

The Company delivered an actual RORE of -0.99% for the year ended 31 March 2024.

The Company's share of overall operational underperformance, adjusted where appropriate for timing differences, delivered a negative return of 4.62%. The difference between the actual and allowed average real interest rates on debt reduced the overall return by (0.54%). A corporation tax variance increased the actual return by 0.32%. This is based on a variance in corporation tax of £7.002m calculated using the table prescribed for line 5 (variation in corporation tax). As explained in the notes accompanying that table, if the actual corporation tax credit reported in our accounts of £0.056m (£0.047m in 2017/18 prices) is used to calculate the variance, it reduces to £1.627m. This would reduce the impact of the corporation tax variance on RORE from 0.32% (as reported) to 0.07%.



RORE calculations are based on a notionally structured, efficient company, and average RCVs. Tax has been assumed at the headline rate of 25%, in line with regulatory accounting guidance. Values below are quoted in 2017/18 year-average CPIH prices.

Wholesale Totex and Retail Cost Performance

The Company share of underperformance totalled £81m in the year, split Wholesale Totex £55m and Retail £26m, reducing RORE by 2.50% and 1.17% respectively. Tables 4C and 2C provide detailed analysis of Wholesale Totex and Retail cost performance.

ODI performance

Dŵr Cymru has a range of performance commitments which have potential penalties or rewards attached to them; these are set out in table 3A. Rewards and penalties are included in the RORE calculation when they are recognised rather than when collected. An ODI charge of £22m was accrued in 2023/24 which lowered RORE performance by 1.00%.

Financing performance

Dŵr Cymru's average real interest rate in 2023/24 was 2.56% (including the impact of hedging instruments), 0.34% higher than the cost of debt allowed for by Ofwat in PR19 (2.22%). The real interest rate excludes the movement in CPIH, not RPI, which the majority of our debt is linked to, which has risen by a larger proportion due to the macroeconomic environment impacting our interest and indexation charges, increasing our cost of debt this year.

Impact of voluntary customer sharing arrangements

During 2022/23, £10m of revenue, based on 2017/18 prices, was foregone in order to support the provision of affordability tariffs. This is not included in the RORE calculation but is included in "Total shareholder return" in table 1F (Line 19). Adjusted for customer value spend, the totex underperformance would reduce by 0.42% and overall RORE would reduce to 3.14%.

1.8 Taxation

Current tax	£m
Current period:	(0.122)
Corporation tax on R&D tax credit included in operating costs	0.029
Prior periods	0.037
Total current tax credit	(0.056)
Total correin fax cream	(0.000)

Current tax is corporation tax which is payable on a company's profit or loss adjusted for tax purposes and is only charged where a taxable profit arises after these tax adjustments - see current tax reconciliation. A current tax credit of £0.1m (2023: £nil) has arisen from surrendering tax losses to a group company.

Operating expenditure includes a Research & Development tax credit of £0.1m (2023: £0.6m). The tax credit is taxable with a corresponding charge of £0.03m (2023: £0.1m). The Research & Development Expenditure Credit claimed is a government incentive that provides tax credits for qualifying R&D expenditure. Claims are made based on an assessment of qualifying expenditure in accordance with the criteria specified under the incentive.

Current taxes in respect of prior years of £0.0m (2023: £0.2m) relate to tax credits for R&D and the remediation of contaminated land.

The 'super-deduction' regime for plant and machinery expenditure ended on 31 March 2023. Therefore, there is no tax credit in the current period.

The effective rate of tax for the year is lower (2023: lower) than the standard rate of corporation tax in the UK of 25% (2023: 19%). The differences are explained below:



Current tax reconciliation	£ı
Loss before tax and fair value movements on derivatives	(285.703
Multiplied by standard rate 19%	(71.426
Expenses not deductible for tax purposes	0.72
Non-taxable IFRIC 18 income	3.52
Other timing differences – general provision	3.39
Tax losses (utilised)/created	2.59
Capital allowances in excess of depreciation	61.11
Prior year tax credit	0.03
Rate differences re RDEC	(0.009
	(0.056
Effective tax rate	£ı
Corporation tax credit relating to current period	(0.094
oss before tax and fair value movements on derivatives	(285.703
	0.03

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

	£m Commentary
Final determination current tax allowance	-
Key differences are as follows:	
Adjustment re prior years	0.037 Additional tax credits claimed R&D expenditure and the remediation of contaminated land.
Group relief surrendered to fellow group company	(0.122)
Tax on R&D expenditure credit	0.029 Corporation tax charge on R&D expenditure credit of £0.655m \times 19%
Current tax charge	(0.056)

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



Deferred tax	£m
At 1 April	763.785
Charge to income statement	(54.881)
Charge to revaluation reserve	35.446
Credit to SOCI – re pensions	6.608
At 31 March	750.957
Analysis of amounts charged to the statement of comprehensive income and re reserve:	evaluation
Defined benefit pension schemes	6.608
Increase in corporation tax rate-pension scheme	-
Credit to SOCI – re pensions	6.608
Revaluation of fixed assets	35.446
Increase in corporation tax- revaluation of fixed assets	-
Charge to revaluation reserve	35.446
Effect of	£m
Tax allowances in excess of depreciation	278.844
Deferred tax on revaluation of fixed assets	567.188
Capital gains rolled over	3.975
	850.006
Deferred tax on capital losses c/f	(96.699)
Deferred tax on losses of derivatives	(11.315)
Pensions	10.512
Other tax differences	(1.547)
	750.957



Tax charges for Statement 1A - Income Statement for the year ended 31 March 2024

Loss before tax	Statutory Accounts £m (237.815)	RAG differences £m (7.550)	Non appointed income £m (0.652)	Reg accounts total £m (230.917)
Current tax				
Current period	(0.122)	-	-	(0.122)
Corporation tax on R&D tax credit included in operating costs	0.029	-	-	0.029
Prior periods	0.037	-	-	0.037
Total current tax	(0.056)	-	-	(0.056)
Deferred tax				
Current period	(55.226)	1.888	(0.163)	(53.501)
Prior periods	(1.389)	0.009		(1.380)
Effect of rate change	-			-
Total deferred tax	(56.615)	1.897	(0.163)	(54.881)
Total tax (charge)/credit	(56.671)	1.897	(0.163)	(54.937)

Reconciliation of deferred tax between statutory accounts and $\ensuremath{\mathsf{APR}}$

£m
768.342
(28.001)
0.104
740.445



Our group tax strategy

Our approach to risk management and governance arrangements

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

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

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

Our approach to tax planning and tax risk

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

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

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

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

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

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

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

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

Our relationship with HMRC

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

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

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

Tax reliefs and incentives

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

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



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

Transparency

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

Contribution

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

1.9 Long-term Viability Statement

This statement can be found on page 67 in the Glas Cymru Holdings Cyfyngedig Annual Report and Accounts and is available on https://corporate.dwrcymru.com/en/library/group-annual-report-and-accounts/glas-cymru-cyfyngedig

1.10 Remuneration Committee Report

This statement can be found on page 132 in the Glas Cymru Holdings Cyfyngedig Annual Report and Accounts and is available on https://corporate.dwrcymru.com/en/library/group-annual-report-and-accounts/glas-cymru-cyfyngedig



Appendix 2 - Restatement of Water Treatment Works Complexity data

		ce water		Gr	round water			
2022/23	Original		Original Restated		Original		Restated	
	DI	nr works	DI	nr works	DI	nr works	DI	nr works
SD	0.00	0	0.00	0	0	0	0.00	0
W1	0.00	0	0.00	0	0	0	0.00	0
W2	0.00	0	0.00	0	0	0	0.00	0
W3	105.42	12	106.22	12	0	0	0.00	0
W4	557.14	26	525.38	24	23.65	10	20.72	9
W5	185.64	12	216.59	14	5.87	5	8.80	6
W6	0.00	0	0.00	0	0	0	0.00	0

		Ground water						
2021/22	Original		Original Restated		Original		Restated	
	DI	nr works	DI	nr works	DI	nr works	DI	nr works
SD	0.00	0	0.00	0	0	0	0.00	0
W1	0.00	0	0.00	0	0	0	0.00	0
W2	0.00	0	0.00	0	0	0	0.00	0
W3	107.227	12	115.53	13	0	0	0.00	0
W4	546.790	26	503.68	23	22.982	10	22.85	10
W5	202.544	12	232.56	14	4.827	5	4.80	5
W6	0.00	0	0.00	0	0	0	0.00	0

		Surface water Ground water				ound water					
2020/21	Original		Restated	Restated		Restated Original		Priginal Restate		ted	
	DI	nr works	DI	nr works	DI	nr works	DI	nr works			
SD	0.00	0	0.00	0	0	0	0.00	0			
W1	0.00	0	0.00	0	0	0	0.00	0			
W2	0.00	0	0.00	0	0	0	0.00	0			
W3	106.905	12	113.70	13	0	0	0.00	0			
W4	547.065	27	505.14	24	25.149	11	25.10	11			
W5	189.499	11	218.84	13	1.702	4	1.71	4			
W6	0.00	0	0.00	0	0	0	0.00	0			

Appendix 3 - Jacobs Letter of Assurance

Jacobs

APR24 Parts 4-11 Assurance Letter

Revision no: 1.0

Dŵr Cymru Welsh Water

Non-financial Assurance Services Framework 18 June 2024





Jacobs

APR24 Parts 4-11 Assurance Letter

Client name: Dŵr Cymru Welsh Water

Project name: Non-financial Assurance Services Framework

Client reference: Project no: B2271302

Document no: Project manager: Alexandra Crawford

Revision 1.0 **Prepared by:** Lisa Slade

Date: 18 June 2024 **File name:** APR Part 4-11 Assurance Letter Final

Doc status: Final

Document history and status

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

Jacobs UK Limited

7th Floor, 2 Colmore Square 38 Colmore Circus, Queensway Birmingham, B4 6BN United Kingdom T +44 (0)121 237 4000 www.jacobs.com

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18 June 2024

Attn: The Board, Dŵr Cymru Welsh Water

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

Subject: APR 2023-24 Parts 4-11 non-financial assurance

Overview

This letter provides an overview of our assurance activity relevant to your submission for Parts 4-11 of the Annual Performance Report (APR) for 2023/24.

Scope of our assurance

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

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

- Table 11A.1-48 Greenhouse gas emissions
- Table 11A. 49-51 Greenhouse gas emissions capital projects
- Table 7F Wastewater network+ Water Industry National Environment Programme (WINEP)/National Environment Plan (NEP) phosphorus removal scheme costs and cost drivers

Our assurance approach

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

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

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



APR24 Parts 4-11 Assurance Letter

Findings

Early Process Audit

There were no material issues identified in the early process audits, but non-material issues and some recommendations were made hence, a low-to-medium level of reporting risk is presented.

Data Audit

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

Table 1: Data audits material issues

Ref	Material Issue	Resolution
5A.1-8 Number and Volumes of abstractions and reservoirs	There is difference in the values for the total water abstracted in the calculation sheet vs the raw data, for the Southeast region. This affects lines 5A.1 – 5A.8.	Resolved – Email was provided from the technical team explaining the difference.
6A.20 - 27	Four Severn Trent works were used to categorise the sites. A material action was raised to check and confirm with Ofwat if this was the correct process to follow.	Resolved - DCWW raised a query to Ofwat.
6C.18 - 20	The team assumed that the number of galvanised communication pipes in the company is equal to the number of communication pipes in the postcodes identified by the predictor model as "high probability". There is no logical thread that links these two numbers and the team have not justified or verified this assumption. This has potential to have a material impact on 6C.19 and 6C.20. The same assumption is made for lead communication pipes for 6C.18.	Resolved - DCWW made some changes to their calculation to make the estimate more robust.
6C.25 Low pressure	372 properties were removed from the low pressure register this year following completion of the Bryn Landscape Character Areas (LCA) scheme. The data was traced back to the completion of the scheme, but we were not able to confirm the individual properties as this data was not recorded. It was therefore not possible to confirm that the 372 properties on the register had all had their pressure improved.	Improvement plan in place and to be reviewed in APR25 – Same as APR23, the team acknowledged the issues and committed to develop a plan for the interim (remainder of current AMP) and longer term (AMP8) to move to a more automated process of data logging and reporting.
	The process for proactive logging was raised an issue in APR23. The action raised to undertake a review of the processes used by local ops teams to monitor and report on low pressures is still valid. This is with a view to ensure consistency and effectiveness of the processes and to ensure that there are sufficient checks and controls in place.	The reporting figures remain questionable but as there is no better data available for the reporting year the commentary will note the potential shortcomings.
7D.21	Population equivalent treatment capacity enhancement, with regard to the completion of the Weobley scheme which is counted as complete in both 2023 and 2024.	Resolved - I nformation of Weobley scheme provided.
11A.49-51 Greenhouse gas emissions – Capital Projects	11A.51 - Purchase Order (PO) spend can be different from Actual/Procurement project spend. As a result, some mismatches are present due to decimal space differences or differences between PO and Actual/Procurement spend records were witnessed during the audit session.	Improvement plan in place and to be reviewed in APR25 – the team acknowledged the issues and confirmed there is plan in place to address this.

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We identified no further material issues with the remaining data that we reviewed for Sections 4-11 which therefore presents a low-to-medium level of reporting risk as some non-material actions and recommendations raised

Assurance Statement

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

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

Yours sincerely,

Sarah Fane

Head of Water Strategy and Regulation

Sarah.Fane@Jacobs.com



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