

CREDIT OPINION

22 December 2022

Update

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RATINGS

Thames Water Utilities Ltd.

Domicile	United Kingdom
Long Term Rating	Baa2
Type	LT Corporate Family Ratings - Dom Curr
Outlook	Stable

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

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Thames Water Utilities Ltd.

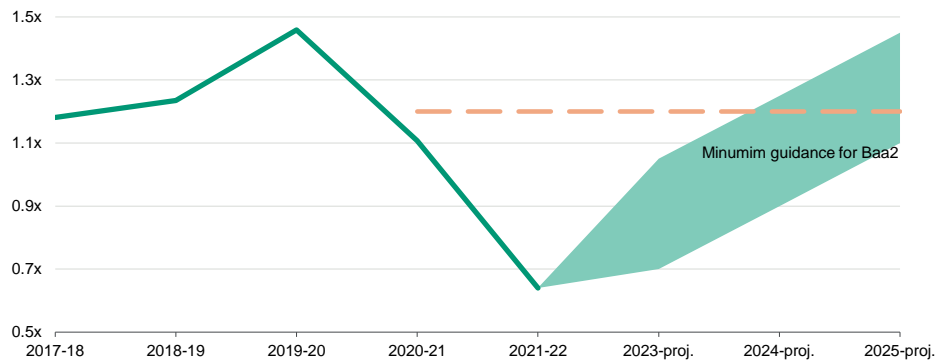
Regular update reflecting HY results and performance YTD 2022/23

Summary

The credit quality of Thames Water Utilities Ltd. (Thames Water, CFR Baa2 stable) is supported by (1) its low business risk profile as monopoly provider of essential water and sewerage services; (2) relatively stable and predictable cash flow generation under a well-established and transparent regulatory framework; and (3) the creditor protections incorporated within the company's financing structure.

The company benefits from a relatively low cash interest cost on its debt. However, Moody's Adjusted Interest Coverage Ratio (AICR) considers accretion on inflation-linked swaps with frequent pay-down requirements as interest expense and current high inflation has weakened the metric. Credit quality is further constrained by relatively high gearing, with net debt to regulatory capital value (RCV) around 80-85%, and a challenging determination for the five-year regulatory period that started in April 2020 (AMP7), with increasing risk of performance penalties. However, additional equity contributions of up to £1.5 billion over the remainder of the regulatory period to support increased investments that aim to turn around performance over the medium to long term provide some mitigation against weak near-term credit ratios.

Exhibit 1  
Interest coverage is negatively affected by higher inflation on short-dated derivatives and other cost pressures while revenue growth lags  
Adjusted Interest Coverage Ratio



Moody's forecast is our opinion and does not represent the views of the issuer.  
Source: Moody's Investors Service

## Credit strengths

- » Stable cash flows from the provision of water and wastewater services under a well-established, transparent and predictable regulatory regime
- » Debt structural features, including distribution lock-up covenants, dedicated liquidity, and intercreditor and security arrangements, which provide additional creditor protection for event risk and enhance recovery prospects in an event of default
- » A lower average cost of debt than highly-leveraged peers and smaller risk from derivative contracts

## Credit challenges

- » Track record of weak operating performance
- » Relatively high financial leverage, which constrains financial flexibility
- » Increased cash flow pressures from lower allowed returns and more demanding efficiency and performance targets in AMP7
- » Further cash flow volatility due to macroeconomic pressures, including rising inflation and interest rates, and significant increase in certain input costs, e.g. around power and materials
- » 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 rating outlook is stable. Weak operational performance as well as near-term macro-economic pressures are weighing on interest cover but strong equity commitment from shareholders underpins a long-term turn-around programme and the company will benefit from regulatory true-up adjustments on the cost of new debt, certain inflation elements as well as total costs against allowances.

## Factors that could lead to an upgrade

An upgrade is not currently anticipated and would be contingent on a significant improvement in operational performance with an AICR sustainably above 1.4x and net debt/RCV below 80%.

## Factors that could lead to a downgrade

The ratings could be downgraded if (1) Thames Water failed to maintain progress in improving operational performance and addressing past issues; (2) the anticipated equity increase to support additional investment was not forthcoming as planned; or (3) there was a weakening of the financial profile such that AICR was expected to stay persistently below 1.2x or net debt/RCV appeared likely to rise above 85%.

In addition, downward rating pressure could result from (1) adoption of more aggressive financial policies, (2) a significant increase in business risk for the sector as a result of legal and/or regulatory changes leading to a reduction in the stability and predictability of regulatory earnings, which in each case are not offset by other credit-strengthening measures or (3) unforeseen funding difficulties.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody's.com> for the most updated credit rating action information and rating history.

## Key indicators

Exhibit 2

### Thames Water's key metrics remains weak amid inflationary pressures

	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23 E
Adjusted Interest Coverage Ratio	1.2x	1.2x	1.5x	1.1x	0.6x	0.8x-1.1x
Net Debt / Regulated Asset Base	82.4%	83.8%	86.3%	83.7%	82.7%	80%-83%
FFO / Net Debt	5.2%	5.1%	6.0%	6.0%	4.4%	4%-6%
RCF / Net Debt	4.7%	4.6%	5.6%	5.7%	4.1%	4%-6%

All ratios are based on 'Adjusted' financial data and incorporate [Moody's Global Standard Adjustments for Non-Financial Corporations](#). We note that the company includes income from grants and contributions to support new network connections within revenues and operating cash flow. From FYE March 2021, we remove this income from FFO and offset against capex; otherwise the company's AICR would be up to 0.2x higher. Moody's projections are Moody's opinion and do not represent the views of the issuer. For definitions of Moody's most common ratio terms, please see the accompanying [User's Guide](#).

Source: *Moody's Financial Metrics*™

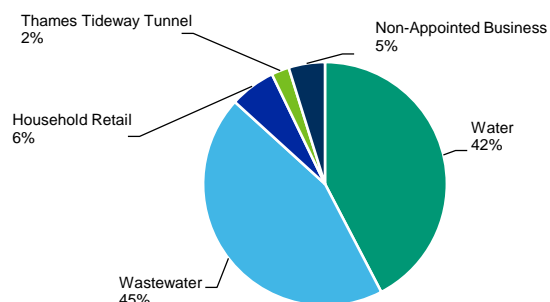
## Profile

Thames Water Utilities Ltd (Thames Water) is the largest of the 10 water and sewerage companies in England and Wales by both RCV and number of customers served. The company provides drinking water to around nine million customers and sewerage services to around 15 million customers in London and the Thames Valley. It is the primary operating subsidiary of Thames Water Limited, which is in turn owned by Kemble Water Finance Limited (the financing subsidiary of which is [Thames Water \(Kemble\) Finance PLC](#), senior secured B1 stable). Since May 2017, the largest shareholders of Kemble are the Ontario Municipal Employees Retirement System (31.8%) and the Universities Superannuation Scheme (19.7%).

Exhibit 3

### Thames Water's £2.2 billion revenue is primarily generated from water and wastewater wholesale activities

Revenue split for FY 2021/22



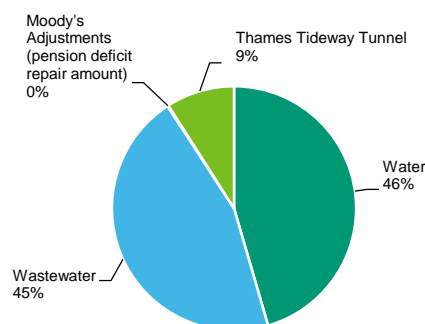
The Tideway segment includes revenue that is collected by Thames Water through customer bills on behalf of [Bazalgette Tunnel Limited](#), the Tideway infrastructure provider. We adjust Thames Water's financial statement to remove the Tideway-related items for the purpose of calculating key credit metrics

Source: *Company reports, Moody's Investors Service*

Exhibit 4

### Thames Water's RCV was £16.6 billion at March 2022

RCV split at March 2022



The RCV associated with Tideway is the element of the tunnel infrastructure investment that is carried out by Thames Water itself, in addition to any investment undertaken by [Bazalgette Tunnel Limited](#), the Tideway infrastructure provider.

Source: *Ofwat, Company reports, Moody's Investors Service*

## Detailed credit considerations

### Transparent regulatory regime, but falling returns pressure companies' financial flexibility

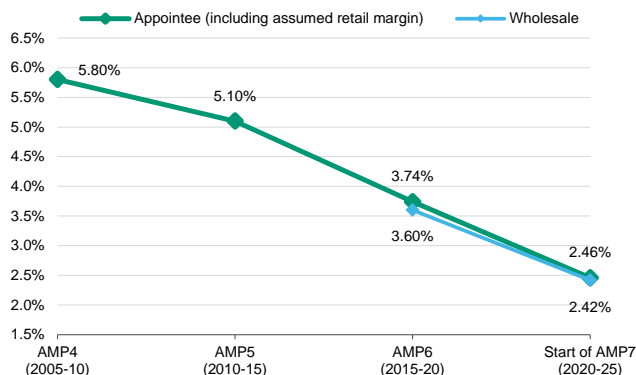
The UK water sector benefits from a transparent, stable and predictable regulatory regime, which is based on clearly defined risk allocation principles and their consistent application in setting water tariffs by an independent regulatory body, the Water Services Regulation Authority (Ofwat).

Ofwat has, to date, reset price limits every five years and published its final determination for the 2020-25 period, known as AMP7, in December 2019.

As previously flagged by the regulator, the determination included a significant cut in allowed cash returns to ca. 2.42% for the wholesale activities at the start of the current period, which incorporates the regulator's decision to only link half of the existing regulatory assets as at March 2020 to the Retail Prices Index (RPI), with the remainder and any new additions linked to the Consumer Prices Index adjusted for housing costs (CPIH). As the share of regulatory assets linked to CPIH grows over time, we estimate that most companies will have an average allowed cash return of around 2.5% over AMP7. For comparison and on a like-for-like RPI-stripped basis, allowed returns will fall by close to 50% to 1.92% (1.96% including retail margin) in AMP7 from 3.6% (3.74% including the retail margin) in AMP6 (April 2015 - March 2020).

Exhibit 5

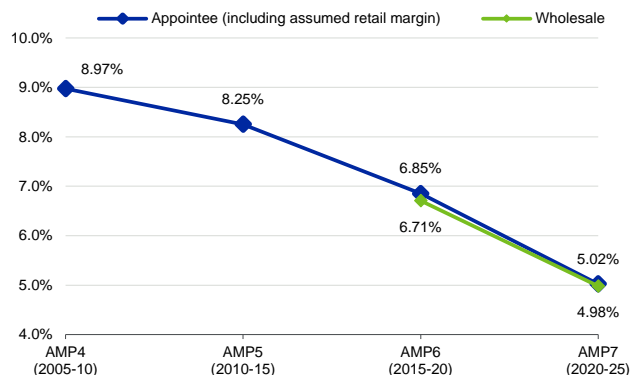
#### Significant cut in allowed returns, despite lower inflation index Real (cash) allowed returns



Since PR14, Ofwat has separated retail activities from the wholesale services.  
Source: Ofwat

Exhibit 6

#### Unprecedented cut in nominal allowed returns Nominal (total) returns including forecast inflation of RCV



Assuming ex ante expectation of 3% RPI inflation and 2% CPIH inflation.  
Source: Ofwat, Moody's Investors Service estimates

The final determination incorporated increasing efficiency challenges for companies, including: (1) totex efficiency, with a frontier shift of 1.1%, set at the upper quartile level as opposed to the sector average level; and (2) an outcome delivery incentives mechanism calibrated so that only the top quartile performers can achieve a reward. Consequently, average as well as below average performers could be negatively affected, putting a further strain on companies' cash flows.

The final determination also confirmed companies' commitment to accept the regulator's proposals under the '[Putting the Sector Back in Balance](#)' consultation, which included (1) a sharing mechanism of perceived financing outperformance from high gearing; and (2) increased transparency around dividend and executive pay policies.<sup>1</sup> Given that Thames Water will maintain gearing above the regulator's maximum threshold of 74% gradually falling to 70% by the end of AMP7, we expect the company to face the associated high gearing penalty as part of the end-of-period true up calculations.

#### Macro-economic conditions increase volatility of key credit metrics

Prolonged high inflation tends to be positive for UK water companies but timing issues can affect cash flow generation and index-linked debt also grows with inflation.

Under the UK model, regulatory assets and revenue will grow with inflation but subject to a lag. For example, customer bills for FY 2022/23 will reflect inflation as at November 2021. This means that many UK water companies already experience an increase in their cost base, particularly on energy, materials and chemicals, but their revenue reflects a much lower level of inflation.

Companies' exposure to current cost pressures varies. Thames Water follows a rolling forward hedging strategy. While it is now mostly hedged for the current financial year's energy needs, it retains unhedged exposure in the final two years of AMP7. Despite its hedging approach, the company saw a 30% increase in power cost year-on-year between FY 2020/21 and FY 2021/22, with a further almost 42% increase in the first half of FY 2022/23 compared with the same period in the prior year. Similarly raw materials and consumables costs (which includes chemicals) increased by almost 44% in the period to September 2023 compared with the first half of FY 2021/22. While customer bills will rise from April 2023 with CPIH inflation as of November 2022, headline inflation will not fully

offset these cost pressures. A true-up for overall total expenditure incurred compared with regulatory allowance for the period will only happen at the next price review in 2024.

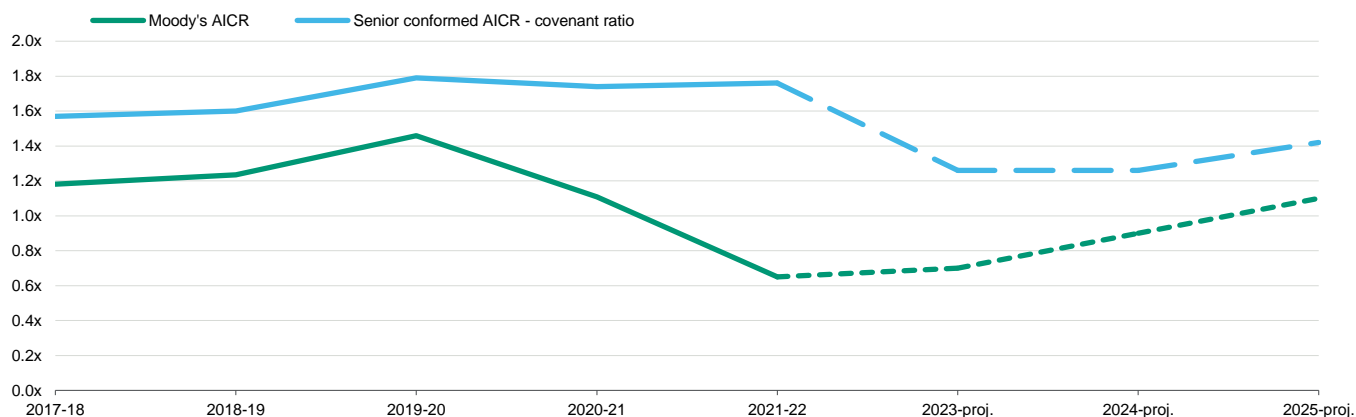
The inflation-linked RCV growth will also only bring modest benefit to Thames Water's gearing because, as at 31 March 2022, between 55-60% of its debt and derivatives liabilities were also inflation-linked. The majority of this inflation-linked liabilities is indexed to RPI and financial liabilities equivalent to roughly 45-50% of RCV will grow with RPI. This is broadly in line with the RCV portion that continues to inflate with RPI over AMP7. However, Thames Water is exposed to the so-called 'wedge' between RPI and CPIH with the differential between the two indices currently much higher than assumed in the regulatory settlement. This means that Thames Water's RPI-linked debt will likely accrete faster than its RPI-linked RCV. While companies will receive a true-up adjustment for the difference between the actual and assumed RPI-CPIH wedge, this will be applied only at the next price review.

A portion of Thames Water's RPI-linked debt is synthetic, created through derivatives. At March 2022, derivatives with a notional amount of £3.6 billion were linked to RPI. In December 2022, the company added a further £1.0 billion of 10-year swaps. Of the £4.6 billion overall notional amount, £694 million of inflation-linked swaps is subject to five-year accretion pay-down and a further £940 million notional is contracted for a short period of five years to 2024.

Accretion on the inflation-linked swaps has increased significantly with higher inflation. This has weakened the company's AICR, because we include accretion under swaps with frequent pay-down requirement or short maturities as interest expense for the purpose of calculating this ratio. From a covenant ratio perspective, however, the company's cash interest cover remains strong, with reported cash interest cost of 2.25% at March 2022, below the sector average of 2.33%.

Exhibit 7

**Thames Water's interest cover covenant exhibits headroom compared with weaker Moody's metric**  
**Moody's projections reflect our forecast and not that of the issuer**



Moody's forecast AICR reflects lower end of range shown in Exhibit 1; Thames Water's covenants AICR forecast as per company's HY results Sep 2022  
 Source: Company reports; Moody's Investors Service

Rising rates will increase interest costs over time. Thames Water's floating rate exposure is very small at below 5%, but the company will continue to raise funding to facilitate its large investment programme and refinance existing debt. Water companies will receive a positive adjustment for rising interest rates at the next price review, because the cost of new debt assumed to be raised within the current period had been linked to the average A/BBB IBoxx indices. However, this may not fully offset actual cost of debt underperformance within the current period.

Ofwat will consider market evidence when resetting the allowed return at the 2024 price review. The regulator's early view indicates an increase in allowed returns in line with rising market rates (see Moody's comment '[Regulated Water Utilities – United Kingdom: PR24 methodology increases risk for weak performers](#)', published on 16 December 2022, for further details). We also expect that, all else being equal, cash returns will increase because of a full switch to CPIH from the RPI-CPIH-blend currently in place. We forecast that a rise in allowed cash returns would likely improve metrics and support credit quality.

### Operational performance remains weak, with challenging AMP7 targets increasing the risk of further penalties

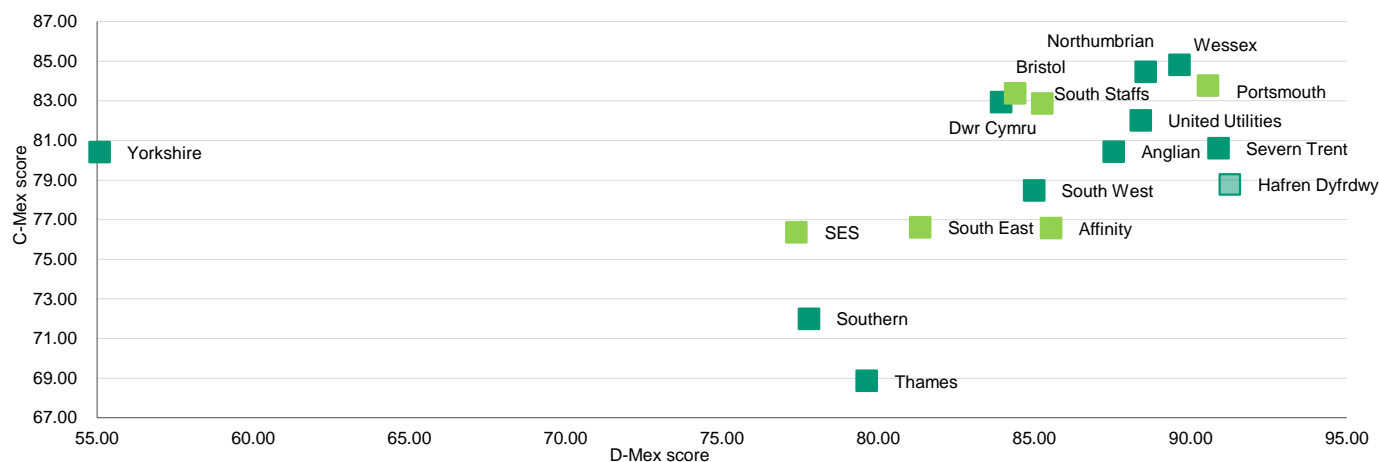
The AMP7 final determination reflected a net revenue reduction for Thames Water of around £67 million (reduced by around £31 million through the so-called blind-year adjustment). This included aggregate penalties of £148 million for operational underperformance during the 2015-20 period under outcome delivery incentives (ODIs), while a further £149 million of ODI penalties resulted in a reduction of the starting RCV (all numbers in 2017/18 prices). Around £130 million (in 2012/13 prices) of underperformance penalties reported in the last financial year of AMP6 relate to a single project, where the company found a simpler and cheaper method to reduce internal sewer flooding incidents than envisaged at the 2014 price review; therefore the penalty is mostly offset by the company not spending the full allowance for this project.<sup>2</sup> The remaining net penalties are primarily associated with the company's performance against leakage and supply interruptions targets as well as the asset health of its water infrastructure in general.

In the first two years of AMP7, Thames Water continued to incur performance penalties, amounting to around £104 million, of which £53 million will have to be returned to customers in 2022/23 and £51 million in 2023/24 (all in 2017/18 prices). This includes cumulative penalties of around £17 million for supply interruptions, £39 million for internal sewer flooding as well as £36 million for weak customer service (all in 2017/18 prices). The leakage target, which has been a key weakness for a number of years, has been met for the period to date.

Exhibit 8

#### Thames Water exhibited some of the weakest customer service among the sector for the first two years of AMP7

FY 2021-22 C-MeX and D-MeX results



Dark green squares are WaSCs (Hafren Dyfrdwy being fully owned by Severn Trent Water) and light green squares are WoCs.

Source: Companies' annual performance reports

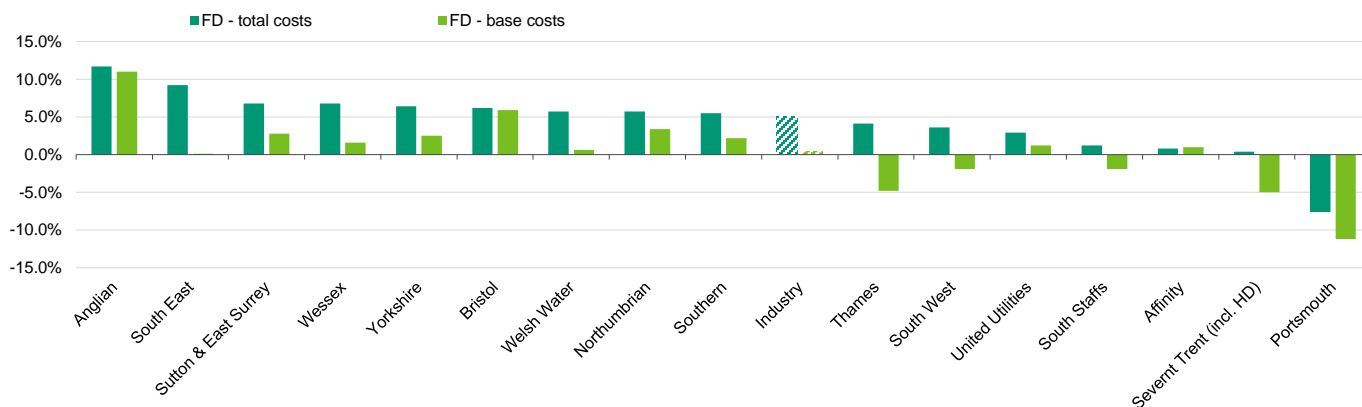
In its annual performance report for FYE March 2022, Thames Water indicates up to £125 million net aggregate penalties over the 2020-25 period, excluding customer service. Subject to final assessment at the 2024 price review, any deferred penalties (currently £6.1 million incurred by Thames Water in the first two years and mostly associated with per capita consumption levels) or penalties incurred in the last two years of the current period will likely be reflected as a legacy adjustment to revenue for the next regulatory period from 1 April 2025.

### Thames Water faces totex efficiency challenge in AMP7

For AMP7, Ofwat's allowance for base operating and maintenance expenditure, excluding enhancement projects and costs associated with the Thames Tideway Tunnel but including retail costs, was £8.5 billion. This was roughly £400 million more than the company requested in its alternative, scaled-back investment plan following draft determinations but £600 million less than proposed in its April 2019 business plan (all amounts in 2017/18 prices).

Exhibit 9

**While Thames Water's efficiency challenge is below the sector average this reflects the company's alternative low-investment plan**  
**Cost efficiency challenge at final determination (FD)**



FD efficiency challenge compares FD allowance against companies' response to draft determination (DD) from August 2019. Comparison of base cost efficiencies may be affected by re-classification from base to enhancement expenditure (and vice versa) between DD and FD.

Source: Ofwat

In June 2022, Thames Water announced a £2 billion increase in its investment programme with an updated business plan including total expenditure of £11.5 billion over AMP7 (in outturn prices). The new plan will be supported by equity injections, with £500 million committed during the current financial year to 31 March 2023 and plans for further £1.0 billion shareholder funding. The sizeable shareholder commitment is credit positive; it demonstrates continued shareholder support for the company and will bolster financial metrics in the face of higher investment.

Despite the additional investments, we expect improvements will still take several years to materialise. Indeed, Thames Water has said that it will continue with its long-term turnaround plan well into the next regulatory period and aims to reflect this in its business plan for the upcoming 2024 price review. As confirmed in its [announcement](#), "shareholders acknowledge that further shareholder support may be required to improve financial resilience".

Under the totex sharing mechanism, only 25% of any overspend will be added to the RCV in 2025. Ofwat decided to apply the lower significant scrutiny cost sharing rate for any underperformance to protect customers. Conversely, 56-68% of any underspend would be subtracted from the RCV or repaid to customers over the 2025-30 period.

### Relatively high leverage constrains credit quality

Thames Water's credit quality is constrained by its relatively high debt burden. While management had committed to reducing leverage at the operating company, we expect that with the growing investment programme, gearing will remain broadly in the 80-85% range over the period. Current high inflation and receipt of the first £500 million equity injection by March 2023 will reduce gearing temporarily for the FYE March 2023, but leverage is expected to rise again as investment progresses.

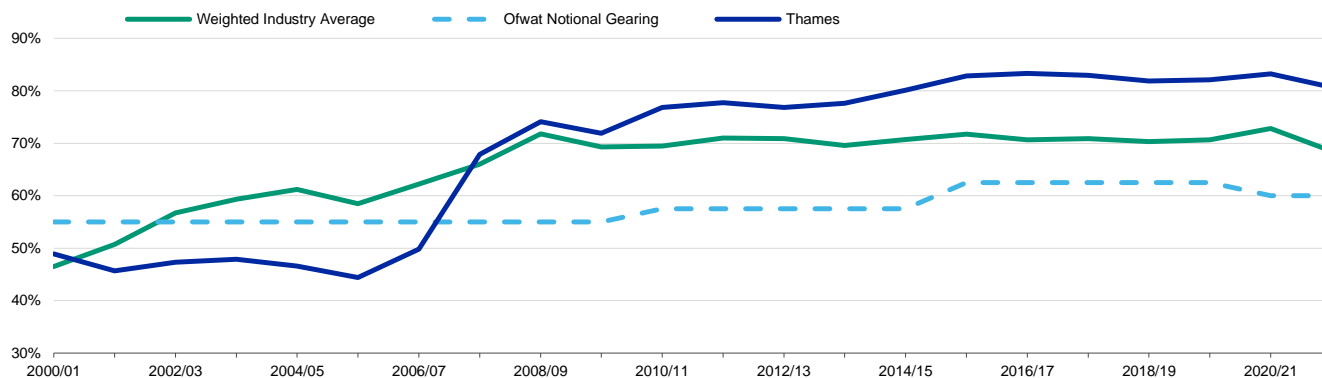
During the period of underperformance and high investment, management has curtailed dividend payments, with no distribution to external shareholder since 2017, and amounts limited to meet holding company debt payments and associated cost. We expect this approach to continue at least until the end of the current regulatory period.



Exhibit 10

**Following the implementation of the highly covenanted financing structure in 2007, Thames Water's leverage increased to above 80% and remains the highest in the sector**

Regulatory gearing ratios as reported by companies to Ofwat



Average gearing as reported by companies to Ofwat, and not reflective of Moody's standard adjustments, e.g. for pension obligations.

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

With the recent rise in interest rates, the fair value of Thames Water's existing borrowings and derivatives has lowered significantly and we estimate that the company's fair value gearing was close to actual book value gearing of ca. 80% of RCV as of September 2022.

## Structural considerations

The Baa2 CFR is assigned to Thames Water as if it was a single consolidated legal entity with a single class of debt. It reflects an opinion on the expected loss associated with the financial obligations within the Thames Water group, and consolidates the legal and financial obligations of Thames Water, its financing subsidiary Thames Water Utilities Finance PLC (TWUF) and the intermediate holding company within the group, Thames Water Utilities Holdings Limited. The Baa2 CFR also factors in the credit enhancements of the financing structure.

### Debt structural features provide a rating uplift for additional creditor protection

Thames Water's Baa2 CFR takes into account the covenant and security package agreed by the company, which is designed to insulate its creditworthiness from that of its ultimate shareholders and improve creditors' protection in a default scenario. The overall covenant and security package is similar to those for comparable highly leveraged financing transactions, and results in a rating uplift of around one notch for credit-enhancing features, embedded in the Baa2 CFR.

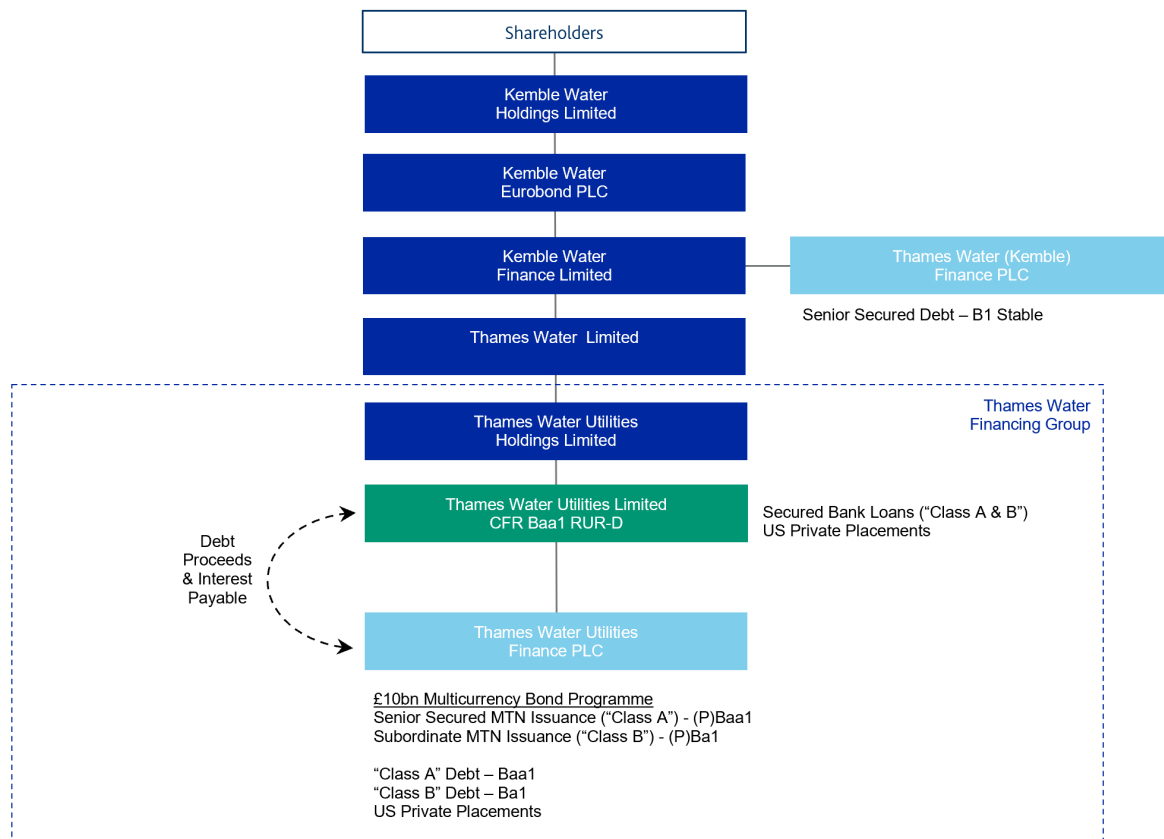
The terms and conditions of its financing arrangements allow Thames Water to increase its indebtedness (on the basis of net debt/RCV) up to 85% before distribution lock-ups come into effect. Failure to maintain a level of adjusted interest cover of at least 1.1x in any single year (or 1.2x on a three-year rolling average) would also trigger the dividend lock-up mechanism. We note, however, that our calculation of both ratios differs from the definition of the financial covenants in the financing documents because of our specific adjustments, particularly following swap restructurings executed by the company in November 2019.

Additional event risk protection provided by the bond covenant and security package also include, inter alia, restrictions on acquisitions and disposals (subject to limited defined exceptions), maturity concentration limits and limitation on non-core activities. In addition, we consider creditor step-in rights if certain trigger events occur.

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 Thames Water; and (2) the agreement by financial creditors to give up their individual rights to petition for insolvency proceedings. We recognise the fact that the benefit of the security provided to bondholders is limited because of the regulated and essential nature of the services provided by Thames Water, as governed by its licence and the Water Industry Act 1991.



Exhibit 11

**Simplified organisational structure**

Source: Moody's Investors Service

We also rate the bonds issued by TWUF under a £10 billion MTN programme (the Programme), guaranteed by Thames Water. The bonds are issued either as part of a senior tranche (Class A debt) or a junior tranche (Class B debt) and are 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 after 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 contractually subordinated — serves to reduce the operating company's financial flexibility because Class B debt would continue to be served even in a trigger event as long as sufficient cash remains available. In addition, 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, thus, 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 in the cash flow waterfall.

**Liquidity analysis**

Thames Water's solid liquidity will be sufficient to support the company's operating and capital spending over at least the next 12-18 months. It is underpinned by (1) the stable and predictable cash flow generated by its regulated activity; (2) cash balances and short-term investments of around £259 million as of 30 September 2022 (excluding cash associated with the Tideway contract); and (3) around £1,026 million available under undrawn, committed revolving facilities. Since September, £671 million of revolving credit facility drawdowns were repaid, £622 million of proceeds received under a US private placement transaction entered in August 2022, as well

as new £1.0 billion (maturing in March 2026) and £164 million facilities raised (£65 million maturing in December 2027 and £99 million maturing in December 2029).

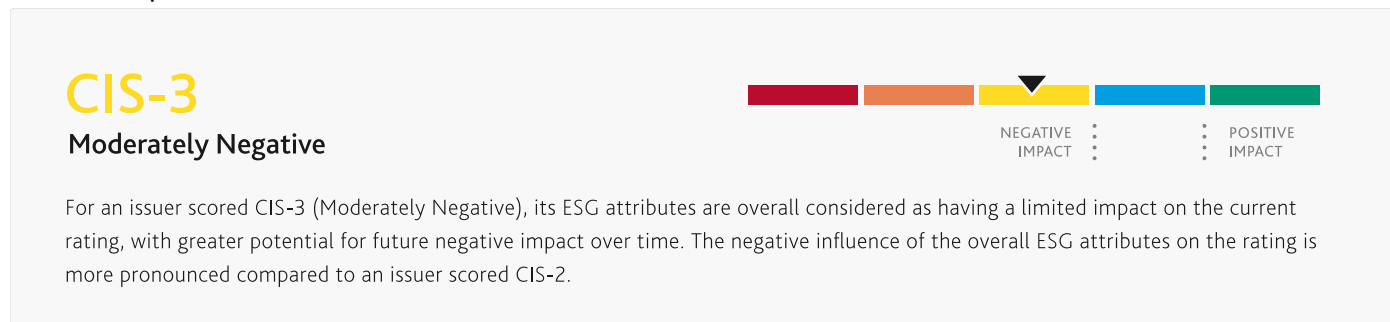
In addition, Thames Water retains access to a £310 million debt service reserve facility and a £240 million O&M reserve facility, with a group of 16 relationship banks.

## ESG considerations

### Thames Water Utilities Ltd.'s ESG Credit Impact Score is Moderately Negative CIS-3

Exhibit 12

#### ESG Credit Impact Score



Source: Moody's Investors Service

The ESG Credit Impact Score for Thames Water Utilities Limited is moderately negative (**CIS-3**), reflecting high environmental exposure and moderate social and governance risks. The overall credit impact score also recognises mitigating factors, in particular the regulated nature of water companies' activities and their investment requirements, including a forward-looking allowance for efficient cost. However, as investment needs continue to grow to tackle climate change and population growth, the resulting increase in regulated assets and their remuneration will have to continue to be supported by the regulatory tariff framework in order to avoid negative credit implications in the future.

Exhibit 13

#### ESG Issuer Profile Scores



Source: Moody's Investors Service

## Environmental

Thames Water's high environmental risk (**E-4** issuer profile score) primarily reflects the company's high risk exposure to water management and natural capital, which both take into account the effects of water pollution, and moderate exposure associated with physical climate risks, including climate change-related drought or flooding incidents. According to an analysis by the UK government's Environment Agency (EA), the southeast of England, which includes the service area of Thames Water, will require additional supply of 1,765 million litres a day by 2050, more than a third of current overall annual distribution input at just over 5,000 million litres per day for the region, to offset additional challenges from population growth and climate change as well as increase drought resilience. As a wastewater company, Thames Water is also exposed to the risk of pollution and associated fines. In November 2021, the UK government's Environment Agency and water regulator Ofwat launched investigations into wastewater treatment works, with companies more at risk of greater penalties than in the past. In addition, Ofwat announced in March 2022, that it had served five

companies, including Thames Water, formal notices to gather further information for enforcement purposes. While all water and wastewater companies in England and Wales remain subject to investigation, the five were singled out for one of (a) a significant number of potentially non-complaint works, (b) concerns about company's management of compliance, or (c) poor data. Thames Water's previous water pollution incidents have resulted in significant cumulative environmental fines. As of December 2021, Thames Water accounted for 25% of the £145 million cumulative fines in the industry. In March 2017, the company received the largest ever fine for six separate, significant pollution incidents on the River Thames during 2012-14, with the penalty amounting to almost £20 million. The enforcement action took into account the company's weak track record when requiring a settlement amount well in excess of historical levels. While significantly higher than previous penalties, the fine was modest in the context of Thames Water's financial profile. The other major offender with respect to environmental discharges is Southern Water, which did not comply with its discharge permits over 2010-17 and also falsified associated reporting data. Southern Water received a significant penalty from Ofwat in this respect and was also fined an unprecedented £90 million in July 2021 by the Environment Agency. Given long lead times in the legal process, there is a risk that prior underperformance in this area could lead to further penalties in the future. Thames Water was most recently fined £4 million in November 2021 for a pollution incident from 2016.

### Social

Thames Water's social risk is moderately negative (**S-3**), reflecting the risk, common to all regulated utilities, that public concern over environmental, social or affordability issues could lead to adverse regulatory or political intervention. While water companies and regulators have sought to address criticism over operational performance, bills and dividend payments, the opposition UK Labour Party has argued for nationalisation. In addition, we see moderately negative risk exposure related to customer relationships, with Thames Water having among the weakest customer service scores in the sector. The risks associated with customer service, societal trends and responsible production are balanced by neutral effects from health and safety and human capital.

### Governance

Governance risks are moderate (**G-3**). Regulatory requirements ensure that independent directors account for the largest single group on the company's board and the company's regulatory licence prescribes a minimum credit profile. While Thames Water maintains a highly-leveraged financing structure, financial covenants restrict distributions once certain metrics are breached. Nevertheless, we expect Thames Water to maintain a financial profile close to these covenants to maximise dividends payments because additional debt-funded holding companies rely on these to service their own obligation. The moderate risk score for compliance and reporting reflects an ongoing investigation by the regulator and the UK's Environment Agency into potentially illegal wastewater discharges into rivers by the wastewater companies in England and Wales.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moody's.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

## Rating methodology and scorecard factors

Thames Water's Baa2 CFR reflects our [Regulated Water Utilities](#) rating methodology, published in June 2018. The methodology scorecard indicates an outcome of Baa2 on a forward-looking basis, in line with the assigned CFR.

Exhibit 14

### Rating Methodology Scorecard

Thames Water Utilities Ltd.

Regulated Water Utilities Industry [1][2]	Current FY 3/31/2022		Moody's 12-18 Month Forward View As of Dec 2022 [3]	
	Measure	Score	Measure	Score
<b>Factor 1 : Business Profile(50%)</b>				
a) Stability and Predictability of Regulatory Environment	Aa	Aa	Aa	Aa
b) Asset Ownership Model	Aa	Aa	Aa	Aa
c) Cost and Investment Recovery (Sufficiency & Timeliness)	A	A	A	A
d) Revenue Risk	Aa	Aa	Aa	Aa
e) Scale and Complexity of Capital Programme & Asset Condition Risk	A	A	A	A
<b>Factor 2 : Financial Policy (10%)</b>				
a) Financial Policy	B	B	Ba	Ba
<b>Factor 3 : Leverage and Coverage (40%)</b>				
a) Adjusted Interest Coverage Ratio (3 Year Avg)	1.0x	B	0.8x - 1.1x	B/Caa
b) Net Debt / Regulated Asset Base (3 Year Avg)	84.1%	Ba	80% - 83%	Ba
c) FFO / Net Debt (3 Year Avg)	5.4%	B	4% - 6%	B
d) RCF / Net Debt (3 Year Avg)	5.1%	Ba	4% - 6%	Ba
<b>Rating:</b>				
Scorecard-Indicated Outcome Before Notch Lift		Ba2		Ba1/Ba3
Notch Lift		1.5		1.5
a) Scorecard-Indicated Outcome		Baa3		Baa3/Ba1
b) Actual Rating Assigned				Baa2

(1) All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. (2) As of FYE 31/03/2022. (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 Metrics*™

## Ratings

Exhibit 15

Category	Moody's Rating
<b>THAMES WATER UTILITIES LTD.</b>	
Outlook	Stable
Corporate Family Rating -Dom Curr	Baa2

Source: *Moody's Investors Service*

## Appendix

Exhibit 16

### Selected peer comparison Thames Water Utilities Ltd.

(in GBP million)	Thames Water Utilities Ltd. Baa2 Stable			Anglian Water Services Ltd. A3 Stable			Yorkshire Water Services Ltd Baa2/Ba1 Stable*			Southern Water Services Ltd Baa3 Stable *		
	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	
	Mar-20	Mar-21	Mar-22	Mar-20	Mar-21	Mar-22	Mar-20	Mar-21	Mar-22	Mar-20	Mar-21	Mar-22
Revenue	2,109	2,033	2,092	1,420	1,352	1,400	1,063	1,101	1,119	878	820	845
EBITDA	1,125	1,053	1,062	738	706	675	564	568	335	535	363	452
Total Assets	20,231	19,933	20,563	12,110	11,274	12,229	9,661	10,010	10,853	7,096	7,265	7,568
Regulated Asset Base (RAB)	14,594	15,070	16,664	7,966	7,993	8,780	6,960	7,024	7,746	5,072	5,149	5,665
Total Debt	13,344	13,106	14,201	7,506	6,981	6,534	5,665	5,727	5,738	3,824	4,059	4,127
Net Debt	12,588	12,615	13,781	6,458	6,695	5,663	5,416	5,529	5,709	3,639	3,702	3,677
Net Debt / Regulated Asset Base	86.3%	83.7%	82.7%	81.1%	83.8%	64.5%	77.8%	78.7%	73.7%	71.7%	71.9%	64.9%
Adjusted Interest Coverage Ratio	1.5x	1.1x	0.6x	1.7x	1.3x	1.3x	1.3x	0.9x	0.8x	1.1x	0.4x	-0.1x
FFO / Net Debt	6.0%	6.0%	4.4%	7.7%	6.5%	8.4%	5.8%	6.2%	6.0%	8.2%	6.7%	1.4%
RCF / Net Debt	5.6%	5.7%	4.1%	6.7%	6.5%	6.7%	4.6%	6.2%	5.8%	8.0%	6.6%	1.5%

All figures & ratios calculated using Moody's estimates & standard adjustments. FYE = Financial Year-End. LTM = Last Twelve Months. RUR = Ratings under Review, where UPG = for upgrade and DNG = for downgrade. \* Ratings represent senior secured and, where applicable, junior debt ratings assigned at the issuing finance subsidiary level.

Source: Moody's Financial Metrics™

Exhibit 17

### Moody's-adjusted debt breakdown Thames Water Utilities Ltd.

(in GBP million)	FYE Mar-18	FYE Mar-19	FYE Mar-20	FYE Mar-21	FYE Mar-22
<b>As Reported Total Debt</b>	11,089	11,854	13,196	12,829	13,360
Pensions	301	339	209	277	257
Leases	87	0	0	0	0
Non-Standard Adjustments	79	58	(61)	0	584
<b>Moody's Adjusted Total Debt</b>	11,556	12,251	13,344	13,106	14,201
Cash & Cash Equivalents	(104)	(154)	(756)	(491)	(420)
<b>Moody's Adjusted Net Debt</b>	11,451	12,097	12,588	12,615	13,781

All figures are calculated using Moody's estimates and standard adjustments. Non-standard adjustments add cumulative derivative accretion.

Source: Moody's Financial Metrics™

Exhibit 18

**Moody's-adjusted funds from operations (FFO) breakdown**  
 Thames Water Utilities Ltd.

(in GBP million)	FYE Mar-18	FYE Mar-19	FYE Mar-20	FYE Mar-21	FYE Mar-22
<b>As Reported Funds from Operations (FFO)</b>	1,020	1,071	1,189	1,007	1,158
Pensions	19	0	21	96	4
Leases	7	0	0	0	0
Capitalized Interest	(101)	(109)	(98)	(70)	(115)
Alignment FFO	(234)	(146)	(192)	(148)	(546)
Unusual Items - Cash Flow	2	3	6	0	0
Cash Flow Presentation	0	0	(203)	(121)	(158)
Non-Standard Adjustments	(121)	(205)	32	(13)	260
<b>Moody's Adjusted Funds from Operations (FFO)</b>	593	613	755	751	603

All figures are calculated using Moody's estimates and standard adjustments. Non-standard adjustments relate primarily to the reclassification of interest paid and received to cash flow from operations and add back annual inflation accretion on debt and eligible derivatives.

Source: Moody's Financial Metrics™

Exhibit 19

**Selected historical Moody's-adjusted financial data**  
 Thames Water Utilities Ltd.

	FYE	FYE	FYE	FYE	FYE
(in GBP million)	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22
<b>INCOME STATEMENT</b>					
Revenue	2,018	2,037	2,109	2,033	2,092
EBITDA	1,038	1,059	1,125	1,053	1,062
EBITDA margin %	51.4%	52.0%	53.3%	51.8%	50.8%
EBIT	505	505	536	434	367
EBIT margin %	25.0%	24.8%	25.4%	21.3%	17.5%
Interest Expense	608	561	526	349	841
Net income	(69)	(33)	(94)	56	(728)
<b>BALANCE SHEET</b>					
Net Property Plant and Equipment	14,662	15,234	15,818	16,274	16,880
Total Assets	17,711	18,545	20,231	19,933	20,563
Total Debt	11,556	12,251	13,344	13,106	14,201
Cash & Cash Equivalents	104	154	756	491	420
Net Debt	11,451	12,097	12,588	12,615	13,781
Total Liabilities	15,015	15,835	17,157	17,195	18,826
Total Equity	2,696	2,710	3,074	2,738	1,737
<b>CASH FLOW</b>					
Funds from Operations (FFO)	593	613	755	751	603
Cash Flow From Operations (CFO)	731	724	810	792	877
Dividends	55	60	57	33	37
Retained Cash Flow (RCF)	538	553	699	718	566
Capital Expenditures	(1,070)	(1,108)	(1,137)	(1,001)	(1,192)
Free Cash Flow (FCF)	(394)	(443)	(384)	(242)	(352)
<b>INTEREST COVERAGE</b>					
(FFO + Interest Expense) / Interest Expense	2.0x	2.1x	2.4x	3.2x	1.7x
Adjusted Interest Coverage Ratio	1.2x	1.2x	1.5x	1.1x	0.6x
<b>LEVERAGE</b>					
FFO / Net Debt	5.2%	5.1%	6.0%	6.0%	4.4%
RCF / Net Debt	4.7%	4.6%	5.6%	5.7%	4.1%
Regulated Asset Base (RAB)	13,895	14,441	14,594	15,070	16,664
Net Debt / Regulated Asset Base	82.4%	83.8%	86.3%	83.7%	82.7%

All figures are calculated using Moody's estimates and standard adjustments.

Source: Moody's Financial Metrics™

## Endnotes

- 1 The 'Putting the sector back in balance' measures marked a change in direction for the regulator, in our view, in response to political and public pressure and evidenced a modest deterioration in the stability and predictability of the regime. The regulator has long maintained that capital structure is a matter for shareholders but, with the new measures, will exert greater influence. Accordingly, [in May 2018, we revised the scoring for the stability and predictability of the regulatory regime](#) under our rating methodology for Regulated Water Utilities to Aa from Aaa. At the same time we modestly tightened our ratio guidance.
- 2 At the 2014 price review, Thames Water was allowed £227 million to construct a new sewer. The £130 million underperformance penalty relates to the cancellation of the original project, and the reduction has been applied to the opening RCV for the AMP7 period.



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