Appendix YKY57_Cost recovery rates



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1. Summary

Within our plan we have sought to recover costs in line with Ofwat's methodology and on a consistent basis with prior AMP's. Ofwat's PR24 methodology has sought to create greater consistency within the industry, which has led us to transfer the recovery of our base maintenance costs (IRE) through RCV run-off rates, rather than through pay-as-you-go (PAYG) rates, as previously.

Within the table below we have shown our proposed PR24 cost recovery rates in comparison to the prior PR19 rates under both methodologies to highlight the impact caused by the change in IRE methodology.

Cost recovery rates	PR24 proposed rates			PR19 r	estated	PR19 original		
Cost recovery rates	PAYG	Run-off		PAYG	Run-off	PAYG	Run-off	
Water resources Water networks	56.3% 49.9%	4.5% 4.5%		61.7% 64.3%	4.1% 5.0%	82.2% 75.5%	2.5% 3.5%	
Waste water networks Bioresources	31.3% 45.0%	4.5% 8.0%		34.4% 58.2%	4.9% 9.4%	45.2% 58.2%	3.7% 9.4%	
Total wholesale	40.4%	4.6%		48.7%	5.1%	59.3%	3.8%	

Overall wholesale PAYG rates of 40.4% are lower than at PR19 as a result of the increased proportion of capital spend within our overall proposed cost allowances. Our PAYG rates have been set based on the proportion of operating costs within our total proposed cost allowance, in accordance with Ofwat's PR24 methodology. Further detail behind the calculation of PAYG rates for each price control is provided in Section 3.

Our overall wholesale run-off rate for PR24 of 4.6% is lower than our equivalent rate for PR19 of 5.1% when the treatment of IRE is aligned. Our run-off rates have been set based on an analysis of current depreciation rates and prior run-off rates, which is in accordance with Ofwat's PR24 methodology. Further detail behind the calculation of run-off rates for each price control is provided in Section 4.

Our proposed cost recovery rates are in line with the boundaries proposed by Ofwat, whilst also providing consistency with prior periods, when IRE is considered on a consistent basis.

We do not propose any deviation from the 'natural' cost recovery rates detailed above.

2. Methodology

2.1 Basis of recovery

Our starting point for recovering costs has been to do so at our natural rates, which we explain below. If we choose to deviate from the natural recovery rates we will explain clearly the reason for doing so and why it is in the interest of customers; however we have not chosen to deviate from the natural rates.

2.2 Natural recovery rates

When recovering costs, we consider that the natural rate is the most appropriate starting point. This ensures that fast money/operating expenditure is recovered as it is being expensed and slow money/capital expenditure is recovered in line with the economic use of the assets we have invested in.

- For PAYG rates we have recovered operating costs as fast money in line with Ofwat's PR24 methodology.
- For RCV run-off rates we have considered analysis of current depreciation rates, together with prior run-off rates, which is consistent with Ofwat's PR24 methodology.

We believe that these approaches provide a fair starting point for customers from an intergenerational point of view. We consider that deviation from these rates should only be done where there is a compelling reason to do so that is in the interest of customers. At all points in the decision making process we have considered the impact on customer bills.

3. PAYG rates

3.1 Summary

Within our plan we have sought to recover costs in line with Ofwat's methodology and on a consistent basis with prior AMP's. Ofwat's PR24 methodology has sought to create greater consistency within the industry, which has led us to transfer the recovery of our base maintenance costs (IRE) to be through RCV run-off rates, rather than through pay-as-you-go (PAYG) rates, as previously.

Within the table below we have shown our proposed PR24 PAYG rates in comparison to prior PR19 rates under both methodologies to highlight the impact caused by the change in IRE methodology.

PAYG rates (%)	Proposed rate	PR19 restate	PR19 orig
Water resources	56.3%	61.7%	82.2%
Water network plus	49.9%	64.3%	75.5%
Wastewater network plus	31.3%	34.4%	45.2%
Bioresources	45.0%	58.2%	58.2%
Wholesale total	40.4%	48.7%	59.3%

Once IRE is re-classified as run-off our PAYG rate for PR19 would have been 49% rather than 59%. Our proposed PAYG rate for PR24 of 40% is lower than the PR19 restated rate of 49% because of the significant increase in capital costs forecast within our plan, which reduces the proportion of operating costs.

The following table summarises our proposed costs and the level of fast money, or PAYG rate, we have used for recovering wholesale costs:

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Wholesale - PAYG rates	FY26	FY27	FY28	FY29	FY 30	Total
Operating costs (fm)	584.6	602.3	587 5	595.8	618.0	2,988,1
IRE (£m)	201.2	132.8	122.1	134.7	157.1	747.9
Capex (£m)	583.9	815.5	870.8	806.0	578.9	3,655.1
Totex (£m)	1,369.7	1,550.6	1,580.4	1,536.5	1,354.0	7,391.1
Natural fast money (£m)	584.6	602.3	587.5	595.8	618.0	2,988.1
Natural PAYG rate	42.7%	38.8%	37.2%	38.8%	45.6%	40.4%
Actual PAYG rate	42.7%	38.8%	37.2%	38.8%	45.6%	40.4%
Variance vs natural rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

To determine our 'natural' PAYG rates we have recovered operating costs as fast money in line with Ofwat's PR24 methodology.

As illustrated above, the PAYG rate varies each year in line with the planned expenditure. PAYG rates are lowest in FY28 as capital costs are expected to be at their highest level in this year.

Overall for the 2026-30 period we have recovered fast money in line with how we expect to incur operating costs, that is we have not slowed down nor accelerated cost recovery into the 2031-35 period, as we have not found a compelling reason to do so.

3.2 Methodology

PAYG rates are dependent on the mix of costs within totex. The first stage of assessing PAYG rates is to consider the 'natural' PAYG rate. In line with the guidance within Ofwat's PR24 methodology we have determined our 'natural' PAYG rates to be the total operating costs as a proportion of the total totex, as illustrated within the table above.

We consider that the 'natural' rate is the most appropriate starting point. This ensures that fast money is recovered as it is being expensed and slow money is recovered in line with the economic use of those assets. We believe that this approach provides a fair starting point for customers from an intergenerational point of view.

The data used for determining the 'natural' PAYG rates by price control is contained within data tables CW1 and CWW1 which detail our proposed cost allowances by price control.

Once the 'natural' PAYG rate has been determined we have then considered whether any adjustment would be appropriate. We consider that deviation from the 'natural' rate should only be done where there is a compelling reason to do so that is in the interest of customers. At all points in the decision making process we have considered the impact on customer bills.

3.3 'Natural' rate analysis

Analysis of our proposed costs results in an overall PAYG rate of 40% as illustrated below:

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Wholesale - PAYG rates	FY26	FY27	FY28	FY29	FY 30	Total
Operating costs (£m)	584.6	602.3	587.5	595.8	618.0	2,988.1
IRE (£m) Capex (£m)	201.2 583.9	132.8 815.5	122.1 870.8	134.7 806.0	157.1 578.9	747.9 3,655.1
Totex (£m)	1,369.7	1,550.6	1,580.4	1,536.5	1,354.0	7,391.1
Natural fast money (£m)	584.6	602.3	587.5	595.8	618.0	2,988.1
Natural PAYG rate	42.7%	38.8%	37.2%	38.8%	45.6%	40.4%

PAYG rates vary from year to year due to the proposed mix of totex. We anticipate that our capital expenditure will be highest across FY27 to FY29; therefore our PAYG rates are lowest in these years.

Our proposed PAYG rates are lower than those incurred in the current AMP as we are proposing a significant increase in the level of capital investment in comparison to PR19.

PAYG rates can also vary significantly by price control, depending on the planned mix of costs. Further analysis of proposed 'natural' PAYG rates by price control is provided below:

Water resources - PAYG rates	FY26	FY27	FY28	FY29	FY30	Total
Operating costs (£m)	50.4 15.5	49.6 20.1	47.2 11.5	46.0	46.1	239.3
Capex (£m) Totex (£m)	26.8 92.7	34.4 104.1	31.7 90.4	23.0 74.4	16.7 63.6	132.7 425.1
Natural fast money (£m)	50.4	49.6	47.2	46.0	46.1	239.3
Natural PAYG rate	54.4%	47.6%	52.2%	61.9%	72.5%	56.3%

Water networks - PAYG rates	FY26	FY27	FY28	FY29	FY30	Total
Operating costs (£m)	272.0	275.0	267.3	263.5	262.6	1,340.4
IRE (£m)	140.1	66.2	66.7	94.3	87.6	454.9
Capex (£m)	157.1	205.2	207.2	165.2	157.4	892.0
Totex (£m)	569.2	546.3	541.2	523.0	507.6	2,687.3
Natural fast money (£m)	272.0	275.0	267.3	263.5	262.6	1,340.4
Natural PAYG rate	47.8%	50.3%	49.4%	50.4%	51.7%	49.9%

Waste networks - PAYG rates	FY	26	FY27	FY28	FY29	FY 30	Total
Operating costs (£m) IRE (£m) Capex (£m)	21 4 35	4.9 5.6 0.5	230.7 46.5 516.6 793 9	226.6 43.9 565.6 836 1	240.5 35.1 555.2 830.8	263.6 68.7 358.9	1,176.3 239.8 2,346.8
Natural fast money (£m) Natural PAYG rate	21 35	4.9 .2%	230.7 29.1%	226.6 27.1%	240.5 28.9%	263.6 38.1%	3,762.9 1,176.3 31.3%

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Bioresources - PAYG rates	FY26	FY27	FY28	FY29	FY30	Total
Operating costs (£m)	47.4	47.0	46.4	45.8	45.8	232.2
Capex (£m)	49.5	- 59.3	66.4	62.5	45.9	283.6
Totex (£m)	96.8	106.2	112.8	108.3	91.7	515.8
Natural fast money (£m)	47.4	47.0	46.4	45.8	45.8	232.2
Natural PAYG rate	48.9%	44.2%	41.1%	42.3%	49.9%	45.0%

4. Run-off rates

4.1 Summary

Within our plan we have sought to recover costs in line with Ofwat's methodology and on a consistent basis with prior AMP's. Ofwat's PR24 methodology has sought to create greater consistency within the industry, which has led us to transfer the recovery of our base maintenance costs (IRE) to be through RCV run-off rates, rather than through pay-as-you-go (PAYG) rates, as previously.

We have derived the natural run-off rates primarily from an analysis of current depreciation rates reported within our ARFS and APR over the last two years, together with a comparison against past run-off rates to ensure there isn't an impact on inter-generational fairness. This approach is consistent with the one adopted by Ofwat in determining their run-off rate guidance.

Within the table below we have shown our proposed PR24 run-off rates, together the current depreciation rate analysis and a comparison to prior PR19 rates under both methodologies to highlight the impact caused by the change in IRE methodology.

Run-off rates (%)	Proposed rate	FY23 APR	FY22 APR	Avg	Ofwat max	PR19 restate	PR19 orig
Water resources Water network plus	4.5% 4.5%	3.8% 4.6%	3.3% 4.9%	3.6% 4.8%	4.5% 4.5%	4. 1% 5. 0%	2.5% 3.5%
Wastewater network plus Bioresources	4.5% 8.0%	4.4% 5.9%	4.8% 6.5%	4.6% 6.2%	4.5% 8.0%	4.9% 9.4%	3.7% 9.4%
Wholesale total	4.6%	4.6%	4.9%	4.7%	4.6%	5.1%	3.8%

On a total basis the depreciation rate analysis suggests a rate of 4.7%, which is lower than our restated rate for PR19 of 5.1%, but slightly higher than Ofwat's maximum rate guidance, which is equivalent to an overall average rate of 4.6%.

Given the closeness to Ofwat's maximum rate guidance, we have chosen to use Ofwat's maximum rates for each price control. Whilst this results in a higher rate for water resources and bioresources than implied by the asset life analysis (and lower rates for the other price controls), the total amount of run-off will still be lower than the rate suggested by the depreciation rate analysis.

We have not advanced or delayed the natural run-off rate.

We have used the same run-off rates for assets existing at 31 March 2025 and for new assets as whilst our forecasts suggest depreciation rates on new assets will be slightly higher than those of existing assets, our proposed rate for existing assets is already at the maximum level allowed by Ofwat; therefore we have chosen not to increase the rate for new assets.

4.2 Methodology

The first stage of assessing run-off rates is to consider the 'natural' rate. In line with the guidance within Ofwat's PR24 methodology we have determined our 'natural' run-off rates based on an assessment of average asset lives.

We consider that the 'natural' rate is the most appropriate starting point. This ensures that capital costs are recovered in line with the economic use of those assets. We believe that this approach provides a fair starting point for customers from an intergenerational point of view.

The data used for determining the 'natural' run-off rates by price control is contained within data table 2D of our annual APR and note 12 of our annual report and financial statements (ARFS).

Once the 'natural' run-off rate has been determined we have then considered whether any adjustment would be appropriate. We consider that deviation from the 'natural' rate should only be done where there is a compelling reason to do so that is in the interest of customers. At all points in the decision making process we have considered the impact on customer bills.

4.3 'Natural' rate analysis

Ofwat used Table 2D of companies 2022 annual performance reports (APR) to set out average remaining asset lives and associated depreciation rates by price control.

Our own analysis adopts a consistent approach to Ofwat, using data from both our 2022 and 2023 APR; however we detail below why further adjustments are needed to this analysis to ensure intertemporal fairness for customers and consistent treatment across the industry.

Finally, in line with Ofwat's guidance we also compare our proposed run-off rates determined from our asset-life analysis against our PR19 rates and Ofwat's maximum rate guidance.

4.4 Asset life analysis

Our asset life analysis starts from the data included in Table 2D of our APR; however we have made the following adjustments in order to achieve a more reflective run-off rate:

- 1. Remove the impact of revaluation of infrastructure assets;
- 2. Remove the impact of revaluation of certain categories of land and buildings;
- 3. Remove the costs of assets under construction which have no depreciation charge;
- 4. Reflect a full year's depreciation charge for assets capitalised during the year; and
- 5. Reflect a full year's depreciation charge for additions during the year

Further commentary on the justification for these amendments is provided below. The tables below summarise the impact of these adjustments for 2022 and 2023.

2022 accot life analysis	ADD		Adjustments							
	AFN	1	2	3	4	5	rate			
Water resources	2.00%	0.32%	0.37%	0.36%	0.29%	-0.01%	3.33%			
Water networks	3.28%	1.17%	0.00%	0.29%	0.12%	0.06%	4.92%			
Waste water networks	3.16%	0.99%	0.00%	0.31%	0.25%	0.10%	4.81%			
Bioresources	5.74%	0.00%	0.00%	0.62%	0.07%	0.03%	6.46%			
Total wholesale	3.27%	0.99%	0.03%	0.32%	0.20%	0.08%	4.89%			

2023 accot life analysis			Adju stment s								
	AFIN	1	2	3	4	5	rate				
Water resources Water networks Waste water networks Bioresources	2.87% 3.66% 3.16% 5.00%	0.53% 0.45% 0.67% 0.00%	-0.42% 0.00% 0.00% 0.00%	0.75% 0.39% 0.40% 0.58%	0.07% 0.08% 0.12% 0.27%	0.01% 0.06% 0.06% 0.01%	3.81% 4.64% 4.40% 5.87%				
Total wholesale	3.42%	0.55%	-0.01%	0.42%	0.11%	0.05%	4.55%				

Adjustment 1 – infrastructure revaluation

Yorkshire Water's Infrastructure assets are revalued each year in accordance with FRS102 which requires that assets subject to a policy of revaluation should be carried at their fair value less any subsequent depreciation and accumulated impairment losses. Yorkshire Water's infrastructure assets fair value is determined with the support of a third party using a market value approach, which uses discounted cash flow modelling to calculate a valuation range for the enterprise value of Yorkshire Water.

We consider It inappropriate to include the fair value of infrastructure assets within the calculation of RCV run-off rates because:

- There would be intertemporal unfairness as customers would pay different amounts for the same infrastructure assets in different AMPs.
- The PR24 RCV run-off rate will contribute to the discounted cash flow used to calculate the fair value of the infrastructure assets. As this would then be used to calculate future RCV run-off rates it creates circularity within the process.
- Other water and sewage companies have not adopted the FRS102 revaluation approach which would lead to inconsistent treatment.

We consider it to be more appropriate to include infrastructure assets in the calculation of average asset lives at their historic cost. Alternative figures on this basis can be found within Note 12 Tangible Assets of Yorkshire Water's ARFS.

Adjustment 2 – Revaluation of land and buildings

Certain categories of Yorkshire Water's land and buildings are revalued on the basis of existing use, with the last valuation by independent qualified valuers in March 2019. Similar to adjustment 1 above we consider It inappropriate to include the impact of revaluations within the calculation of RCV run-off rates because:

- There would be intertemporal unfairness as customers would pay different amounts for the same assets in different AMPs.
- The PR24 RCV run-off rate will contribute to the discounted cash flow used to calculate the fair value of the infrastructure assets. As this would then be used to calculate future RCV run-off rates it creates circularity within the process.
- Other water and sewage companies will have alternative approaches which would lead to inconsistent treatment.

We consider it to be more appropriate to include land and buildings in the calculation of average asset lives at their historic cost. Alternative figures on this basis can be found within Note 12 Tangible Assets of Yorkshire Water's ARFS.

Adjustment 3 – Assets under construction

The net book value (NBV) included in Table 2D of Yorkshire Water's annual performance report includes the cost of assets under construction, however no depreciation has been charged in the year, as the assets are only depreciated when they have been completed or commissioned.

An adjustment needs to be made to remove these assets from the NBV, so the costs of these assets are shared fairly between AMP8 and future customers.

Adjustment 4 – Assets capitalised during the year

Assets under construction are commissioned through the year and then depreciation is charged. These assets will not incur a full year depreciation charge, so depreciation is adjusted to provide a full year depreciation charge.

Adjustment 5 – Assets acquired during the year

Assets are acquired through the year and then depreciation is charged. These assets will not incur a full year depreciation charge, so depreciation is adjusted to provide a full year depreciation charge.

Taking the average of the two years would result in the following potential run-off rate:

Average asset life	ADD	Adjustments					Adjusted
analysis	AFIX	1	2	3	4	5	rate
Water resources Water networks	2.43% 3.47% 3.16%	0.43% 0.81% 0.83%	-0.02% 0.00%	0.56% 0.34% 0.35%	0.18% 0.10% 0.19%	0.00%	3.57% 4.78% 4.61%
Bioresources	5.37%	0.00%	0.00%	0.60%	0.17%	0.02%	6.16%
Total wholesale	3.34%	0.77%	0.01%	0.37%	0.16%	0.07%	4.72%

We have then compared the asset life data above to our PR19 run-off rates and the maximum guidance rate provided by Ofwat as illustrated within the table below.

FY23 APR	FY22 APR	Avg		Ofwat max	PR19 restate	PR19 orig
3.8% 4.6% 4.4% 5.9% 4.6%	3.3% 4.9% 4.8% 6.5% 4.9%	3.6% 4.8% 4.6% 6.2% 4.7%		4.5% 4.5% 4.5% 8.0% 4.6%	4.1% 5.0% 4.9% 9.4% 5.1%	2.5% 3.5% 3.7% 9.4% 3.8%
	FY23 APR 3.8% 4.6% 4.4% 5.9% 4.6%	FY23 FY22 APR APR 3.8% 3.3% 4.6% 4.9% 5.9% 6.5% 4.6% 4.9%	FY23 APR FY22 APR Avg 3.8% 3.3% 3.6% 4.6% 4.9% 4.8% 4.4% 4.8% 4.6% 5.9% 6.5% 6.2% 4.6% 4.9% 4.7%	FY23 APR FY22 APR Avg 3.8% 3.3% 3.6% 4.6% 4.9% 4.8% 4.4% 4.8% 4.6% 5.9% 6.5% 6.2% 4.6% 4.9% 4.7%	FY23 APR FY22 APR Avg Ofwat max 3.8% 3.3% 3.6% 4.5% 4.6% 4.9% 4.8% 4.5% 4.4% 4.8% 4.6% 4.5% 5.9% 6.5% 6.2% 8.0% 4.6% 4.9% 4.7% 4.6%	FY23 APR FY22 APR Avg Ofwat max PR19 restate 3.8% 3.3% 3.6% 4.5% 4.1% 4.6% 4.9% 4.8% 4.5% 5.0% 4.4% 4.8% 4.6% 4.5% 4.9% 5.9% 6.5% 6.2% 8.0% 9.4% 4.6% 4.9% 4.7% 4.6% 5.1%

On a total basis the depreciation rate analysis suggests a rate of 4.7%, which is lower than our restated rate for PR19, but slightly higher than Ofwat's maximum rate guidance, which is equivalent to an overall average rate of 4.6%.

Given the closeness to Ofwat's maximum rate guidance, we have chosen to use Ofwat's maximum rates for each price control. Whilst this results in a higher rate for water resources and bioresources than implied by the asset life analysis (and lower rates for the other price controls), the total amount of run-off will still be lower than the rate suggested by the depreciation rate analysis.

In summary, our proposed run-off rates are as follows for each price control:

Run-off rates (%)	Proposed	Asset life	Ofwat	PR19	PR19
	rate	data	max	restate	orig
Water resources	4.5%	3.6%	4.5%	4.1%	2.5%
Water network plus	4.5%	4.8%	4.5%	5.0%	3.5%
Wastewater network plus	4.5%	4.6%	4.5%	4.9%	3.7%
Bioresources	8.0%	6.2%	8.0%	9.4%	9.4%
Wholesale total	4.6%	4.7%	4.6%	5.1%	3.8%

4.5 New assets versus existing assets

The analysis above only considers existing assets. In order to determine whether an alternative rate would be applicable for new assets we have replicated the depreciation rate analysis across the 2025-30 period.

Based on the data included within data table RR28 we have calculated the following total depreciation rates for each price control in comparison to the source APR depreciation rate used to determine the run-off rate for existing assets (before adjustments detailed above):

Run-off rates (%)	FY 22	FY23	FY26	FY27	FY28	FY 29	FY30
	APR	APR	RR28	RR28	RR28	RR28	RR28
Water resources	2.0%	2.9%	3.2%	3.2%	3.1%	3.1%	3.1%
Water network plus	3.3%	3.7%	3.6%	3.6%	3.6%	3.7%	3.8%
Wastewater network plus	3.2%	3.2%	3.4%	3.4%	3.4%	3.4%	3.4%
Bioresources	5.7%	5.0%	6.1%	6.0%	6.0%	6.1%	6.2%
Wholesale total	3.3%	3.4%	3.6%	3.6%	3.6%	3.6%	3.7%

The analysis above shows that source depreciation rates in the 2025-30 period are expected to be higher than those reported in FY22 and FY23 for each price control and in total. This analysis implies that the run-off rate on new assets should be slightly higher than the rate applied to existing assets. However; as our proposed run-off rate for existing assets is already at the maximum level proposed by Ofwat we have chosen not to include a higher rate for new assets and have used the same rate for all assets.

4.6 Consideration of the longer term impact of our decisions

The primary concern has been the impact of our decision on the 2025-30 period. The decision to start with natural rates of recovery is the fairest method when considering intergenerational issues. We would only consider moving away from this position should there be obvious benefits to customers with regard to:

- Maintaining financeability and financial resilience: The notional company achieves target ratios with current cost recovery and revenue streams, plus ratings agencies back out any changes to natural cost recovery rates; therefore no financeability benefit from amending rates.
- Adverse customer reaction to proposed bill movements: Results of customer acceptability testing show 78% of customers found our plan to be acceptable.

When considering the 2030-35 period and beyond we do not find evidence that either of the above factors are concerning. There is no compelling evidence to adjust the method and rates we are proposing in this plan.