Yorkshire Water Services Limited

Rating Type	Rating	Outlook	Last Rating Action
Class A senior secured rating	А	Negative	Affirmed 11 February 2019
Class B senior secured rating	BBB+	Negative	Affirmed 11 February 2019
Click here for full list of ratings			

Financial Summary

(GBPm)	Mar 2017	Mar 2018	Mar 2019F	Mar 2020F
Gross Revenue	1,003	1,027	1,094	1,143
Operating EBITDAR Margin (%)	55.9	56.1	50.2	52.0
FFO Margin (%)	33.1	34.1	37.6	39.7
FFO Fixed Charge Coverage (x)	2.4	2.5	3.0	3.2
FFO Adjusted Leverage (x)	8.6	8.4	9.9	9.5
Source: Fitch Ratings, Fitch Solutions				

Fitch Ratings' Outlook on Yorkshire Water Services Limited's (YW) class A and class B was revised to Negative in February 2019, reflecting our expectations that YW's financial profile and, in particular, gearing in the next regulatory period, AMP7, could be weak for the ratings. Fitch's preliminary forecast suggests net senior debt (Fitch-adjusted) to regulatory capital value (RCV) of around 81% at FYE25 (financial year ending March) versus our negative rating sensitivity of 77%.

The Outlook could be revised to Stable if the company's final business plan demonstrates balance sheet strengthening and a potential to earn meaningful financial rewards for operational performance in AMP7. We expect to revisit the Outlook after the regulator publishes its AMP7 price determinations.

On 1 April 2019, the company announced its intention to reduce gearing to 70% (unadjusted) by FYE21 via a combination of a capital injection and dividend retention, which is credit-positive for Yorkshire Water. The company's final decision around the amounts and timing will depend on the outcome of draft and final determinations due in July and later in 2019.

Key Rating Drivers

Weaker Returns After 2020: In December 2017 the UK water industry regulator, Ofwat, announced a significant stepdown in the allowed return on capital for AMP7. Real, RPI-linked weighted average cost of capital (WACC) of 3.6% (excluding retail margin) is set to decline to 2.3%. This will lead to a significant fall in YW's EBITDA and post-maintenance cash flow. The regulator also plans to introduce more challenging cost and performance targets, with higher penalties for inefficiency. Additionally, pressure on the gearing ratio will come from a midnight inflation correction adjustment to RCV (GBP103 million in 2012/13 prices), which could add around 1.5% to debt/RCV at the beginning of AMP7.

Increased Business Risk: Fitch tightened its ratio guidelines for all rated UK water holding and operating companies in July 2018 to reflect an increase in business risk from the next price control. This is because the tougher proposed regulatory package offers low er cash flow visibility, as more revenue will be at risk with a higher proportion of the allow ed return linked to performance. We have tightened our gearing rating sensitivity by 3% and increased the post-maintenance interest cover (PMICR) sensitivity by 0.1x for Fitch-rated entities for the upcoming price control.

Stretched Gearing in AMP7: Our preliminary analysis of YW's business plan submitted to Ofwat in September 2018 suggests that the company may struggle to maintain gearing in line with our revised rating sensitivities during the next price control. Under Fitch's rating case, we expect class A and total senior swap-adjusted net debt/RCV to be substantially over our negative rating sensitivities of 67% and 77%, and average PMICRs at our negative rating sensitivities of 1.6x and 1.3x, assuming approximately 2% total expenditure (totex) outperformance and GBP32 million of outcome delivery incentives (ODI) rewards (in nominal terms).

Given the company's middle-ranking regulatory performance in AMP6, the total wholesale cost challenge of 18% recently announced by Ofwat and more demanding cost and incentive targets for AMP7, the extent of potential out or under-performance is highly uncertain amid the regulatory price-setting process.

Regulatory Performance Stable: In FY18, the company achieved 22 out of 26 commitment performance targets, resulting in a net positive reward of GBP12.66 million (in 2012/13 prices), with the main rewards coming from water supply interruptions and internal flooding incidents. Reliability measures were stable across all four of the company's key asset categories. The company met its service incentive mechanism (SIM) score, which slightly improved to 84.3 from 83.4, reflecting higher customer satisfaction.

How ever, In FY18 the company missed its drinking water quality contacts target (leading to a penalty of GBP6.6 million in 2012/13 prices) and it expects to continue missing its performance targets on this measure for the rest of the AMP, leading to an estimated overall penalty of GBP14.4 million (in 2012/13 prices). Severe weather conditions negatively affected YW's leakage performance, resulting in the company just missing its leakage target. This did not result in financial penalties. Overall, YW is a middle-ranking performer and forecasts a net cumulative reward of GBP68 million in AMP6 (in 2012/13 prices).

AMP6's Totex Outperformance Reinvested: In early 2018 YW decided to increase its capex and reinvest around GBP230 million of totex outperformance achieved in FY16-FY17 in service improvements. Key areas of reinvestment are reduction of leakage, water supply interruptions, pollution incidents and sew er flooding incidents. The company expects to deliver dramatic service enhancements including a 40% reduction in leakage and a 70% reduction in internal sew er flooding by the end of AMP7. With larger capex, we now expect higher closing gearing at FYE20, at around 78.4% (Fitch-adjusted) versus 77% (Fitch-adjusted) previously. At FYE18, the company reported net debt-to-shadow RCV of 76.6%.

Swap Restructuring Lowers Cash Interest: In 2017-2018 the company completed a number of swap restructurings. As a result, YW extended mandatory breaks on some of its swaps and arranged for a temporary step-up in the cash interest received from the swaps in FY18-FY32 of around GBP45 million per annum on average. A forecast reduction in the net cash interest paid results in improved class A and total senior PMICR metrics, which had previously been under pressure.

Swap-Related Adjustment: We view YW's proactive approach in managing the breaks and the super-senior accretion pay-downs on its swap portfolio positively. However, since a substantial part of the fixed cash interest savings was funded through extending the tenor on out-of-money swaps, the cash flow benefits received in FY18-FY30 could be paid back by YW to swap counterparties in the price controls following AMP8. We view this as a way to borrow through swaps, although the amount payable in the future will depend on the real interest rates.

To reflect potential cash outflow after FY30, we add the re-couponing benefit to the reported net debt in each respective year, on a cumulative basis, excluding funding other than tenor extensions. This reflects a general approach we have developed for similar swap re-couponing transactions funded through swap tenor extensions. The adjustment starts accruing in FY19 and reaches a peak by FY30, with a gradual decrease thereafter.

Base Dividends Planned for AMP7: YW's shareholders demonstrated their flexibility over cash dividends in AMP5 and AMP6. In 2017, shareholders waived dividends for the rest of AMP6, resulting in overall dividends significantly below the level assumed at the price determination. The AMP6 dividends primarily cover operating costs and external interest costs at Kelda. For AMP7, YW follow ed Of wat's proposal for setting base dividend at a 5% equity yield, noting that this plan will be subject to financial resilience-testing prior to deciding on actual distributions.

Index-linked Swaps: YW has a portfolio of index-linked swaps with a notional amount of GBP1.29 billion and a negative money-to-market (MtM) value of GBP2.4 billion at 31 March 2018. We factor these swaps into our overall rating assessment as they could substantially increase the company's senior debt, although we do not adjust the gearing ratio unless the swaps crystallise. YW paid down around GBP130 million of RPI accretion on these swaps in November 2018, actively managing its super-senior trigger event covenant of 6% RCV. We expect the management to continue managing liquidity exposure and making accretion pay-downs at least 24 months in advance.

Rating Derivation Relative to Peers

Rating Derivation vs. Peer	Rating Derivation vs. Peers								
Peer Comparison	The senior secured ratings and credit metrics reflect the highly geared nature of YW's secured covenanted structure versus that of peers such as United Utilities Water Limited (IDR: BBB+/Stable, senior unsecured A-) and Wessex Water Services Limited (IDR: BBB+/Negative, senior unsecured: A-), which have lower leverage and are not covenanted secured structures. YW's debt financing benefits from structural enhancements, including trigger mechanisms (such as dividend lock-up provisions tied to financial, positive and negative covenants) and debt service reserve liquidity. The company's higher ratings compared to similar peers with covenanted structures such as Southern Water (class A: BBB+/ class B: BBB-/Stable) reflects stronger credit metrics and more robust regulatory performance.								
Parent/Subsidiary Linkage	Parent/Subsidiary Linkage is applicable but, given the regulatory, structural and contractual ring-fenced structure of the group it does not affect the ratings.								
Country Ceiling	No Country Ceiling constraint was in effect for these ratings.								
Operating Environment	No operating environment influence was in effect for these ratings.								
Other Factors	None.								
Source: Fitch Ratings									

Rating Sensitivities

Developments That May, Individually or Collectively, Lead to Positive Rating Action

- An upgrade is unlikely for both classes of debt, given the pressure on the gearing.
- The Outlooks could be revised to Stable if we expect class A debt gearing below 67% (Fitch-adjusted) and net senior gearing below 77% (Fitch-adjusted) in AMP7, through a combination of operational outperformance and changes to planned distributions.

Developments That May, Individually or Collectively, Lead to Negative Rating Action

- Class A debt gearing above 67% (Fitch-adjusted) and/or PMICR materially below 1.6x on a sustained basis.
- Net senior gearing above 77% (Fitch-adjusted) and/or PMICR materially below 1.3x on a sustained basis.
- Deterioration in operational or regulatory performance.
- Regulatory decisions that may materially impact cash flow generation such as opening up additional parts of the value chain to competition.

Liquidity and Debt Structure

At 30 September 2018, the company had GBP23.3 million in cash and cash equivalents and GBP684.0 million in available undrawn committed bank facilities. In the interim period between March and September 2018, YW issued GBP150 million of fixed rate notes due between 2031 and 2038 and GBP25 million of CPI-linked debt due 2031. Of the available liquidity facilities, GBP405 million (recently extended to Oct 2023) can be used without restriction while the remaining GBP279 million of operational and maintenance and debt service reserve facilities can only be utilised by YW during a standstill period. This funding position provides sufficient financial resources for operating requirements and debt maturities for the next 18 months. YW's senior net indebtedness was GBP5 billion at end-September 2018 and GBP4.9 billion at FYE18.

Debt Maturities and Liquidity at FYE18

AVAILABLE LIQUIDITY (GBPm)	2019F	2020F	2021F	2022F
Beginning Cash Balance ^a	23	-249	-672	-1,022
Rating Case FCF after Acquisitions and Divestitures	-205	-89	-309	-359
<other base="" case="" cash="" fcf="" inflows="" into="" modeled="" not="" or="" post-fcf=""></other>				
<e.g., balance="" debt="" issued="" last="" sheet="" since=""></e.g.,>				
<e.g., capex="" cash="" from="" in="" inflow="" reduction=""></e.g.,>				
<e.g., cash="" dividend="" from="" in="" inflow="" reduction=""></e.g.,>				
Total Available Liquidity (A)	-182	-338	-981	-1,381
LIQUIDITY USES				
Debt Maturities	-68	-334	-41	-169
<other liquidity="" of="" uses=""></other>				
Total Liquidity Uses (B)	-68	-334	-41	-169
LIQUIDITY CALCULATION				
Ending Cash Balance (A+B)	-249	-672	-1,022	-1,550
Revolver Availability ^a	684	684	684	684
Ending Liquidity	435	12	-338	-866
Liquidity Score	7.4	1.0	Not meaningful	Not meaningfu
^a Cash and RCF as of 30 September 2018, Revolver availability includes O&M and Source: Fitch Ratings	DSCR facilities			

Full Debt Maturity Schedule - Yorkshre Water	Original
Statement Date	31 March 2018
2019	68
2020	334
2021	41
2022	169
2023	437
Thereafter	3,849
Total	4,897
Source: Fitch Ratings	

Key Assumptions

Fitch's Key Assumptions Within Our Rating Case for the Issuer

- Long-term RPI at 3%, long-term CPIH at 2%
- Allow ed WACC in AMP7 declines to 2.3% (RPI based) and 3.3% (CPIH based) in real terms, excluding retail margins
- 50% of the RCV is RPI-linked and another 50% plus capital additions is CPIH-linked, starting from FY21
- AMP7 totex of GBP5.5 billion in nominal terms
- Pay-as-you-go (PAYG) ratio of 53.4%, run-off rate at 3.8%
- Net AMP6-related ODI rewards of GBP105 million (nominal) are included in AMP7's revenue adjustments
- 2% totex outperformance, GBP32 million ODI-related rew ards in AMP7 (nominal)
- Retail EBITDA of GBP12 million p.a. on average during AMP7
- Average YW's cash cost of debt of 3.2% (including the benefit from swap-re-couponing), total cost of debt of 4.9% in AMP7
- Average Kelda's cost of debt of 5.9% and annual corporate costs of around GBP9 million
- Pension deficit recovery payments of around GBP14 million p.a. in FY19-FY22
- YW's AMP7 total dividend of GBP417 million including Kelda's AMP7 dividend of GBP326 million

Financial Data

	Histori	cal	Forecast			
(GBPm)	Mar 2017	Mar 2018	Mar 2019F	Mar 2020F		
Summary Income Statement						
Gross Revenue	1,003	1,027	1,094	1,143		
Revenue Growth (%)	2.8	2.4	6.6	4.4		
Operating EBITDA (Before Income from Associates)	559	573	547	591		
Operating EBITDA Margin (%)	55.7	55.8	50.0	51.7		
Operating EBITDAR	561	576	549	594		
Operating EBITDAR Margin (%)	55.9	56.1	50.2	52.0		
Operating EBIT	282	277	231	262		
Operating EBIT Margin (%)	28.1	27.0	21.1	22.9		
Gross Interest Expense	-306	-328	-273	-279		
Pretax Income (Including Associate Income/Loss)	-363	98	17	45		
Summary Balance Sheet						
Readily Available Cash and Equivalents	230	25	25	25		
Total Debt with Equity Credit	4,949	4,897	5,204	5,404		
Total Adjusted Debt with Equity Credit	4,963	4,918	5,227	5,438		
Net Debt	4,719	4,872	5,179	5,379		
Summary Cash Flow Statement						
Operating EBITDA	559	573	547	591		
Cash Interest Paid	-243	-231	-173	-178		
Cash Tax	0	0	0	0		
DividendsReceivedLessDividendsPaid to Minorities (Inflow/(Out)flow)	0	0	0	0		
Other Items Before FFO	16	8	-22	-22		
Funds Flow from Operations	332	350	411	454		
FFO Margin (%)	33.1	34.1	37.6	39.7		
Change in Working Capital	-12	21	23	4		
Cash Flow from Operations (Fitch Defined)	320	371	434	457		
Total Non-Operating/Non-Recurring Cash Flow	74	65				
Capital Expenditure	-305	-394				
Capital Intensity (Capex/Revenue) (%)	30.4	38.4				
Common Dividends	-139	-89				
Free Cash Flow	-50	-47				
Net Acquisitions and Divestitures	0	0				
Other Investing and Financing Cash Flow Items	-26	-11	-101	-111		
Net Debt Proceeds	282	0	307	200		
Net Equity Proceeds	0	-134	0	0		
Total Change in Cash	206	-192	0	0		

Water/Wastewater Utility / United Kingdom

Calculations for Forecast Publication				
Capex, Dividends, Acquisitions and Other Items Before FCF	-370	-418	-639	-546
Free Cash Flow After Acquisitions and Divestitures	-50	-47	-205	-89
Free Cash Flow Margin (After Net Acquisitions) (%)	-5.0	-4.5	-18.8	-7.7
Coverage Ratios				
FFO Interest Coverage (x)	2.4	2.5	3.0	3.2
FFO Fixed Charge Coverage (x)	2.4	2.5	3.0	3.2
Operating EBITDAR/Interest Paid + Rents(x)	2.3	2.5	3.1	3.3
Operating EBITDA/Interest Paid (x)	2.3	2.5	3.2	3.3
Leverage Ratios				
Total Adjusted Debt/Operating EBITDAR (x)	8.8	8.5	9.5	9.2
Total Adjusted Net Debt/Operating EBITDAR (x)	8.4	8.5	9.5	9.1
Total Debt with Equity Credit/Operating EBITDA (x)	8.9	8.5	9.5	9.1
FFO Adjusted Leverage (x)	8.6	8.4	9.9	9.5
FFO Adjusted Net Leverage (x)	8.2	8.4	9.9	9.5
Source: Fitch Ratings, Fitch Solutions				

How to Interpret the Forecast Presented

The forecast presented 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. 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 in future reports but assumes no responsibility to do so. Original financial statement data for historical periods is processed by Fitch Ratings is processed by Fitch Ratings to do so. Original financial statement data for historical periods is processed by Fitch Ratings. Key financial adjustments and all financial forecasts credited to Fitch Ratings. Key financial adjustments and all financial forecasts credited to Fitch Ratings. Key financial adjustments and all financial forecasts credited to Fitch Ratings are generated by rating agency staff.

Water / Wastewater Utility / United Kingdom

Ratings Navigator

Fitc	hRatings	5	Yorkshir	e Water	Services	Limited.	ESG Relevance:		Corp	orates Ratin EMEA Regul	gs Navigator ated Networks
Factor Levels	Sector Risk Profile	Operating Environment	Management and Corporate Governance	Sector Positioning	Business Profile Regulatory Environment	Asset Base	Operations	Profitability and Cash Flow	Financial Profile Financial Structure	Financial Flexibility	Issuer Default Rating
aaa			Corporate Covernance		Enviolment			Tiow			AAA
aa+											AA+
aa											AA
aa-		T									AA-
a+	1										A+
a											А
a-					•		T				A-
bbb+								T		_	BBB+
bbb											BBB
bbb-								.			BBB-
bb+										_	BB+
bb									I		BB
bb-	_										BB-
b+	_								•		B+
D											В
b- ccc+	•										B- CCC+
ccc+								-			
ccc-											 CCC-
cc											cc
с											c
d or rd											D or RD

Source: Fitch Ratings

Water / Wastewater Utility / United Kingdom

FitchRatings

Yorkshire Water Services Limited.

Corporates Ratings Navigator EMEA Regulated Networks

Transparent framew orks with strong track record and multi-year predictable tariffs set

Tariff setting with challenge mechanisms that may marginally limit cost and investment

Medium counterparty risk; medium collection rates for water suppliers. Some exposure

Licensing includes effective ring-fencing provisions with creditw orthiness

a High insulation from price and volume risk, little revenue under-recovery.

bbb Key performance measures in line with sector average and/or regulatory target.

Opera	Operating Environment							
aa			Economic Environment	а	Strong combination of countries where economic value is created and where assets are located.			
aa-		ľ	Financial Access	aa	Very strong combination of issuer-specific funding characteristics and the strength of the relevant local financial market.			
			Systemic Governance	aa	Systemic governance (eg rule of law , corruption, government effectiveness) of the issuer's country of incorporation consistent with 'aa'.			

Management and Corporate Governance

Regulatory Environment

Predictability

Concessioning

aa-

a+

а

a-

bbb+

а

a-

bbb+ bbb bbb

bb+

bb

bbb+ b

Operations

Financial Structure

Independence, Transparency,

Cost and Investment Recovery

Licensing, Ring-Fencing,

Volume and Price Risk

Performance Measures

Lease-Adjusted FFO Gross

Net Debt/Asset Base

Lease-Adjusted FFO Net Leverage

Counterparty Risk

a+ Management Strategy



by independent regulators; little political risk.

recovery, with little regulatory lag.

to cyclical industries and/or customers.

requirements: limited concession renew al risk.

а

а

а

bbb

b 8.0x

b 7.5x

bbb 70%

Sector Positioning

CCC+

а	Operation Type	bbb	Local or regional monopoly asset ow ners, regional monopoly asset operators.
a-	Non-Regulated Earnings (% of Total Earnings)	а	up to 10%
bbb+			
bbb			
bbb-			

Asset Base

а		Diversification	bbb	Limited diversification by geography without regulatory diversification; regional utility.
a-	Т	Critical Mass	а	Critical mass in one regulated asset; does not affect efficiency of operations (cost base, customer base, key personnel).
bbb+		Asset Quality and Residual Life	bbb	Mid-range asset quality not affecting opex and capex requirements compared with peers. The residual life of regulatory assets is average.
bbb				
bbb-				

Profitability and Cash Flow

a-		Return on Capital	bbb	Return on capital comparable with the regulatory benchmark.
bbb+	T	Volatility of Profitability	bbb	Stability and predictability of profit in line with utility peers.
bbb		Investment Cycle	bbb	Investment cycle position and dividend policy contributing to negative free cash flow . Moderate flexibility in smoothing capex plans.
bbb-				
bb+				

Financial Flexibility

bbb+		Financial Discipline	bbb	Financial policies less conservative than peers but generally applied consistently.
bbb		Liquidity	bbb	One-year liquidity ratio above 1.25x. Well spread debt maturity schedule but funding may be less diversified.
bbb-		FFO Fixed-Charge Cover	bb	2.0x
bb+		FX Exposure	aa	No material FX mismatch.
bb		PMICR: (CFO - Maintenance Capex)/Interest	bbb	1.5x

How to Read This Page: The left column shows the three-notch band assessment for the overall Factor, illustrated by a bar. The right column breaks down the Factor into Sub-Factors, with a description appropriate for each Sub-Factor and its corresponding category.

Credit-Relevant ESG Derivation

Leverage

Credit-Kelevalit LSG Derivation				Overa	II ESG
Yorkshire Water Services Limited, has no ESG rating drivers	key driver	0	issues	5	
	driver	0	issues	4	
	potential driver	0	issues	3	
	not a rating	0	issues	2	
	driver	0	issues	1	

For further details on Credit-Relevant ESG scoring, see page 3.

Source: Fitch Ratings

Yorkshire Water Services Limited

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FitchRatings

Corporates

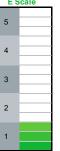
Water / Wastewater Utility / United Kingdom

Environmental (E)

General Issues	E Score	Sector-Specific Issues	Reference	E	Sca
GHG Emissions & Air Quality		Emissions from operations	Profitability and Cash Flow	5	F
Energy Management		Energy and fuel use in operations; entities' financial targets for losses/shrinkage	Profitability and Cash Flow	4	E
Water & Wastewater Management		Water usage in operations; water utilities' financial targets for water quality, leakage and usage	Operations; Profitability and Cash Flow; Financial Structure; Financial Flexibility	3	F
Waste & Hazardous Materials Management; Ecological Impacts		Impact of waste including pollution incidents; discharge compliance; sludge disposal	Operations; Profitability and Cash Flow; Financial Flexibility	2	E
Exposure to Environmental Impacts		Exposure to extreme weather events - negative (e.g. risk of drought and flooding) or positive (e.g. additional return on capex for network weather-resilience)	Operations; Profitability and Cash Flow; Financial Flexibility	1	

Social (S)

General Issues	S Score	Sector-Specific Issues	Reference	S S	Scale
Human Rights, Community Relations, Access & Affordability		Product affordability and access	Profitability and Cash Flow; Regulatory Environment	5	
Customer Welfare - Fair Messaging, Privacy & Data Security		Quality and safety of products and services; data security	Profitability and Cash Flow	4	
Labor Relations & Practices		Impact of labor negotiations and employee (dis)satisfaction	Profitability and Cash Flow; Financial Structure; Financial Flexibility	3	
Employee Wellbeing		Worker safety and accident prevention	Financial Structure; Financial Flexibility	2	
Exposure to Social Impacts		Social resistance to major projects that leads to delays and cost increases	Operations; Profitability and Cash Flow	1	



How to Read This Page

ESG scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant and green (1) is least relevant.

The Environmental (E), Social (S) and Governance (G) tables break out the individual components of the scale. The left-hand box shows the aggregate E, S, or G score. General Issues are relevant across all markets with Sector-Specific Issues unique to a particular industry group. Scores are assigned to each sectorspecific issue. These scores signify the credit-relevance of the sector-specific issues to the issuing entity's overall credit rating. The Reference box highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis.

The Credit-Relevant ESG Derivation table shows the overall ESG score. This score signifies the credit relevance of combined E, S and G issues to the entity's credit rating. The three columns to the left of the overall ESG score summarize the issuing entity's sub-component ESG scores. The box on the far left identifies the [number of] general ESG issues that are drivers or potential drivers of the issuing entity's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the score.

Classification of ESG issues has been developed from Fitch's sector and subsector ratings criteria and the General Issues and the Sector-Specific Issues have been informed with SASB's Materiality Map.

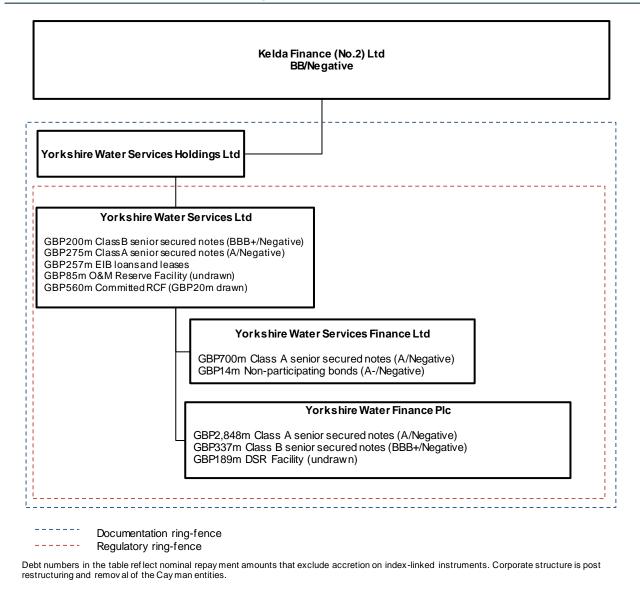
	CREDIT-RELEVANT ESG SCALE							
G Scale	How relevant are E, S and G issues to the overall credit rating?							
5	Highly relevant, a key rating driver that has a significant impact on the rating on an individual basis. Equivalent to "higher" relative importance within Navigator.							
4	Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative importance within Navigator.							
3	Minimally relevant to rating, either very low impact or actively managed in a w ay that results in no impact on the entity rating. Equivalent to "low er" relative importance within Navigator.							
2	2 Irrelevant to the entity rating but relevant to the sector.							
1	1 Irrelevant to the entity rating and irrelevant to the sector.							

Governance (G)

General Issues	G Score	Sector-Specific Issues	Reference
Management Strategy		Strategy development and implementation	Management and Corporate Governance
Governance Structure		Board independence and effectiveness; ownership concentration	Management and Corporate Governance
Group Structure		Complexity, transparency and related-party transactions	Management and Corporate Governance
Financial Transparency		Quality and timing of financial disclosure	Management and Corporate Governance

Source: Fitch Ratings

Simplified Group Structure Diagram



Source: Fitch Ratings, Company as at June 2019

Cayman entity removal: In May 2018, YW initiated the process of removing the financing companies incorporated in the Cayman Islands from its corporate structure to improve the transparency of its business and simplify the financing structure. YW started a bondholder consent solicitation process to substitute the issuers, with consent received in June 2018.

As a result, in August 2018 Yorkshire Water Services Bradford Finance Limited and Yorkshire Water Services Odsal Finance Limited (together, the "Cayman Issuers") have been substituted with Yorkshire Water Finance plc, a public limited liability company incorporated in England and Wales, as the issuer of the debt issued by each of the Cayman Issuers (in total about GBP3 billion). Cayman Issuers left the YW financing group and relevant changes were implemented to the Finance Documents.

The company has finalised the restructuring in June 2019 as it dissolved the two Cayman Island companies.

Swap restructuring: Yorkshire Water executed three swap restructuring transactions in FY18-FY19, which helped it to reduce net cash interest in the next two regulatory periods (AMP7 and AMP8). These transactions were very complex and involved a number of components, including: (1) break extensions and voluntary accretion pay-down, (2) swap bifurcation and sale of RPI legs to institutional investors, (3) reduction of pay legs on some swaps through agreeing to receive a fixed cash benefit in AMP7 and AMP8, and (4) extension of tenor on some out-of-money swaps, providing additional value.

As a result of these, the company arranged for a temporary step-up in the cash interest received from the swaps in FY18-FY32 of around GBP45 million a year on average. The re-couponing benefit was funded through GBP250 million of new class A debt, savings generated via swap bifurcation and tenor extensions on out-of-money swaps.

There is a credit-positive part to the restructuring transactions: proactive approach in managing the breaks and the supersenior accretion pay-downs as well as unlocking some value via swap bifurcation. However, additional liabilities may arise around the re-couponing parts of these transactions, particularly those funded through extending tenor on out-of-money swaps.

Overall, we do not view swap re-couponings funded via extending tenor on out-of-money swaps as credit-enhancing transactions. These transactions only postpone structural problems of the existing index-linked swap portfolios rather than addressing them. The cash flow related to swaps is simply being up-fronted, with the payback structured further out in the future (after FY30). While there is a possibility that the macroeconomic environment could improve after FY30 and extended swaps will no longer be out-of-money, under current macroeconomic conditions extended swaps would result in significant cash outflows. This, together with discontinuation of the fixed annual cash inflows from re-couponed swaps, could lead to a significant step-dow n in PMICRs from FY31.

To reflect these very long-dated credit profile challenges in the current ratings, Fitch decided to adjust the companies' net senior debt for the swap re-couponing benefit (only the part funded via tenor extension on out-of-money swaps). To reflect potential cash outflow after FY30, we add the re-couponing benefit to net debt in each respective year, on a cumulative basis, excluding the capital injection. The adjustment starts accruing in FY19 and reaches peak by FY30, with a gradual decrease thereafter.

Swap re-couponing adjustments as a % of forecast shadow RCV, AMP7

	FY21	FY22	FY23	FY24	FY25
Yorkshire Water	1%	1%	1%	2%	2%

Peer Financial Summary

Company	IDR	Financial Statement Date	Gross Revenue (GBPm)	Operating EBITDAR Margin (%)	FFO Margin (%)	FFO Fixed Charge Coverage (x)	FFO Adjusted Net Leverage (x)
Yorkshire Water Services Limited.							
		2018	1,027	56.1	34.1	2.5	8.4
		2017	1,003	55.9	33.1	2.4	8.2
		2016	976	56.1	30.5	2.3	8.5
Kelda Finance (No.2) Limited	BB						
	BB	2018	1,027	56.1	32.3	2.3	9.2
	BB	2017	1,003	55.9	31.7	2.2	8.7
	BB	2016	976	56.1	29.0	2.1	9.0
Anglian Water Services Ltd.							
		2018	1,249	54.7	31.4	2.6	9.6
		2017	1,227	55.2	34.3	2.7	8.9
		2016	1,185	53.9	30.8	2.6	9.5
Wessex Water Services Limited	BBB+						
	BBB+	2018	541	62.6	45.8	4.7	6.4
	BBB+	2017	525	63.2	45.8	4.8	6.3
	BBB+	2016	521	64.7	48.8	5.0	5.9
United UtilitiesWaterLimited	BBB+						
	BBB+	2018	1,717	59.4	46.2	6.1	7.6
	BBB+	2017	1,680	58.4	44.3	5.5	7.6
	BBB+	2016	1,692	55.7	42.8	5.1	7.3
Source: Fitch Ratings, Fitch Solut	tions						

UK Water OpCos - Peer Summary

GBPm, unless otherwise noted As of 3/31/2018	Angliar	Water	United Utilities	Wessex Water	Yorkshi	re Water	Southern Water
LT IDR/Outlook	n.	a.	BBB+/ Stable	BBB+/ Negative	n.	а.	n.a.
Debt Class	Class A	Class B	Senior Unsecured	Senior Unsecured	Class A	Class B	Class A
Instrument Rating/Outlook	A/ Stable	BBB+/ Stable	A-	A-	A/ Negative	BBB+/ Negative	BBB+/ Stable
Positive Rating Guidelines a							
Net debt/ RAV (%)	-	-	< 60	< 67	< 67	< 77	< 72
PMICR (x)	-	-	>1.9	>1.6	-	-	> 1.4
Negativ e Rating Guidelines							
Net debt/ RAV (%)	> 67	> 77	> 65	> 67	> 67	> 77	> 77
PMICR (x)	< 1.6	< 1.3	<1.6	<1.6	< 1.6	< 1.3	< 1.3
Current metrics - Fitch Case							
FY18 net debt/ RAV (%)	69	80	64	69	68	77	70
FY18 PMICR (x)	1.9	1.5	3.1	2.3	1.6	1.3	1.1
AMP6 regulatory performance - Fitch Case							
Totex out/underperformance (%) b	1	1	2d	11	ţ	ō	1e
ODI rewards/penaties(GBPm) c	8	3	19	44	9	4	-37
Asset health not stable (FY18)	Sta	ble	N/A	N/A	Sta	ıble	Stable
SIM scores (FY18)	88/	100	87/100	87/100	84/	100	79/100
Leakage target (FY18)	Met - 183	/192 ml/d	Met - 454/463 ml/d	Met - 68/68 ml/d		æd- 97 ml/d	Missed- 89/87 ml/d
Overall ranking (FY16-FY18)	Upp qua	oer- rtile	Upper- quartile	Upper- quartile		ond- rtile	Bottom- quartile
AMP7 expectations - Fitch Case							
Gearing vs. guidance (avg. of AMP7)	In-line	In-line	Below	Above	Above	Above	Below
PMICR vs. guidance (avg. for AMP7)	In-line	In-line	Above	In-line	In-line	In-line	In line

b Expected for the whole of AMP6, before sharing, pre-reinvestments, negative/positive numbers relate to under/outperformance, respectively c Assumed for the whole of AMP6, Induding rewards for SIM

d Excludes incremental dry weather spending of GBP80 million

e Totex outperformance of about 1% is after some reinvestments of realised efficiencies Source: Fitch, companies disclosure, Ofwat reports

Water / Wastewater Utility / United Kingdom

Reconciliation of Key Financial Metrics

Reconciliation of Key Financial Metrics for Yorkshire Water Servic	es Ltd	Source
(GBPm)	31-Mar-18	
Interest bearing loans and borrow ings Class A	4,354.40	YW's investor report for FY18
- Cash and equivalents	24.9	
= Net debt	4,329.50	YW's investor report for FY18
+ Pension deficit not funded by customers	0	
= Pension adjusted net debt Class A (a)	4,329.50	
Economic regulatory asset value (b)		Shadow RCV from YW's FY18 Annual Report
Net debt/RAV Class A (%)	68.2%	
Pension adjusted net debt/regulatory asset value (a/b) x 100		
Operating EBITDA	573	Fitch adjusted based on YW's FY18 Annual Report
- Regulatory Depreciation	278.3	YW's investor report for FY18
- Taxation paid	0	
Post maintenance cash flow = EBITDA - regulatory depreciation - tax - pensions (c)	294.7	
Class A cash interest (d)	185.5	YW's investor report for FY18 adjusted for mandatory swap accretion pay-dowr
Post maintenance interest cover ratio Class A (x)	1.6x	
Post maintenance cash flow / cash interest c/d		
Source: Fitch based on company accounts and investor reports		

Water / Wastewater Utility / United Kingdom

Reconciliation of Key Financial Metrics for Yorkshire Water Services	s Ltd	Source
(GBPm)	31-Mar-18	
Interest bearing loans and borrowings Class A and Class B debt	4,897.10	YW's investor report for FY18
- Cash and equivalents	24.9	
= Net debt	4,872.20	YW's investor report for FY18
+ Pension deficit not funded by customers	0	
= Pension adjusted net debt Class A and Class B (a)	4,872.20	
Economic regulatory asset value (b)	6 350 70	Shadow RCV from YW's FY18 Annual Report
Net debt/RAV class A and class B (%)	76.7%	
Pension adjusted net debt/regulatory asset value(a/b) x 100		
Operating EBITDA	573	Fitch adjusted based on YW's FY18 Annual Report
- Regulatory depreciation	278.3	YW's investor report for FY18
- Taxation paid	0	
Post maintenance cash flow = EBITDA - regulatory depreciation - tax – pension deficit (c	294.7	
Class A and class B cash interest (d)	216.5	YW's investor report for FY18 adjusted for mandatory swap accretion pay-dow
Post maintenance interest cover ratio Class A and Class B (x)	1.4x	
Post maintenance cash flow / cash interest c/d		
Source: Fitch based on company accounts and investor reports		

Reconciliation of Key Financial Metrics for Yorkshire Water Services Limited.

(GBP Millions As reported)	31 Mar 2018
(GBP Millions, As reported) Income Statement Summary	JI WIAI 2010
Operating EBITDA	573
+ Recurring Dividends Paid to Non-controlling Interest	0
+ Recurring Dividends Received from Associates	0
+ Additional Analyst Adjustment for Recurring VS Minorities and Associates	0
= Operating EBITDA After Associates and Minorities (k)	573
+ Operating Lease Expense Treated as Capitalised (h)	373
= Operating EBITDAR after Associates and Minorities (j)	576
	510
Debt & Cash Summary	
Total Debt with Equity Credit (I)	4,897
+ Lease-Equivalent Debt	21
+ Other Off-Balance-Sheet Debt	0
= Total Adjusted Debt with Equity Credit (a)	4,918
Readily Available Cash [Fitch-Defined]	25
+ Readily Available Marketable Securities [Fitch-Defined]	0
= Readily Available Cash & Equivalents (o)	25
Total Adjusted Net Debt (b)	4,893
Cash-Flow Summary	
Preferred Dividends (Paid) (f)	0
Interest Received	0
+ Interest (Paid) (d)	(231)
= Net Finance Charge (e)	(231)
Funds From Operations [FFO] (c)	350
+ Change in Working Capital [Fitch-Defined]	21
= Cash Flow from Operations [CFO] (n)	371
Capital Expenditures (m)	(394)
Multiple applied to Capitalised Leases	8.0
Gross Leverage	
Total Adjusted Debt / Op. EBITDAR* [x] (a/j)	8.5
FFO Adjusted Gross Leverage [x] (a/(c-e+h-f))	8.4
Total Adjusted Debt/(FFO - Net Finance Charge + Capitalised Leases - Pref. Div. Paid)	0.4
Total Debt With Equity Credit / Op. EBITDA* [x] (I/k)	8.5
Net Leverage	
Total Adjusted Net Debt / Op. EBITDAR* [x] (b/j)	8.5
FFO Adjusted Net Leverage [x] (b/(c-e+h-f))	8.4
Total Adjusted Net Debt/(FFO - Net Finance Charge + Capitalised Leases - Pref. Div. Paid)	
Total Net Debt / (CFO - Capex) [x] ((I-o)/(n+m))	-211.8
Coverage	
Op. EBITDAR / (Interest Paid + Lease Expense)* [x] (j/-d+h)	2.5
Op. EBITDA / Interest Paid* [x] (k/(-d))	2.5
FFO Fixed Charge Cover [x] ((c+e+h-f)/(-d+h-f))	2.5
(FFO + Net Finance Charge + Capit. Leases - Pref. Div Paid) / (Gross Int. Paid + Capit. Leases - Pref. Div. Pa	
FFO Gross Interest Coverage [x] ((c+e-f)/(-d-f))	2.5
(FFO + Net Finance Charge - Pref. Div Paid) / (Gross Int. Paid - Pref. Div. Paid)	2.3
*EBITDA/R after Dividends to Associates and Minorities	
Source: Fitch Ratings, based on information from company reports.	
umbers in the above table reflect standard Fitch adjustments for canital leases, canitalised interest, debt and interest adju	stmont to mat

Numbers in the above table reflect standard Fitch adjustments for capital leases, capitalised interest, debt and interest adjustment to match the company's Investor Report figures as well as adjustment for swap accretion pay -downs.

Fitch Adjustment Reconciliation

Yorkshire Water Services Limited.

(GBP Millions, As reported)	Reported Values 31 Mar 18	Sum of Fitch Adjustments	- CORP - other	Capitalised Interest Costs	operating lease	Adjusted Values
Income Statement Summary						
Revenue	1,027	0				1,027
Operating EBITDAR	573	3			3	576
Operating EBITDAR after Associates and Minorities	573	3			3	576
Operating Lease Expense	0	3			3	3
Operating EBITDA	573	0				573
Operating EBITDA after Associates and Minorities	573	0				573
Operating EBIT	277	0				277
Debt & Cash Summary						
Total Debt With Equity Credit	4,909	(12)	(12)			4,897
Total Adjusted Debt With Equity Credit	4,909	9	(12)		21	4,918
Lease-Equivalent Debt	0	21	()		21	21
Other Off-Balance Sheet Debt	0	0				0
Readily Available Cash & Equivalents	39	(14)	(14)			25
Not Readily Available Cash & Equivalents	0	14	14			14
Cash-Flow Summary	Ū					
Preferred Dividends (Paid)	0	0				0
Interest Received	57	(57)	(57)			0
Interest (Paid)	(194)	(36)	(22)	(14)		(231)
Funds From Operations [FFO]	430	(80)	(65)	(14)		350
Change in Working Capital [Fitch-Defined]	21	0	()	(/		21
Cash Flow from Operations [CFO]	451	(80)	(65)	(14)		371
Non-Operating/Non-Recurring Cash Flow	0	65	65	(/		65
Capital (Expenditures)	(409)	14	00	14		(394)
Common Dividends (Paid)	(89)	0				(89)
Free Cash Flow [FCF]	(47)	(0)				(47)
Gross Leverage	()	(0)				()
Total Adjusted Debt / Op. EBITDAR* [x]	8.6					8.5
FFO Adjusted Leverage [x]	8.7					8.4
Total Debt With Equity Credit / Op. EBITDA* [x]	8.6					8.5
Net Leverage	0.0					0.0
Total Adjusted Net Debt / Op. EBITDAR* [x]	8.5					8.5
FFO Adjusted Net Leverage [x]	8.6					8.4
Total Net Debt / (CFO - Capex) [x]	115.1					-211.8
Coverage						2
Op. EBITDAR / (Interest Paid + Lease Expense)* [x]	2.9					2.5
Op. EBITDA / Interest Paid* [x]	2.9					2.5
FFO Fixed Charge Coverage [x]	2.9					2.5
FFO Interest Coverage [x]	2.9					2.5
*EBITDA/R after Dividends to Associates and Minorities Source: Fitch Ratings, based on information from company reports.	2.3					2.0

Numbers in the above table reflect standard Fitch adjustments for capital leases, capitalised interest, debt and interest adjustment to match the company's Investor Report figures as well as adjustment for swap accretion pay -downs

Related Research & Criteria

What Investors Want to Know: UK Water - Pressure on Credit Quality Persists (June 2019)

Fitch Revises Outlook on Yorkshire Water's Senior Secured Debt to Negative (February 2019)

Corporate Rating Criteria (February 2019)

The Importance of Post-Maintenance Interest Coverage Ratios for Credit Analysis of UK Regulated Networks (January 2019)

Fitch Ratings: UK Water Companies' Plans Show Large Capex Step-up, Low er Leverage (October 2018)

Parent and Subsidiary Rating Linkage (July 2018)

Fitch Revises Outlook on 3 UK Water Holding Companies to Negative (July 2018)

What Investors Want to Know: UK Water (May 2018)

Corporates Notching and Recovery Ratings Criteria (March 2018)

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Yorkshire Water Services Limited 12 July 2019

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