

# Yorkshire Water Finance Plc; Yorkshire Water Services Finance Limited

Fitch Ratings' recent downgrade of the class A debt of Yorkshire Water Finance Plc and Yorkshire Water Services Finance Limited (YWSF) reflects the significant derivatives liabilities of Yorkshire Water Services Limited (YWS). We believe that these partially offset the strong recovery expectations embedded in the class A debt rating, while the class B debt was already downgraded in 2021 for the same reason.

The Stable Outlooks reflect our expectation that YWS will gradually deleverage towards 70% by the end of the five-year price control period ending March 2030 (AMP8), after a peak in FY26. Moreover, we see YWS's financial policy as consistent with the current rating and believe that management is committed to maintaining the rating. We have revised the negative rating sensitivity for YWS to 70% net debt/regulated capital value (RCV) in AMP8 from 72%.

## Key Rating Drivers

**Downgrade Related to MtM Liabilities:** Fitch has removed the one-notch uplift for sector-specific recovery for our UK water portfolio when mark-to-market (MtM) liabilities related to super senior derivatives exceed 10% of the RCV. This follows our revised view of the sector, reflecting its increased risk profile.

The derivative liabilities for YWS were GBP1.8 billion, 19% of RCV at the end of the financial year to end-March 2024 (FY24). This is the key driver of the class A debt rating downgrade. Fitch expects to reinstate the one-notch uplift if MtM liabilities consistently reduce towards this threshold in the future.

**Rising Sector Risk:** Fitch believes that the final determination has provided a reasonable outcome for most UK water companies, especially compared with the draft determination, and is in line with our expectations. However, we still see moderately higher business risk in AMP8, mainly driven by heightened exposure to environmental risk, increasing public scrutiny, and higher clawback risk, which is linked to the price control deliverables (PCDs) mechanism. Further uncertainties may arise from the Cunliffe review, the most significant regulatory reform since privatisation.

The sector also faces a heightened risk of fines related to operational and environmental under-performance, and a pressing need to rebuild trust with the public, government, and regulatory bodies. At the same time, we would expect the sector to enhance its assets to accommodate population growth and extreme weather conditions.

**Tightened Debt Capacity:** Fitch has revised the sector's debt capacity for AMP8, leading to a 2% reduction in net debt/RCV and a 0.1x increase in cash and nominal post-maintenance interest coverage ratios (PMICRs) for YWS.

**Forecast Gearing Headroom:** Fitch forecasts tight net debt/RCV rating headroom for YWS in AMP8. We anticipate net debt/RCV to peak at 77% in FY26, before declining to about 70% by end-AMP8. The fall is due to the shareholders' commitment to repay a legacy inter-company loan to YWS in FY27 of around GBP600 million (GBP440 million outstanding capital and GBP160 million accrued interest). Fitch has tightened the net debt/RCV sensitivities in AMP8 after accounting for all debt at YWS, instead of just class A debt previously. As a result, we would allow a 2.5% breach of net debt/RCV within AMP8, provided the PMICRs remain well within their rating sensitivities.

## Ratings

### Yorkshire Water Finance Plc

Senior Secured Debt - Long-Term Rating BBB+

Subordinated Long-Term Rating BBB-

### Outlooks

Senior Secured Debt - Long-Term Rating Stable

Subordinated Long-Term Rating Stable

### Yorkshire Water Services Finance Limited

Senior Secured Debt - Long-Term Rating BBB+

### Outlook

Senior Secured Debt - Long-Term Rating Stable

[Click here for the full list of ratings](#)

## ESG and Climate

ESG Relevance Scores are not assigned to the entities in this report.

2035 Climate Vulnerability Signal: 15

## Applicable Criteria

Sector Navigators – Addendum to the Corporate Rating Criteria (December 2024)  
Corporate Recovery Ratings and Instrument Ratings Criteria (August 2024)  
Corporate Rating Criteria (December 2024)  
Parent and Subsidiary Linkage Rating Criteria (June 2023)

## Related Research

Global Corporates Macro and Sector Forecasts

UK Water Companies After the Draft Determination (July 2024)

UK Water – Relative Credit Analysis (June 2024)

Spotlight: UK Water Business Plans (October 2023)

## Analysts

Yeshvir Singh  
+44 20 3530 1810  
[yeshvir.singh@fitchratings.com](mailto:yeshvir.singh@fitchratings.com)

Djivan Torossian  
+44 20 3530 2617  
[djivan.torossian@fitchratings.com](mailto:djivan.torossian@fitchratings.com)

**Adequate PMICRs Headroom Expected:** We forecast cash PMICR of 1.9x for AMP8, which is comfortably above our negative rating sensitivity of 1.5x, and a nominal PMICR of 1.9x, which is above our negative rating sensitivity of 1.8x. The cash PMICR has greater headroom than the nominal PMICR, due to around 60% of YWS's total debt being inflation-linked (IL), partly through swaps in FY24. This is above our sector average of about 52%. Our ratios assume an average cost of new debt at 5.8%, broadly in line with the sector average.

**Neutral Total Expenditure Performance:** Total expenditure (totex) for AMP8 stands at GBP8.5 billion in real terms, excluding Ofwat's adjustments, representing a material increase from GBP4.1 billion in AMP7. Totex allowances are in line with those requested by YWS, but enhancement totex for AMP8 is nearly 3.5x higher than in AMP7. Investments under PCDs need to achieve the Ofwat benchmarks of allowance and timeline to mitigate the risk of a clawback. Under this mechanism, investment funding is ringfenced, ensuring that any unspent allowances are returned to customers.

**Net ODI Penalties Assumed:** We forecast net in-period ODI penalties of GBP67 million cumulatively for AMP8. Since the cash impact of these penalties materialises with a two-year lag, we are projecting cash ODI penalties of GBP148 million in AMP8 to include the amount related to the last two years of AMP7. In AMP8, we expect that YWS will incur penalties mainly in internal sewer flooding, storm overflows, and compliance risk index.

**Regulatory Fines Forecast:** Fitch forecasts about GBP75 million in total fines from the Environment Agency and Ofwat as baseline cash outflows, due to heightened regulatory scrutiny and stricter controls on wastewater networks. Our rating case excludes the GBP40 million redress package from the recent enforcement investigation, which will be covered entirely by the company as additional capex. We have assumed fines across all companies operating wastewater networks and will adjust this assumption to reflect actual fines or a perceived reduction in risk, accordingly.

**Subordinated Debt Rating:** The non-participatory notes issued by YWSF are rated one notch lower than the class A debt rating at 'BBB'. This reflects the absence of a share pledge by YWS but also the benefit from other creditor protections and structural features of the overall covenant package at YWS and YWSF. YWSF's class B debt is subordinated to class A debt and sizeable super-senior IL swap liabilities, and we rate class B debt two notches below class A debt.

**Standalone Assessment under PSL:** Fitch rates YWS on a standalone basis using the stronger subsidiary/weaker parent approach under its Parent and Subsidiary Linkage (PSL) Rating Criteria. This assessment reflects 'insulated' legal ring-fencing, highlighted by a well-defined contractual framework, and tight financial controls imposed by Ofwat, which are designed to support YWS's financial profile. We view access and control as overall 'porous' as YWS operates with separate cash management and uses a mixture of external and intercompany funding.

## Financial Summary

(GBPm)	2026F	2027F	2028F	2029F	2030F
EBITDA	888	976	1,082	1,167	1,218
Cash PMICR (x)	2.0	2.0	1.9	1.7	1.7
Nominal PMICR (x)	2.0	1.9	1.9	1.8	1.8
Net Debt/RAV (%)	76.7	71.0	71.1	70.9	70.5

Source: Fitch Ratings, Fitch Solutions, YWS

## Rating Derivation Relative to Peers

The senior secured class A rating for YWS at 'BBB+' /Stable is lower than Anglian Water Services Financing Plc's class A debt rating of 'A-' /Stable. This is due to YWS's class A rating no longer benefitting from a one-notch uplift for sector-specific recovery, as a result of its large super senior MtM liabilities. However, YWS's class A rating is two notches higher than SW (Finance) I PLC's (Southern Water) class A rating of 'BBB-' /Stable. Similar to YWS, Southern Water also has substantial super senior MtM liabilities, to which we have applied the same treatment.

## Rating Sensitivities

### Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

- Adjusted total net debt/RCV above 70%, combined with cash PMICR below 1.5x and nominal PMICR below 1.8x
- Deterioration in operational and environmental performance, resulting in financial penalties and fines that exceed Fitch's rating case
- Lower-than-expected equity injection or a more aggressive financial policy

### Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

- Adjusted total net debt/RCV above 70%, combined with cash PMICR below 1.5x and nominal PMICR below 1.8x
- Deterioration in operational and environmental performance, resulting in financial penalties and fines that exceed Fitch's rating case
- Lower-than-expected equity injection or a more aggressive financial policy

## Liquidity and Debt Structure

As of end-September 2024, YWS held about GBP172.4 million of unrestricted cash and cash equivalents and an undrawn committed revolving credit facility (RCF) of GBP710 million. The company has extended its GBP610 million RCF maturity by one year to November 2029. The remaining GBP80 million of the RCF expires in July 2027 and has two one-year extension options. Its next debt maturity is GBP300 million due in November 2026.

In addition, YWS benefits from a committed undrawn debt service reserve liquidity facility of GBP182 million, sized to cover 12 months of interest payments (including hedge payments), together with a committed undrawn operating and maintenance reserve facility of GBP120 million - both only available on trigger events.

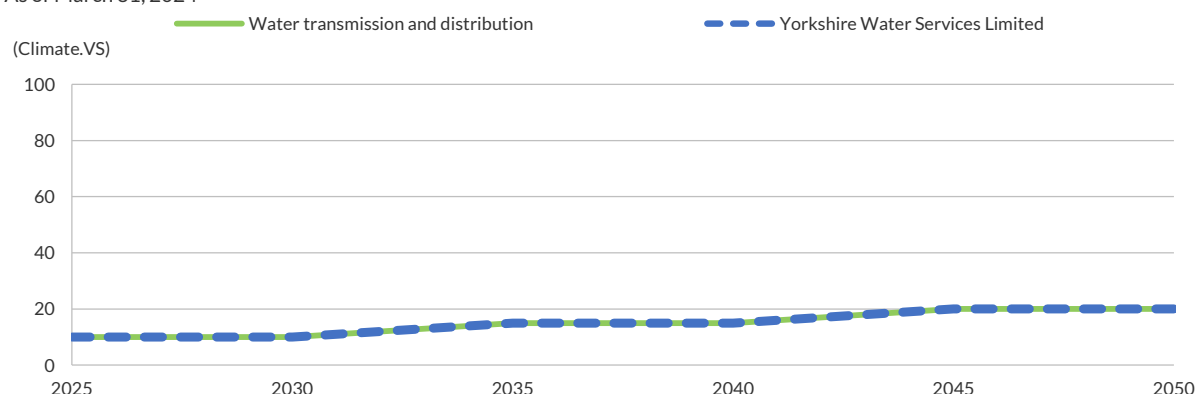
## Climate Vulnerability Considerations

Fitch uses Climate Vulnerability Signals (Climate.VS) as a screening tool to identify sectors and Fitch-rated issuers that are potentially most exposed to credit-relevant climate transition risks and, therefore, require additional consideration of these risks in rating reviews. Climate.VS range from 0 (lowest risk) to 100 (highest risk). For more information on Climate.VS, see Fitch's [Corporate Rating Criteria](#). For more detailed, sector-specific information on how Fitch perceives climate-related transition risks, see [Climate Vulnerability Signals for Non-Financial Corporate Sectors](#).

The FY24 revenue-weighted Climate.VS for YWS for 2035 is 15 out of 100, suggesting low exposure to climate-related risks in that year. This signal is in line with the average for water/wastewater utilities sector.

### Climate.VS Evolution

As of March 31, 2024



Source: Fitch Ratings

## Liquidity and Debt Maturities

### Yorkshire Water Services Limited

Liquidity analysis			
(GBPm)	2025F	2026F	2027F
<b>Available liquidity</b>			
Beginning cash balance	50	463	-34
Rating case FCF after acquisitions and divestitures	-187	-497	98
Debt issued since last balance sheet	500	—	—
Committed equity injection	100	—	600
<b>Total available liquidity (A)</b>	<b>463</b>	<b>-34</b>	<b>665</b>
<b>Liquidity uses</b>			
Debt maturities	—	—	-302
<b>Total liquidity uses (B)</b>	<b>—</b>	<b>—</b>	<b>-302</b>
<b>Liquidity calculation</b>			
Ending cash balance (A+B)	463	-34	363
Revolver availability	710	710	710
<b>Ending liquidity</b>	<b>1,093</b>	<b>596</b>	<b>993</b>
Liquidity score (x)	Not meaningful	Not meaningful	4.6

Source: Fitch Ratings, Fitch Solutions, Yorkshire Water Services Limited

Scheduled debt maturities	
(GBPm)	31 Mar 24
2025	—
2026	—
2027	302
2028	145
2029	187
Thereafter	5,985
<b>Total</b>	<b>6,619</b>

Source: Fitch Ratings, Fitch Solutions, Yorkshire Water Services Limited

## Key Assumptions

- Ofwat's final determination financial model used as the principal source of information
- Neutral totex performance
- Net cash ODI penalties of GBP148 million in FY26-FY30
- Fines totalling about GBP75 million from the Environmental Agency or Ofwat
- Nominal cost of new debt averaging 5.8%
- CPIH averaging 2.8% (starting at 3.3% in FY26 and decreasing to 2.5% by 2030). RPI averaging 3% (starting at 3.5% in FY26 and trending down to 2.5% by 2030)
- Equity injection of approximately GBP600 million in FY27, which will be used to repay GBP440 million of a legacy inter-company loan and accrued interest
- No cash tax payments or pension-deficit recovery payments

## Summary of Financial Adjustments

- Statutory cash interest reconciled with investor reports
- Statutory total debt reconciled with investor reports
- Capex and EBITDA net of grants and contributions
- Cash PMICRs adjusted to include 50% of the accretion charge on IL swaps with five-year pay-downs, and 100% of the accretion charge on IL swaps with less than five-year pay-downs
- Debt adjusted for borrowing through swaps

## Financial Data

### Yorkshire Water Limited AMP8 - Forecasts

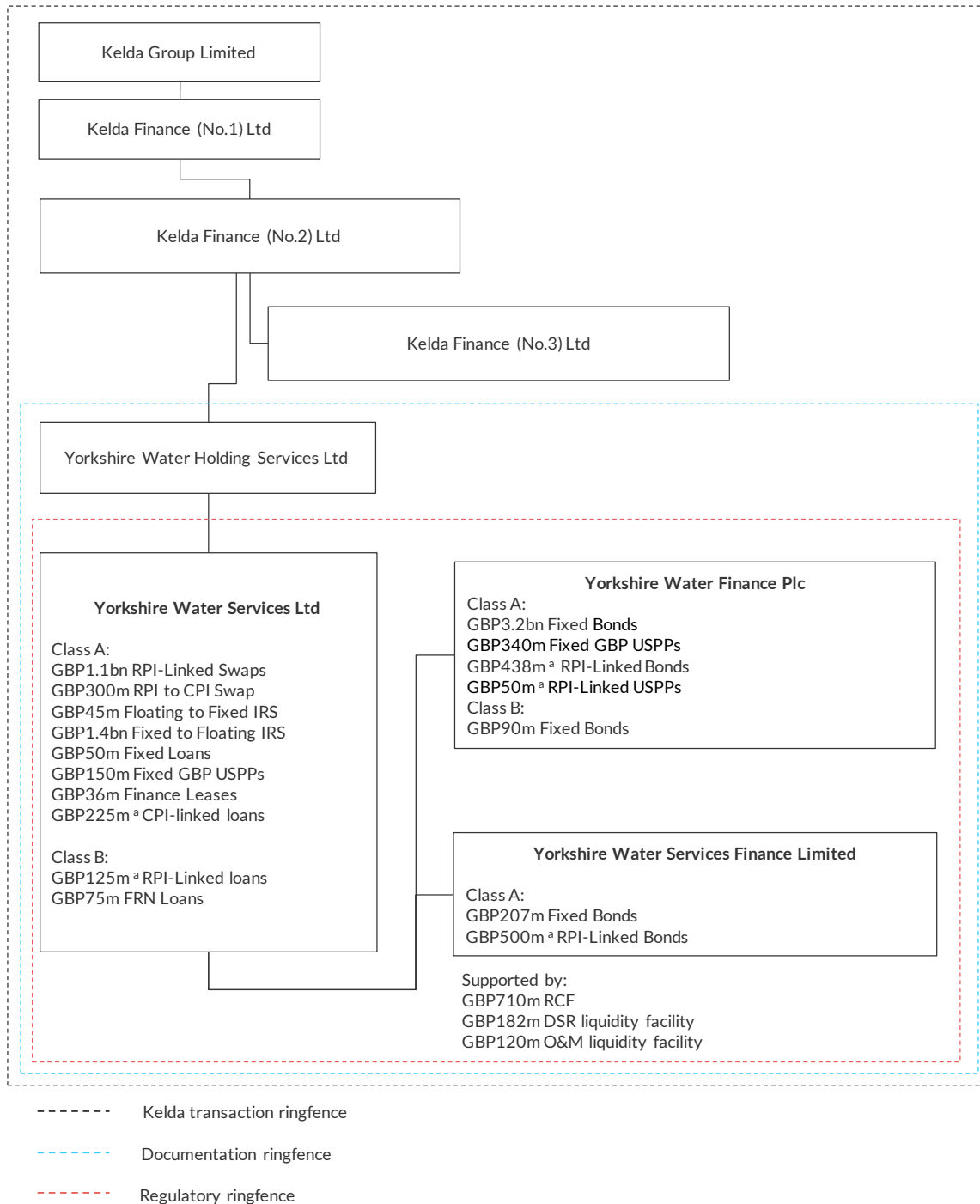
(GBPm)	Notes and formulas	FY26F	FY27F	FY28F	FY29F	FY30F
<b>Post-maintenance cash flow</b>						
<b>Regulated EBITDA</b>		<b>903</b>	<b>990</b>	<b>1097</b>	<b>1182</b>	<b>1233</b>
Environment Agency & Ofwat fines		-15	-15	-15	-15	-15
Cash ODI rewards/(penalties) (nominal)		-40	-57	-20	-16	-15
Non-appointed EBITDA		-	-	-	-	-
<b>Fitch EBITDA</b>		<b>888</b>	<b>976</b>	<b>1082</b>	<b>1167</b>	<b>1218</b>
Regulatory depreciation		-474	-518	-564	-606	-637
Cash tax		-	-	-	-	-
Pension deficit repair		-	-	-	-	-
<b>Post-maintenance cash flow</b>	<b>(a)</b>	<b>414</b>	<b>458</b>	<b>518</b>	<b>561</b>	<b>581</b>
Net cash interest paid (after interest received)	(b)	-189	-206	-259	-309	-328
Accretion on swaps	(c)	-19	-19	-19	-18	-18
<b>Cash PMICR (x)</b>	<b>a / (b + c)</b>	<b>2.0</b>	<b>2.0</b>	<b>1.9</b>	<b>1.7</b>	<b>1.7</b>
Indexation of debt	(g)	-168	-174	-177	-182	-176
RCV yoy indexation	(d)	306	281	306	330	321
<b>Nominal PMICR (x)</b>	<b>(a+d)/(b+g)</b>	<b>2.0</b>	<b>1.9</b>	<b>1.9</b>	<b>1.8</b>	<b>1.8</b>
<b>Net debt to RCV</b>						
Net debt	(a)	7,634	7,709	8,369	8,900	9,154
Impact of swaps recoupons	(b)	219	254	284	310	342
Pension adjustment	(c)	-	-	-	-	-
<b>Fitch net debt</b>	<b>(a + b + c) = d</b>	<b>7,853</b>	<b>7,963</b>	<b>8,653</b>	<b>9,210</b>	<b>9,496</b>
Shadow RCV	(e)	10,233	11,219	12,164	12,998	13,478
<b>Net debt to RCV (%)</b>	<b>d / e</b>	<b>76.7</b>	<b>71.0</b>	<b>71.1</b>	<b>70.9</b>	<b>70.5</b>
<b>Other financial data</b>						
CPIH forecast (%)		3.3	2.8	2.7	2.7	2.5
FCF positive/(negative) funded by debt		-497	-502	-483	-391	-79
Totex over/(under)performance						
Refinancing needs		-	513	145	360	342
Average cost of new debt per year (%)		5.9	5.8	5.7	5.7	5.7
Dividends		-52	-70	-76	-82	-86
Equity		0	600	0	0	0
<b>Rating sensitivities</b>				<b>Negative</b>	<b>Positive</b>	<b>YWS</b>
Closing net debt to RCV (%)				<b>70</b>	<b>65</b>	<b>70</b>
Average cash PMICR (x)				<b>1.5</b>	<b>1.7</b>	<b>1.9</b>
Average nominal PMICR (x)				<b>1.8</b>	<b>1.9</b>	<b>1.9</b>

Source: Fitch Ratings, Fitch Solutions, Ofwat, companies' data

#### How to Interpret the Forecast Presented

The forecast presented above is based on Fitch Ratings' internally produced, conservative rating case forecast. It does not represent the forecast of the rated issuer. The forecast set out above is only one component used by Fitch Ratings to assign a rating or determine a rating outlook, and the information in the forecast reflects material but not exhaustive elements of Fitch Ratings' rating assumptions for the issuer's financial performance. As such, it cannot be used to establish a rating, and it should not be relied on for that purpose. Fitch Ratings' forecasts are constructed using a proprietary internal forecasting tool, which employs Fitch Ratings' own assumptions on operating and financial performance that may not reflect the assumptions that you would make. Fitch Ratings' own definitions of financial terms such as EBITDA, debt or free cash flow may differ from your own such definitions. Fitch Ratings may be granted access, from time to time, to confidential information on certain elements of the issuer's forward planning. Certain elements of such information may be omitted from this forecast, even where they are included in Fitch Ratings' own internal deliberations, where Fitch Ratings, at its sole discretion, considers the data may be potentially sensitive in a commercial, legal or regulatory context. The forecast (as with the entirety of this report) is produced strictly subject to the disclaimers set out at the end of this report. Fitch Ratings may update the forecast in future reports but assumes no responsibility to do so. Original financial statement data for historical periods is processed by Fitch Solutions on behalf of Fitch Ratings. Key financial adjustments and all financial forecasts credited to Fitch Ratings are generated by rating agency staff.

## Simplified Group Structure Diagram



<sup>a</sup> Outstanding at time of issue  
Source: Fitch Ratings, Fitch Solutions, YWS, September 2024

## Peer Financial Summary

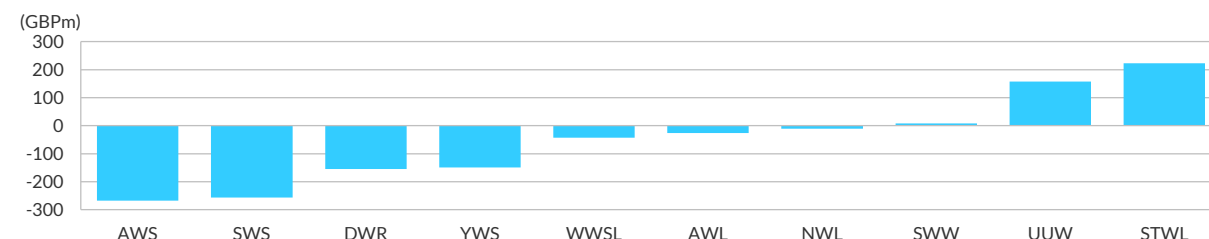
Company	Senior Class A Debt Rating	Financial statement date	EBITDA (GBPm)	Total Interest (GBPm)	Cash PMICR (x)	Nominal PMICR (x)	Net Debt/RCV (%)
Anglian Water Services Ltd. <sup>a</sup>	A-						
		2030F	1,467	605	1.9	1.9	65
		2029F	1,354	573	1.9	1.9	66
		2028F	1,226	532	1.9	1.9	67
		2027F	1,077	473	1.8	1.8	68
		2026F	999	452	1.8	1.9	68
Dwr Cymru Cyfyngedig <sup>b</sup>	A-						
		2030F	880	378	1.4	1.8	63
		2029F	809	384	1.3	1.7	64
		2028F	753	344	1.5	1.8	64
		2027F	697	332	1.5	1.7	63
		2026F	638	297	1.9	1.9	63
Yorkshire Water Services Limited <sup>c</sup>	BBB+						
		2030F	1,218	504	1.7	1.8	70
		2029F	1,167	490	1.7	1.8	71
		2028F	1,082	436	1.9	1.9	71
		2027F	976	380	2.0	1.9	71
		2026F	888	357	2.0	2.0	77
Affinity Water Limited <sup>d</sup>	BBB+						
		2030F	239	93	2.0	2.0	72
		2029F	225	95	1.9	1.9	73
		2028F	212	85	2.1	2.1	73
		2027F	197	91	2.1	1.8	72
		2026F	176	84	2.3	1.9	71
Southern Water Services Limited <sup>e</sup>	BBB-						
		2030F	1,046	550	1.1	1.5	77
		2029F	971	522	1.1	1.5	76
		2028F	859	427	1.2	1.6	73
		2027F	792	347	1.4	1.9	71
		2026F	782	305	1.8	2.3	73

<sup>a</sup> Rated under Anglian Water Services Financing Plc. <sup>b</sup> Rated under Dwr Cymru (Financing) UK Plc. <sup>c</sup> Rated under Yorkshire Water Services Finance Limited and Yorkshire Water Finance Plc. <sup>d</sup> Rated under Affinity Water Finance Plc and Affinity Water Finance (2004) Plc. <sup>e</sup> Rated under SW (Finance) I Plc.  
Source: Fitch Ratings, Fitch Solutions, Ofwat, companies' data



The graph below compares Fitch's assumptions for YWS's cash ODIs across the rated portfolio. These penalties and rewards have a cash impact that materialises with a two-year lag. We forecast YWS's net cash ODI penalties of GBP148 million in AMP8, including the final two years of AMP7.

### Cash ODIs in AMP8



Source: Fitch Ratings, Fitch Solutions, Ofwat, companies

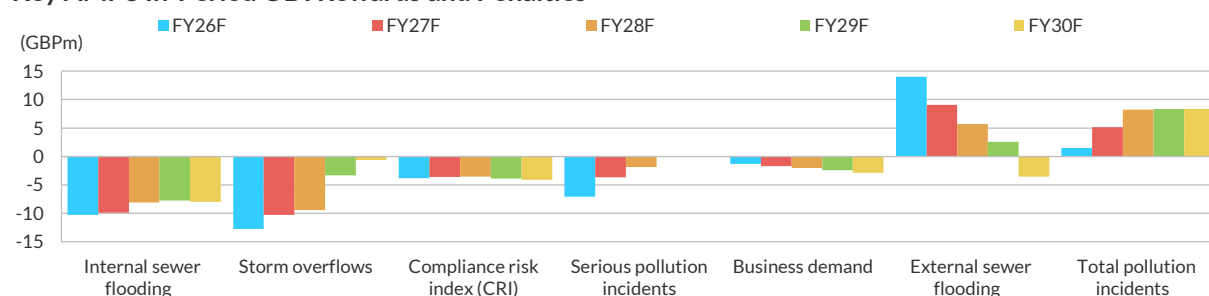
### Key

AWS	Anglian Water Services Limited
DWR	Dwr Cymru (Financing) UK Ltd
SWS	Southern Water Services Limited
UUW	United Utilities Water Limited
WWSL	Wessex Water Services Limited
YWS	Yorkshire Water Services Limited
AWL	Affinity Water Limited
STWL	Severn Trent Water Limited
NWL	Northumbrian Water Limited
SWW	South West Water Limited

Source: Fitch Ratings, Affinity Water Limited

The graph below presents a year-by-year breakdown of the most significant ODI rewards and penalties for YWS. We forecast cumulative net in-period ODI penalties of GBP67 million for AMP8. In AMP8, YWS is expected to incur penalties primarily related to internal sewer flooding, storm overflows, and compliance risk index. Our assumptions conservatively account for operational underperformance risks.

### Key AMP8 In-Period ODI Rewards and Penalties



Source: Fitch Ratings, Fitch Solutions, Ofwat, YWS

## Fitch Adjusted Financials

### Reconciliation of Key Financial Metrics

(GBPm)	Notes and formulas	31 Mar 24
<b>Post-maintenance cash flow</b>		
<b>Fitch EBITDA</b>		<b>612</b>
Regulatory depreciation		-339
Cash tax		0
Pension deficit repair		0
PAYG adjustment		0
<b>Post-maintenance cash flow</b>	<b>(a)</b>	<b>273</b>
Net cash interest paid (after interest received)	(b)	122
Accretion on swaps	(c)	34
<b>Cash PMICR (x)</b>	<b>a/(b+c)</b>	<b>1.8</b>
Indexation of debt	(d)	194
RCV yoy indexation	(e)	562
<b>Nominal PMICR (x)</b>	<b>(a+e)/(b+d)</b>	<b>2.6</b>
<b>Net debt to RCV</b>		
Interest-bearing loans and borrowing		6,518
Cash and equivalents (unrestricted)		-50
Impact of swaps recoupons		151
<b>Fitch net debt</b>	<b>(a)</b>	<b>6,619</b>
<b>RCV</b>	<b>(b)</b>	<b>9,132</b>
<b>Net debt to RCV (%)</b>	<b>a/b</b>	<b>72.5</b>

Source: Fitch Ratings, Fitch Solutions, Ofwat, YWS

## Parent Subsidiary Linkage Analysis

### Key Risk Factors and Notching Approach

Parent	Yorkshire Water Services Limited
Parent LT IDR	NA
Subsidiary	Kelda Group Limited
Subsidiary LT IDR	NA
Path	Stronger Subsidiary
Legal ring-fencing	Insulated
Access and control	Porous
Notching matrix outcome	Standalone
Override applied	No
Notching approach	—

LT IDR – Long-Term Issuer Default Rating  
Source: Fitch Ratings

### Stronger Subsidiary Notching Matrix

Access and control	Open	Porous	Insulated
With open ring-fencing	Consolidated	Consolidated+1	Consolidated+2 <sup>b</sup>
With porous ring-fencing	Consolidated+1	Consolidated+2 <sup>b</sup>	Consolidated+2 <sup>b</sup>
With insulated ring-fencing <sup>a</sup>		Standalone	Standalone

<sup>a</sup> It is unlikely that considerations for "insulated" legal ring-fencing would coexist with the conditions outlined under "open" for access and control. It is more likely that other factors relevant to legal ring-fencing or access and control, but not within this table, would move either one, or both, of the individual Linkage Factor Assessments (LFAs) to a "porous" level that would lead to a consolidated+1, consolidated+2 or standalone outcome. <sup>b</sup> Notching is capped at the subsidiary's Standalone Credit Profile.  
Source: Fitch Ratings

## SOLICITATION & PARTICIPATION STATUS

For information on the solicitation status of the ratings included within this report, please refer to the solicitation status shown in the relevant entity's summary page of the Fitch Ratings website.

For information on the participation status in the rating process of an issuer listed in this report, please refer to the most recent rating action commentary for the relevant issuer, available on the Fitch Ratings website.

## DISCLAIMER & DISCLOSURES

All Fitch Ratings (Fitch) credit ratings are subject to certain limitations and disclaimers. Please read these limitations and disclaimers by following this link: <https://www.fitchratings.com/understandingcreditratings>. In addition, the following <https://www.fitchratings.com/rating-definitions-document> details Fitch's rating definitions for each rating scale and rating categories, including definitions relating to default. Published ratings, criteria, and methodologies are available from this site at all times. Fitch's code of conduct, confidentiality, conflicts of interest, affiliate firewall, compliance, and other relevant policies and procedures are also available from the Code of Conduct section of this site. Directors and shareholders' relevant interests are available at <https://www.fitchratings.com/site/regulatory>. Fitch may have provided another permissible or ancillary service to the rated entity or its related third parties. Details of permissible or ancillary service(s) for which the lead analyst is based in an ESMA- or FCA-registered Fitch Ratings company (or branch of such a company) can be found on the entity summary page for this issuer on the Fitch Ratings website.

In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed. Fitch Ratings makes routine, commonly-accepted adjustments to reported financial data in accordance with the relevant criteria and/or industry standards to provide financial metric consistency for entities in the same sector or asset class.

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.

Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (the "NRSRO"). While certain of the NRSRO's credit rating subsidiaries are listed on Item 3 of Form NRSRO and as such are authorized to issue credit ratings on behalf of the NRSRO (see <https://www.fitchratings.com/site/regulatory>), other credit rating subsidiaries are not listed on Form NRSRO (the "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratings issued by or on behalf of the NRSRO.

Copyright © 2025 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved.