

CREDIT OPINION

21 February 2019

Update



RATINGS

Yorkshire Water Services Limited

Domicile	United Kingdom
Long Term Rating	Baa2
Туре	LT Corporate Family Ratings - Fgn Curr
Outlook	Negative

Please see the <u>ratings section</u> at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Contacts

Alastair Sullivan +44.20.7772.1955 AVP-Analyst

alastair.sullivan@moodys.com

Matthew Brown +44.20.7772.1043

Associate Analyst

matthew.brown@moodys.com

Neil Griffiths- +44.20.7772.5543

Lambeth

Associate Managing Director neil.griffiths-lambeth@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

Yorkshire Water Services Limited

Update following FY18 results and corporate restructure

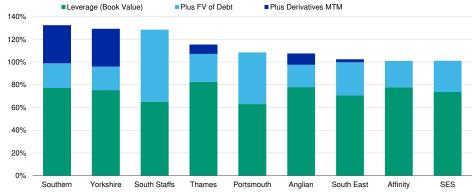
Summary

The credit quality of <u>Yorkshire Water Services Limited</u> (Yorkshire Water, corporate family rating [CFR] of Baa2 negative) is supported by (1) its low business risk profile as a monopoly provider of essential water and sewerage services; and (2) the relatively stable cash flow generated under a well-established and transparent regulatory regime. The company's credit quality is constrained by the overall gearing level, the risk embedded within the company's derivatives portfolio and its leverage on a fair value basis.

Yorkshire Water's net debt was around 76% of its regulatory capital value (RCV) as of 31 March 2018. Following the company's reinvestment of £260 million of outperformance and steps to reduce interest costs, we expect gearing to remain in the mid- to high-70s in percentage terms into the next regulatory period, above the sector average. In addition to its outright borrowings, Yorkshire Water holds a portfolio of inflation-linked derivatives with a notional amount of around £1.3 billion, which had a negative mark-to-market (MTM) value of just under £2.1 billion, equivalent to around 33% of the RCV, as at March 2018, a reduction from the previous years.

Exhibit 1 Yorkshire Water exhibits significant MTM losses on its derivatives portfolio and overall high embedded cost of debt

Water companies exhibiting fair-value leverage in excess of 100% of their March 2018 RCV



Sources: Company data, Moody's Investors Service estimates

The sizeable negative MTM value of derivatives and the high fair value gearing reflect that the company has locked in funding costs significantly above the current market rates over the long term. Yorkshire Water reported a weighted average interest rate of 3.48% in the financial year ended March 2018, a reduction from 4.39% the previous year.

Credit strengths

- » Stable cash flow generated from the provision of monopoly water and wastewater services
- » Well-established, transparent and predictable regulatory regime
- » Debt structural features, including distribution lock-up covenants, dedicated liquidity, intercreditor and security arrangements, which reduce event risk and enhance resilience in downside scenarios

Credit challenges

- » Financing structure allows very high gearing of up to 85% net debt/RCV.
- » Expensive, long-dated debt and derivatives portfolio increases risk in the context of lower returns from 2020, but balance-sheet strengthening measures expected to provide some mitigation.
- » Changes to regulation, aimed at increasing competition in certain parts of the value chain, may reduce cash flow stability and create financial pressure for the sector.

Rating outlook

The negative outlook reflects Yorkshire Water's exposure to a likely significant cut in allowed returns from 2020, while the company's own cost of debt remains high. While management's financial strategy towards strengthening the balance sheet in the run-up to the next price review (PR19) has created some headroom, the company will have to continue to work on additional measures or outperformance opportunities, or both, to accommodate the material cut in allowed returns, indicated by the Water Services Regulation Authority (Ofwat) in its final methodology publication. However, the current financial policy shows a commitment towards maintaining credit quality.

Factors that could lead to an upgrade

Given the negative outlook, there is currently limited upgrade potential. The outlook could be changed to stable if we conclude that (1) financial metrics for the period from 2020-25 are likely to meet the existing guidance for the current rating, in particular, an adjusted interest coverage ratio (AICR) of at least 1.3x and leverage not exceeding 80% (net debt/RCV); and (2) the risk exposure of Yorkshire Water's capital structure remains manageable and does not impair the company's financial flexibility in comparison with industry peers, taking into account any additional measures management or shareholders may be willing to implement and timing of the same. Any stabilisation of the rating will also take into consideration the continuing incentives for shareholders to provide additional support, given the impact of the low-yield environment on the debt fair value and derivative valuations.

Factors that could lead to a downgrade

The rating could be downgraded if, taking into account such measures as management and shareholders may implement, it appears that Yorkshire Water will likely have insufficient financial flexibility to accommodate the expected reduction in allowed returns and more challenging efficiency targets at PR19. Furthermore, downward pressure could result from (1) an unexpected, severe deterioration in operating performance that results in the company remaining persistently in breach of its distribution lock-up triggers; (2) a material change in the regulatory framework for the UK water sector, leading to a significant increase in Yorkshire Water's business risk; or (3) unforeseen funding difficulties, or all.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2
Yorkshire Water Services Limited
Gradual de-leveraging in recent years, but expected to increase

	Mar-14	Mar-15	Mar-16	Mar-17	Mar-18	2019-proj.	2020-proj.
Adjusted Interest Coverage Ratio	1.4x	1.5x	1.2x	1.4x	1.5x	1.6x	1.6x
Net Debt / Regulated Asset Base	80.8%	81.9%	77.6%	76.0%	75.6%	76.0%	77.0%
FFO / Net Debt	8.1%	8.9%	7.6%	7.5%	8.0%	7.1%	6.2%
RCF / Net Debt	6.1%	8.4%	7.1%	6.0%	7.4%	6.4%	5.6%

All ratios are based on 'Adjusted' financial data and incorporate <u>Moody's Global Standard Adjustments for Non-Financial Corporations</u>. For definitions of Moody's most common ratio terms, please see the accompanying <u>User's Guide</u>.

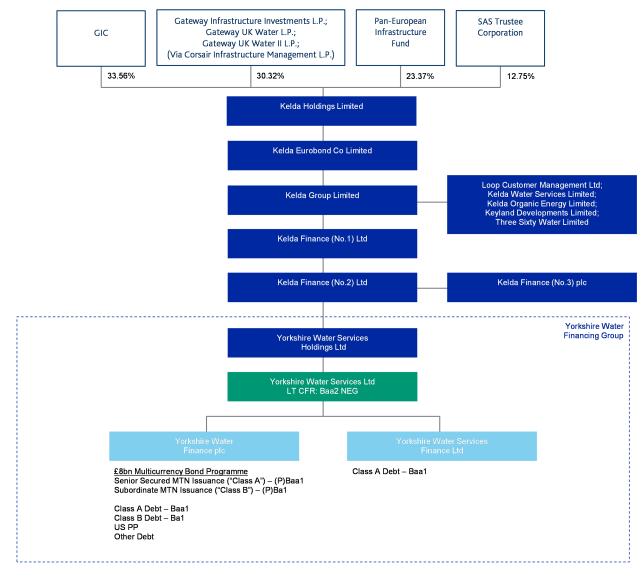
Source: Moody's Financial Metrics TM

Profile

Yorkshire Water Services Limited (Yorkshire Water) is the fifth largest of the 10 water and sewerage companies in England and Wales by both RCV and the number of customers served. Yorkshire Water provides drinking water to around 5 million people and around 130,000 local businesses over an area of around 14,700 square kilometres encompassing the former county of Yorkshire and part of North Derbyshire in Northern England.

Kelda Group Limited, the parent company of the Yorkshire Water group, is ultimately owned by GIC Special Investments Pte Limited, the private equity investment arm of the Government of Singapore; Corsair Infrastructure Management, as a custodian for a number of infrastructure investment funds; Deutsche Asset Management's infrastructure investment arm; and SAS Trustee Corporation, the trustee of certain New South Wales public-sector superannuation schemes.

Exhibit 3
Simplified organisational structure



Sources: Company data, Moody's Investors Service

Detailed credit considerations

Transparent regulatory regime, with certainty around cash flow through March 2020

The UK water sector benefits from a transparent, stable and predictable regulatory regime, which is based on clearly defined risk allocation principles and their consistent application in setting water tariffs by an independent regulatory body, Ofwat.

Ofwat published the price determination for the sector in December 2014. Along with its peers, Yorkshire Water's final determination includes (1) an allowed return of 3.6% per annum on the wholesale RCV; (2) a net retail margin of 1% for household retail activities; and (3) a net retail margin of 2.5% for non-household (NHH) retail activities. The overall allowed return, which for a notional company is around 3.74% per annum (vanilla, real), is significantly lower than the 5.1% per annum return allowed in the previous period, reflecting a low interest rate environment. However, Yorkshire Water managed to secure additional revenue to allow smoothing of customer bills over two periods, which will provide additional liquidity and partly offset the reduction in allowed return.

For the five-year period that commenced on 1 April 2015 (AMP6), Ofwat changed the way it sets tariffs for water companies in England and Wales. Tariffs were set to reflect (1) separate price controls for retail and wholesale activities; (2) increased customer involvement in companies' business planning and focus on long-term outcomes rather than short-term outputs; (3) more tailored outcome delivery incentives; and (4) a total expenditure cost assessment. The introduction of separate price controls for retail and wholesale services is in part to facilitate retail competition for NHH customers.

The market for NHH customers was opened in April 2017. While Yorkshire Water continues to serve NHH customers within its service area, the company does not accept new NHH customers outside of Yorkshire. We expect Yorkshire Water to dispose of this business before the end of the current price control.

We view the changes introduced for AMP6 as largely neutral for the UK water sector as a whole.

PR19 increases risks to the sector

PR19, the process that will set prices for the five-year period from April 2020, is now underway. Significant changes include separate price controls for bio-resources (comprising the treatment and disposal of sewage sludge) and water resource management, and a change in indexing revenue and regulated assets, moving to a measure of consumer prices index (CPIH) from retail prices index (RPI) inflation.

In its final methodology consultation for the 2019 price review, published in December 2017, Ofwat also indicated a significant cut in allowed returns under an assumption that the current low interest rate environment continues to persist, although partially offset by the switch in indexation measures. Furthermore, efficiency challenges will increase, particularly for average performers, which could further strain companies' cash flows.

Exhibit 4
Evolution of the allowed regulatory return
All figures expressed in real terms

	PR19 Final Methodology (Nominal)	PR19 Final Methodology (Real, CPIH = 2%)	PR19 Final Methodology (Real, RPI = 3%)	PR14: 2015-2020 (Real, RPI =3%)	PR14: 2015-2020 (Real, RPI =2.8%)
Lang town defletor		2.00%	3.00%	3.00%	2.80%
Long-term deflator		2.00%	3.00%	3.00%	2.80%
Cost of embedded debt	4.64%	2.58%	1.59%	2.45%	2.65%
Cost of new debt	3.40%	1.37%	0.38%	1.80%	2.00%
Ratio of embedded to total debt	70%	70%	70%	75%	75%
Issuance and liquidity costs	0.10%	0.10%	0.10%	0.10%	0.10%
Overall cost of debt	4.36%	2.32%	1.33%	2.39%	2.59%
Risk-free rate	2.10%	0.10%	-0.88%	1.05%	1.25%
Equity risk premium	6.50%	6.37%	6.31%	5.49%	5.50%
Total market return	8.60%	6.47%	5.44%	6.54%	6.75%
Equity beta	0.77	0.77	0.77	0.8	0.8
Overall cost of equity	7.13%	5.03%	4.01%	5.44%	5.65%
Notional Gearing	60%	60%	60%	62.50%	62.50%
Appointee WACC (vanilla)	5.47%	3.40%	2.40%	3.53%	3.74%
Retail margin	0.10%	0.10%	0.10%	0.14%	0.14%
Wholesale WACC (vanilla)	5.37%	3.30%	2.30%	3.39%	3.60%

Illustrates the proposed mid-point for a nominal return, derived from its various components and deflated into a real return, using a 2% and 3% deflator for the Consumer Prices Index, adjusted for housing costs (CPIH) and Retail Prices Index (RPI), respectively. The latter is also compared with the current period's RPI-linked real return. The wholesale WACC is the appointee WACC minus the retail margin.

Sources: Ofwat, Moody's Investors Service

We continue to view the overall developments as credit negative for the sector, with increased risk of cash flow volatility likely from 2020.

Moreover, on 26 April 2018, Ofwat published a consultation on proposals for companies' business plan submissions for PR19, which concluded in July 2018. Ofwat's final decision requires companies to share perceived outperformance from gearing that is above a 70% threshold and clearly justify their dividends in the context of operational performance. While sharing of perceived outperformance would not occur during AMP7, we estimate that the impact of the proposed mechanism would be equivalent to a reduction of around 0.1x on Yorkshire Water's AICR. These new measures primarily penalise highly leveraged firms, curbing their earnings in an already tough regulatory environment.

Introduction of the high gearing penalty evidenced, in our view, increasing regulatory risk for water companies in England and Wales and we subsequently revised the score for the stability and predictability of the regulatory regime to Aa from Aaa under our methodology (please see Regulated Water Utilities - UK: Regulator's proposals undermine the stability and predictability of the regime, May 2018). In this context of modestly increased business risk, we also tightened our ratio guidance for companies.

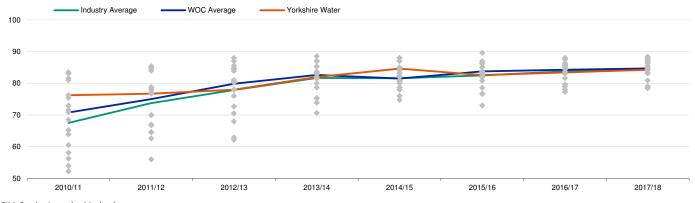
In September 2018, the company submitted its business plan for AMP7, covering the five years between 2020 and 2025. Yorkshire Water has proposed to reduce leakage by 40% and internal sewer flooding by 70% from the current levels by 2025. The company proposed a £14 bill increase, or an £8 bill decrease excluding new environmental commitments under the government's WINEP programme.

In January 2019, Ofwat announced that Yorkshire Water's plan, alongside the majority of the industry, had been slow-tracked with Ofwat assessing that the totex in the company's plan exceeded its own view of efficient costs by 15% (see Ofwat's initial assessment credit positive for three companies, challenges others). We note that this difference may be due to both scope (individual projects being disallowed) or actual unit cost efficiency. The company will need to submit a revised plan on 1 April 2019.

Good operational performance track record supports credit quality

Yorkshire Water has historically been one of the most efficient performers in the sector. The company generally performed well under Ofwat's key performance indicators over the 2010-15 regulatory period. Performance continued to be strong, with 22 of its 26 performance commitments delivered during the 2018 financial year. During the year, the company accrued £12.7 million in net rewards.

Exhibit 5
Yorkshire Water's SIM performance is in line with the sector average

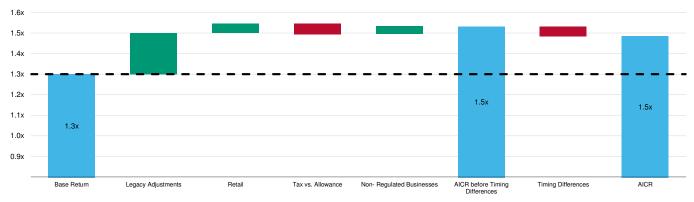


SIM: Service Incentive Mechanism Sources: Ofwat, companies' reports, Moody's Investors Service

For the four performance commitments that were below target, Yorkshire Water only accrued a penalty for the number of contacts because of drinking water quality. While the company reduced the annual number by 1,000 calls to 8,100, it still remained above the target of 6,108 calls annually.

Yorkshire Water's historical performance has led to positive legacy adjustments in the current price control period, which helps support the company's current AICR of 1.5x.

Exhibit 6
Interest coverage has improved in recent years
Our AICR for the financial year ended 31 March 2018



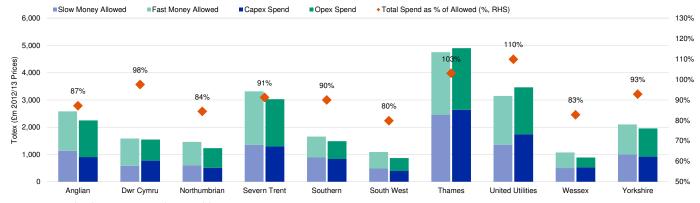
Source: Moody's Investors Service

Capital spending programme and real RCV growth will require additional funding

For AMP6, Yorkshire Water has been allowed total expenditure (totex), which includes opex and capex, of around £3.5 billion (in 2012/13 prices) for the wholesale part of the business. RCV will grow by around 9% in real terms over the period. Given the ongoing investment requirements, Yorkshire Water will have to maintain good access to capital markets, with net funding requirements (including refinancing needs) expected to be around £1.5 billion over the five-year regulatory period.

After material underspends in the first two years of the price control, Yorkshire Water spent 5% more than the allowance in the third year. We expect investments to remain high for the remainder of the price control.

Exhibit 7
Following a slow start to the investment programme, overall expenditure has moved closer to allowances following year three



Sources: Companies' performance reports, Ofwat, Moody's Investors Service

High-cost and long-dated debt and derivatives portfolio poses additional risks in the event of lower returns from 2020

Yorkshire Water's credit quality is constrained by the relatively highly leveraged capital structure adopted by the company. The terms and conditions of its bond programme allow Yorkshire Water to increase its indebtedness (on the basis of net debt/RCV) up to a maximum of 85% before distribution lock-ups come into effect. Failure to maintain adjusted interest cover (deducting regulatory depreciation and similar capital charges from operating cash flow in the numerator) of at least 1.2x would also trigger the dividend lock-up mechanism (note that our calculation of both ratios may differ slightly from the definition of the financial covenants in the financing documents because of our specific adjustments).

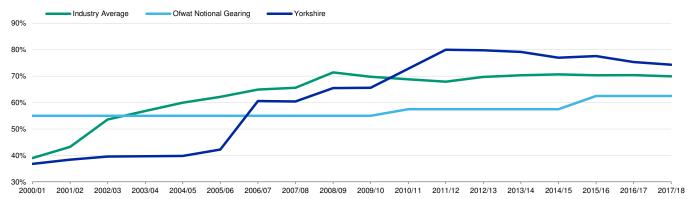
Furthermore, Yorkshire Water's credit quality suffers because of a relatively high-cost and long-dated debt profile, exacerbated by a portfolio of around £1.3 billion of inflation-linked swaps, with a negative MTM value of around £2.1 billion as of March 2018.

A significant reduction in allowed returns for the UK water sector from 2020 poses particular risks for companies, including Yorkshire Water, with more expensive and longer-term debt compared with likely regulatory assumptions. Yorkshire Water reported rates of 4.45% and 4.10% for index-linked and nominal fixed-rate debt, respectively, as of March 2018.

Given the continuing low-yield environment, a cut in allowed returns is to be expected and the regulator has guided to a reduction to 2.3% (real, assuming RPI, inflation) from the current 3.6% for the regulated water and wastewater wholesale activities. The regulator's proposal to link revenue and asset inflation to a measure of the CPIH will increase the overall allowed return, although at the expense of future growth in the RCV. Nevertheless, the allowed cost of capital will still fall by around 0.8%, assuming a 100-basis point wedge between RPI and CPIH.

We believe that Yorkshire Water's exposure to a persistently low interest rate environment has reduced in light of the measures that management and shareholders had taken in 2017 and will continue to work on through the current regulatory period. The de-gearing through the repayment of an intercompany loan by an intermediate holding company in the wider group, as well as the ongoing reduction in distributions to external shareholders, will provide additional financial flexibility within the capital structure. Yorkshire Water's net debt was around 76% of its RCV as of 31 March 2018.

Exhibit 8
Yorkshire Water's gearing is moving closer to the sector average



Gearing ratios are as reported by operating companies to Ofwat and do not reflect Moody's standard adjustments. Sources: Companies' performance reports, Ofwat, Moody's Investors Service

Moreover, we expect the re-couponing and restructuring exercises in relation to the company's derivatives portfolio to reduce the average interest rates. This will result in a decline in cash interest payments as the company enters the next price review in 2019 and has provided some headroom, but the company will have to continue to work on additional measures or outperformance opportunities, or both, to accommodate the material reduction in allowed returns for the UK water sector from 2020.

We further note that the low yield environment may have eroded equity buffers. Taking into account the fair value of existing borrowings and derivatives, Yorkshire Water had gearing (Moody's-calculated) of around 130% as of March 2018. In addition, while Yorkshire Water has ready access to the capital markets, lenders may in future be less supportive of companies with high embedded debt costs and potentially limited equity value. However, Yorkshire Water's operational performance remains well in line with the regulatory assumptions, which may provide a key incentive for ongoing investor support.

Liquidity analysis

Yorkshire Water exhibits a solid liquidity profile, with its stable and predictable cash flow generated by its regulated activity, cash balances of around £23 million as of 30 September 2018 (excluding restricted cash for swap collateral purposes) and access to £560 million committed bank facilities to cover capex and working capital needs, available until October 2023 with a one-year extension option, of which £155 million was drawn as of 30 September 2018.

In addition, under its financing structure, Yorkshire Water has access to a £189 million debt service reserve liquidity facility and a £90 million operation and maintenance liquidity facility. Both facilities are renewed annually and sized to cover projected needs over the next 12 months.

Structural considerations

The Baa2 CFR is assigned to Yorkshire Water as if it had a single class of debt and were a single consolidated legal entity, and reflects our opinion on the expected loss associated with the financial obligations within the Yorkshire Water group. The CFR consolidates the legal and financial obligations of Yorkshire Water, its financing subsidiaries Yorkshire Water Finance plc and Yorkshire Water Services Finance Limited, and the intermediate holding company (Yorkshire Water Services Holdings Limited) within the ring-fenced group. The rating also factors in the credit enhancements of the financing structure.

Debt structural features provide rating uplift for additional creditor protection

Yorkshire Water's CFR also takes into account the covenant and security package agreed by the company, which is designed to insulate the company's creditworthiness from that of its ultimate shareholders and improve creditors' protection in a default scenario. The overall covenant and security package is similar to that of comparable highly leveraged financing transactions, and results in a level of rating uplift incorporated in the Baa2 CFR.

Additional event risk protection provided by the bond covenant and security package includes, inter alia, restrictions on acquisitions and disposals (subject to limited defined exceptions), a dividend lock-up coming into effect if gearing increases above 85% of RCV and limitation on non-core activities. In addition, we consider creditor step-in rights if certain trigger events occur.

In 2015, the highly leveraged UK water companies, including Yorkshire Water, introduced a new supplementary interest cover covenant, designed to reflect regulatory changes in the revenue building block approach for tariff-setting purposes. The definition of Yorkshire Water's supplementary covenant is slightly different from that of its highly leveraged peers. Whereas Anglian Water's or Thames Water's supplementary covenant replaces the previous regulatory capital charges (infrastructure renewals charge and current cost depreciation) with the new RCV depreciation under Ofwat's totex approach, Yorkshire Water also deducts the funded portion of infrastructure renewal expenditure not included in opex in its statutory financial statements, as well as a "fast/slow adjustment" that would reverse excess revenue allowances compared with expected cost assumptions at the final determination. We believe that Yorkshire Water's supplementary covenant most closely resembles the creditor protection that was intended with the original interest cover covenant. As has been the case in the past, our calculation of the AICR will likely differ from the covenant definition, subject to additional disclosure provided in regulatory accounts and investor reports. Overall, we expect Yorkshire Water to continue to exhibit an AICR, based on our calculation, in line with the minimum guidance for its current ratings.

Recovery prospects in a default scenario can be improved by (1) a first-ranking fixed charge over the shares in the company, plus first-ranking fixed and floating charges over all the assets, rights and undertakings of Yorkshire Water; and (2) the agreement by financial creditors to give up their individual rights to petition for insolvency proceedings. We recognise that the benefit of the security provided to bondholders is limited because of the regulated and essential nature of the services provided by Yorkshire Water as governed by its licence and the Water Industry Act 1991.

We also rate the bonds issued by Yorkshire Water's finance subsidiary under an £8.0 billion multicurrency bond programme (the programme), guaranteed by Yorkshire Water. The bonds are issued either as part of a senior tranche (Class A debt) or a junior tranche (Class B debt), and are currently rated Baa1 or Ba1, respectively.

The Baa1 rating of the Class A bonds issued under the programme reflects the strength of the debt protection measures for this class of bonds and other pari passu indebtedness (together, the Class A debt), the senior position in the cash waterfall and post any enforcement of security. The rating also, however, factors in the subordinated Class B debt (Class B bonds and other pari passu debt), which, while it is contractually subordinated, serves to reduce the operator's financial flexibility. A downgrade or default of the Class B debt could have an impact on the viability of the company's funding model as a whole because the inability to raise additional Class B debt in the future could undermine the capital structure and affect the credit quality of the senior debt.

The Ba1 rating of the Class B bonds reflects the same default probability as factored into the Baa2 CFR, as well as our expectation of a heightened loss severity for the Class B debt following any default, given its subordinated position.

Rating methodology and scorecard factors

Yorkshire Water's Baa2 CFR reflects our rating methodology for <u>Regulated Water Utilities</u>, published in June 2018. The methodology grid results in an indicative rating of Baa1. The current Baa2 rating takes into account Yorkshire Water's risk exposure to future low returns, which remains higher than that for most of its peers.

Exhibit 9
Rating factors
Yorkshire Water Services Limited

Regulated Water Utilities Industry Grid [1][2]	Current FY 31/03/2018		
Factor 1 : Business Profile(50%)	Measure	Score	
a) Stability and Predictability of Regulatory Environment	Aa	Aa	
b) Asset Ownership Model	Aa	Aa	
c) Cost and Investment Recovery (Sufficiency & Timeliness)	А	Α	
d) Revenue Risk	A	Α	
e) Scale and Complexity of Capital Programme & Asset Condition Risk	A	Α	
Factor 2 : Financial Policy (10%)			
a) Financial Policy	В	В	
Factor 3 : Leverage and Coverage (40%)			
a) Adjusted Interest Coverage Ratio (3 Year Avg)	1.4x	Ва	
b) Net Debt / Regulated Asset Base (3 Year Avg)	76.4%	Ва	
c) FFO / Net Debt (3 Year Avg)	7.7%	Ва	
d) RCF / Net Debt (3 Year Avg)	6.8%	Baa	
Rating:	·	-	
Indicated Rating from Grid Factors 1-3	•	Baa3	
Rating Lift	1.5	1.5	
a) Indicated Rating from Grid		Baa2	
b) Actual Rating Assigned			

Moody's 12-18 Month Forward
View
As of Feb 2019 [3]

As of Feb 2019 [3]			
Measure	Score		
Aa	Aa		
Aa	Aa		
Α	Α		
Α	Α		
A	Α		
В	В		
1.4x - 1.6x	Baa		
75% - 77%	Ва		
6% - 8%	Ва		
5% - 7%	Baa		
	Baa3		
1.5	1.5		
	Baa1		
	Baa2		

⁽¹⁾ All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. (2) At at 31/03/2018. (3) This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate any significant acquisitions or divestitures.

Source: Moody's Financial MetricsTM

Ratings

Exhibit 10

Category	Moody's Rating
YORKSHIRE WATER SERVICES LIMITED	
Outlook	Negative
Corporate Family Rating	Baa2
YORKSHIRE WATER FINANCE PLC	
Outlook	Negative
Bkd Senior Secured	Baa1
Bkd Subordinate -Dom Curr	Ba1
YORKSHIRE WATER SERVICES FINANCE LIMITED	
Outlook	Negative
Bkd Senior Secured -Dom Curr	Baa1
Source: Moody's Investors Service	

Appendix

Exhibit 11
Peer comparison
Yorkshire Water Services Limited

	Ser	kshire Water vices Limited a2 Negative		Anglian Water Services Ltd Baa1 Negative			Southern Water Services Limited Baa2 Negative		
in GBP millions	FYE Mar-16	FYE Mar-17	FYE Mar-18	FYE Mar-16	FYE Mar-17	FYE Mar-18	FYE Mar-16	FYE Mar-17	FYE Mar-18
Revenue	976	1,003	1,027	1,185	1,227	1,249	804	810	830
EBITDA	687	100	621	552	561	801	476	133	618
Regulated Asset Base	5,844	6,217	6,457	7,099	7,522	7,847	4,484	4,710	4,948
Total Debt	4,562	4,930	4,910	6,174	6,319	6,400	3,703	4,067	4,160
Cash & Cash Equiv.	25	206	28	419	430	287	19	294	276
Adjusted Interest Coverage Ratio	1.2x	1.4x	1.5x	1.4x	1.4x	1.4x	1.3x	1.2x	1.0x
Net Debt / RAB	77.6%	76.0%	75.6%	81.1%	78.3%	77.9%	82.2%	80.1%	78.5%
FFO / Net Debt	7.6%	7.5%	8.0%	6.7%	7.3%	7.1%	9.8%	8.9%	7.6%
RCF / Net Debt	7.1%	6.0%	7.4%	4.0%	5.1%	5.7%	7.3%	6.9%	5.4%

All figures are calculated using Moody's estimates and standard adjustments. The above table shows Moody's definition of EBITDA, which may not necessarily reconcile to EBITDA values published by the rated entities.

Source: Moody's Financial Metrics™

Exhibit 12 Moody's-adjusted net debt breakdown Yorkshire Water Services Limited

in GBP millions	FYE Mar-15	FYE Mar-16	FYE Mar-17	FYE Mar-18
As Reported Net Debt	4,556.4	4,560.7	4,782.6	4,870.7
Pensions	87.5	0.0	8.7	0.0
Operating Leases	12.1	11.1	12.3	10.8
Non-Standard Adjustments	-2.1	-34.9	-79.4	0.6
Moody's Adjusted Net Debt	4,653.9	4,536.9	4,724.2	4,882.1

Non-standard adjustments relate to the removal of fair-value adjustments from reported numbers, partially offset by the inclusion of accretion on index-linked bonds. Source: Moody's Financial MetricsTM

Exhibit 13

Moody's-adjusted funds from operations breakdown
Yorkshire Water Services Limited

in GBP millions	FYE Mar-15	FYE Mar-16	FYE Mar-17	FYE Mar-18
As Reported FFO	477.3	370.1	417.7	429.6
Operating Leases	2.8	3.3	2.9	2.5
Capitalised Interest	-30.7	-13.0	-11.7	-14.3
Align FFO	-84.2	-22.5	-53.9	-108.9
Unusual Items	-62.4	-62.9	-60.9	-51.1
Non-Standard Adjustments	111.9	68.3	59.9	130.6
Moody's Adjusted FFO	414.7	343.3	354.0	388.4

Unusual items relate to the removal of interest received from intercompany loans. Non-standard adjustments relate to the inclusion of index-linked bonds. Source: Moody's Financial Metrics $^{\text{TM}}$

Exhibit 14 Select historical Moody's-adjusted financial data Yorkshire Water Services Limited

	FYE	FYE	FYE	FYE
in GBP millions	Mar-15	Mar-16	Mar-17	Mar-18
INCOME STATEMENT				
Revenue	1,007	976	1,003	1,027
EBITDA	303	687	100	621
EBITDA Margin %	30.1%	70.4%	10.0%	60.5%
EBIT	28	409	-179	325
EBIT Margin %	2.7%	42.0%	-17.9%	31.7%
Interest Expense	290	248	287	283
BALANCE SHEET				
Cash & Cash Equivalents	25	25	206	28
Total Assets	8,480	8,462	9,137	9,001
Total Liabilities	7,499	7,324	8,161	7,865
CASH FLOW				
Funds From Operations (FFO)	415	343	354	388
FFO / Net Debt	8.9%	7.6%	7.5%	8.0%
Capital Expenditures	280	271	368	444
Dividends	23	20	70	29
Retained Cash Flow (RCF)	392	323	284	360
RCF / Net Debt	8.4%	7.1%	6.0%	7.4%
Free Cash Flow (FCF)	140	61	-117	-51
FCF / Net Debt	3.0%	1.3%	-2.5%	-1.1%
INTEREST COVERAGE				
EBITDA/Interest Expense (exc. Indexation)	1.0x	2.8x	0.3x	2.2x
Adjusted Interest Coverage Ratio	1.5x	1.2x	1.4x	1.5x
LEVERAGE				
Debt / EBITDA	15.4x	6.6x	49.2x	7.9x
Net Debt / EBITDA	15.4x	6.6x	47.1x	7.9x
Debt / Book Capitalization	76.9%	74.8%	78.9%	76.3%
Regulated Asset Base	5,686	5,844	6,217	6,457
Net Debt / Regulated Asset Base	81.9%	77.6%	76.0%	75.6%

All figures are calculated using Moody's estimates and standard adjustments. The above table shows Moody's definition of EBITDA, which may not necessarily reconcile to EBITDA values published by the rated entity.

Source: Moody's Financial Metrics™

© 2019 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER 1144484

