

CREDIT OPINION

19 December 2023

Update



RATINGS

Thames Water Utilities Ltd.

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

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.

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Thames Water Utilities Ltd.

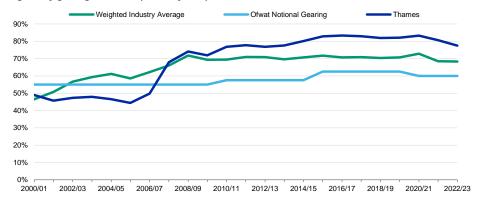
Regular update following HY 2023/24 results

Summary

The credit quality of <u>Thames Water Utilities Ltd.</u> (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; (3) the creditor protections incorporated within the company's financing structure; and (4) solid liquidity.

The company benefits from a relatively low cash interest cost on its embedded 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), which coupled with weak operational performance results in increasing performance penalties. However, proposed equity contributions of up to £1.25 billion over the current regulatory period (and more beyond) to support the company's medium-term turn-around programme provide some mitigation against weak near-term credit ratios.

Exhibit 1
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

On 27 June 2023, <u>Thames Water announced that Sarah Bentley resigned as Chief Executive</u> <u>Officer of the company</u>, stepping down with immediate effect. The sudden CEO resignation

increased regulatory and political scrutiny on Thames Water' financial structure, and – coupled with hightened customer expectations – may have an adverse impact on the company's ability to access future capital on competitive terms.

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
- » Historically, lower average cost of debt and smaller risk from derivative contracts than peers under highly covenanted financing arrangements

Credit challenges

- » Track record of weak operating performance
- » Relatively high financial leverage, which constrains financial flexibility
- » Cash flow weakened by lower allowed returns and more demanding efficiency and performance targets in AMP7, which are leading to increased performance penalties
- » 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
- » Ongoing investigations by Ofwat and the Environment Agency into the sector's performance with respect to wastewater assets may result in penalties or detrimental policy/regulatory interventions while increased public scrutiny heightens social risks

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 (after considering regulatory true-up adjustments) 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.moodys.com for the most updated credit rating action information and rating history.

Key indicators

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

	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24 E
Adjusted Interest Coverage Ratio	1.2x	1.2x	1.5x	1.1x	0.7x	0.5x	0.5x-0.9x
Net Debt / Regulated Asset Base	82.4%	83.8%	86.3%	83.7%	82.7%	79.1%	80%-85%
FFO / Net Debt	5.2%	5.1%	6.0%	6.0%	4.6%	3.8%	4%-6%
RCF / Net Debt	4.7%	4.6%	5.6%	5.7%	4.3%	3.5%	4%-6%

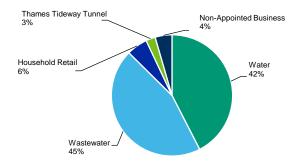
All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. We note that the company includes income from grants and contributions to support new network connections within revenues and operating cash flow. From FYE March 2021, 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 MetricsTM

Profile

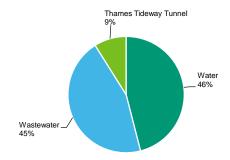
Thames Water Utilities Ltd (Thames Water) is the largest of the 10 water and sewerage companies in England and Wales by both RCV and number of customers served. The company provides drinking water to around nine million customers and sewerage services to around 15 million customers in London and the Thames Valley. It is the primary operating subsidiary of Thames Water Limited, which is in turn owned by Kemble Water Finance Limited (Kemble, the financing subsidiary of which is Thames Water (Kemble) Finance PLC, senior secured B3 negative). 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 2022/23



The Tideway segment includes revenue that is collected by Thames Water through customer bills on behalf of <u>Bazalgette Tunnel Limited</u>, 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 £18.9 billion at March 2023
RCV split at March 2023



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

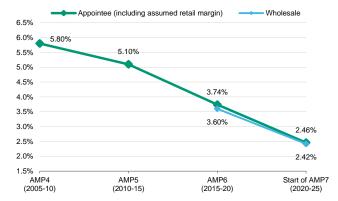
Transparent regulatory regime, but low AMP7 returns pressure companies' financial flexibility

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.

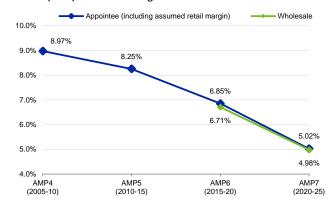
As previously flagged by the regulator, the 2019 determination included a significant cut in allowed cash returns to ca. 2.42% for the wholesale activities at the start of the current period, which incorporates the regulator's decision to only link half of the existing regulatory assets as at March 2020 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 AMP7 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. Given that Thames Water will maintain gearing above the regulator's maximum threshold of 74% gradually falling to 70% by the and of AMP7, we expect the company to face the associated high gearing penalty as part of the end-of-period true-up adjustments.

Tighter regulatory oversight expected for AMP8, with Thames Water in the spotlight

In December 2022, Ofwat published its final methodology for the 2024 price review, outlining its approach to setting allowed returns, incentivising operational performance and establishing cost targets for the next regulatory period, which will run from 1 April 2025 to 31 March 2030 (known as AMP8).

The regulator's "early view" of the cost of capital, based on average market conditions during September 2022, is 3.23% for the wholesale activities, an increase from the current period. Ofwat also confirmed that it will transition to full CPIH indexation of companies' RCV in AMP8; because CPIH is structurally lower than RPI, the "early view" of the cost of capital implies an approximately 30% higher return in cash terms, compared to the current period. While "early view" equity returns may appear low in the context of rising cost of debt, latest market evidence will have to be considered when Ofwat resets the allowed return at the 2024 price review. A

rise in allowed cash returns would be credit positive, particularly in the context of likely rising investment needs and associated funding requirements in a higher interest rate environment.

Ofwat also aims to further tighten performance requirements, which will mean greater penalties for companies that fall short of the regulator's expectations. Given its historically weak performance track record, Thames Water remains at risk of incurring future penalties, unless its turn-around programme can be successfully delivered. The company's AMP8 business plan, published in early October 2023, suggests a risk-reward profile that is skewed to the downside (which is in line with the representation by its peers).

In March 2023, Ofwat also published its decision to modify the regulatory ring-fencing conditions in the licences of the water and wastewater companies in England and Wales. With effect from 1 April 2025, the rating trigger resulting in a cash lock-up under the licence will be raised to Baa2/BBB negative from Baa3/BBB- negative currently. Additional licence changes, which apply from 17 May 2023, also allow the regulator to take enforcement action where companies do not link their dividend payments to operational performance or fail to be transparent about their dividend policy. On balance, the licence modifications are credit positive for the operating companies, but detrimental to holding company credit quality where the operating company is at an increased risk of triggering the lock-up.

The tighter rating trigger is relevant for Thames Water, as its dividend payments support debt service at various holding companies within the wider organisational structure, in particular at Kemble. The <u>definition of "issuer credit rating" that Ofwat considers relevant for the rating trigger</u> includes Moody's corporate family rating, currently at Baa2 stable. Given the closeness of existing operating company ratings to the new lock-up trigger, the risk of a distribution block has increased.

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 reflected inflation as at November 2021. This means that many UK water companies already experienced an increase in their cost base, particularly on energy, materials and chemicals, while their revenue reflected a much lower level of inflation.

Companies' exposure to current cost pressures varies. Thames Water follows a rolling forward hedging strategy. Despite its hedging approach, the company was one of the most affected from rising power prices, exhibiting a 72% increase in power cost between FY 2022/23 and FY 2020/21, compared to 60% for the industry. Similarly raw materials and consumables costs (which includes chemicals) increased by around 52% over the same period. While customer bills rose from April 2023 with CPIH inflation as of November 2022, headline inflation has not kept pace with cost inflation. 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 30 September 2023, around 55-60% of its debt and derivatives liabilities were also inflation-linked. The majority of these 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. Companies will receive a true-up adjustment for the difference between the actual and assumed RPI-CPIH wedge, which will be reflected in additional revenue as well as a sizeable RCV addition (close to 2% uplift) at the next price review.

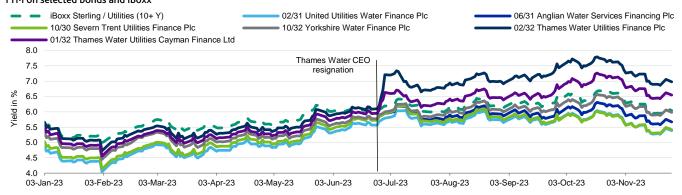
A portion of Thames Water's RPI-linked debt is synthetically created through derivatives. At March 2023, derivatives with a notional amount of £4.6 billion were linked to RPI, of which £594 million notional is subject to five-year accretion pay-down and a further £940 million notional is contracted for 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 2.32% at March 2023, below the sector average of 2.61%. Management continues to forecast covenant headroom, albeit declining towards the last year of AMP7, as 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. In October 2023, Thames Water issued a £300 million bond, in the first market test after the resignation of CEO Sarah Bentley in June. The 16-year bond was issued at a 8.25% coupon, signaling a sizeable premium compared with peers. Thames Water's bonds continue to trade at least 100 basis points above the sector (see Exhibit 7). While this may soften if and when additional shareholder contributions are received, a longer term issuer-specific premium will weigh on future interest coverage, given the sizeable refinancing as well as investment needs over the coming AMP8 period. Based on its business plan submission, we estimate that Thames Water may have to raise up to £10 billion over the AMP8 period, roughly equally split between new debt and refinancing.

Exhibit 7
Thames Water bond yields significantly higher than peers after CEO resignation YTM on selected bonds and iBoxx



Source: FactSet, Moody's Investors Service

Extreme weather exacerbates penalties from weak operational performance

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. 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.

Over AMP7 to date, Thames Water continued to incur performance penalties of around £178 million, of which £53 million reduced cash flows 2022/23, £51 million will have to be returned to customers in 2023/24 and £74 million in 2024/25 (all in 2017/18 prices).

Exhibit 8

Cumulative ODI reward and penalties for FY 2020-21 to FY 2022-23 in absolute terms and as % of March 2023 RCV (in 2017/18 prices)

EQUIPMENT ODIS and CMAY/D-MAY after Object interventions

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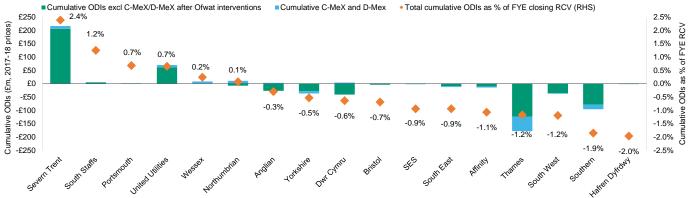
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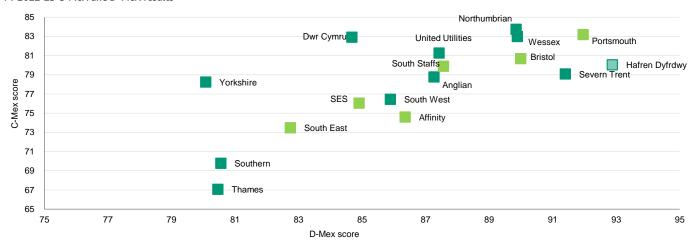
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Source: Companies' annual performance reports, Ofwat's final ODI determinations

Performance areas with the largest contribution to penalties include supply interruptions (£37 million cumulative penalties to date), internal sewer flooding (£45 million) and weak customer service (£54 million, all amounts in 2017/18 prices). More extreme weather, including a severe drought in summer 2022 and a wetter than average autumn and heavy rains in January 2023 added further pressure on mains, resulting in performance weakening for leakage and pollution incidents.

Exhibit 9
Thames Water exhibited some of the weakest customer service among the sector for the first three years of AMP7
FY 2022-23 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 2023, Thames Water indicates up to £270 million (in 2017/18 prices) net aggregate penalties over the 2020-25 period, excluding customer service, a number significantly up from the prior year estimate of £125 million. The increase in expected penalties is concentrated on leakage, mains repairs and pollution incidents. ODI penalties incurred in the last two financial years of AMP7 will carry over into AMP8 with a two-year lag. In addition and subject to final assessment at the 2024 price review, any deferred penalties (mostly associated with per capita consumption levels) will likely be reflected as a legacy adjustment to revenue for the next regulatory period from 1 April 2025. Thames Water's business plan includes cumulative ODI penalties of around £72 million (in 2022/23 prices) as part of its AMP8 legacy revenue adjustment, associated with per capita consumption and customer service (including both customer, C-Mex, and developer, D-Mex, service measures).

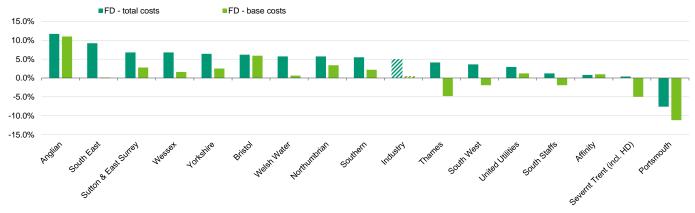
The company's re-focused three-year turn-around plan, which was approved by its board in late November and is one of the conditions for receiving further shareholder monies, will concentrate on performance areas that have attracted the most significant penalties,

including meaningful improvements in supply interruptions, water quality, leakage, pollutions and customer complaints. However, achieving a step change will take time to bear fruit.

Thames Water faces totex efficiency challenge in AMP7 and sizable growth in investment programme for AMP8

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 10
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 reclassification 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).³ The new plan to facilitate a turn-around in operational performance was closer to the company's original PR19 business plan submission. The additional investment will be supported by up to £1.25 billion shareholder equity. An amount of £500 million was received in March 2023 via (partial) repayment of intercompany loans by one of its holding companies (Thames Water Utilities Holdings Limited) to the operating company.⁴ Shareholders have agreed to provide a further £750 million over the remainder of the current AMP7 regulatory price control period which runs to March 2025 but subject to "preparation and production of a business plan that underpins a more focused turnaround that delivers targeted performance improvements for customers, the environment and other stakeholders over the next three years and is supported by appropriate regulatory arrangements".⁵

As part of its AMP8 business plan submission in October 2023, Thames Water also confirmed further indicative shareholder support of around £2.5 billion over the next regulatory period, with final amounts dependent upon Ofwat's final AMP8 determination. The sizeable shareholder support is credit positive in the context of required performance improvements and rising investment needs. Thames Water proposed totex of almost £19 billion (in 2022/23 prices) for AMP8, a roughly 60% increase compared with AMP7 levels. Enhancement expenditure, which aims to improve services and is largely driven by new statutory requirements to reduce pollution as well as the environmental impact of water abstraction, accounts for £6.5 billion, more than triple the AMP7 enhancement levels. If confirmed by Ofwat in its 2024 determination, this would lead to a 31% real growth in RCV compared with ca. 11.5% for the current period.

Ongoing pollution investigations pose risk of material fines

In <u>November 2021</u>, the UK government's Environment Agency (EA) and Ofwat launched parallel investigations into more than 2,000 sewage treatment works across all wastewater companies in England, "after new checks led to water companies admitting that they could be releasing unpermitted sewage discharges into rivers and watercourses." In <u>November 2022</u>, Ofwat confirmed that it had

opened enforcement cases against six companies, which aside from Thames Water also included <u>Anglian Water Services Ltd.</u>(A3 stable), <u>Northumbrian Water Ltd</u>. (Baa1 stable), South West Water, Wessex Water Services Limited (funded through <u>Wessex Water Services Finance Plc</u>, rated Baa1 stable) and Yorkshire Water Services Limited (funded through <u>Yorkshire Water Services Finance Limited</u> and Yorkshire Water Finance plc, with senior debt rated Baa2 stable, and junior debt rated Ba1 stable).

In <u>December 2023</u>, the regulator notified Northumbrian Water, Thames Water and Yorkshire Water of its provisional findings. The companies will have the opportunity to respond and provide further evidence, before a draft decision is published for consultation in the first quarter of 2024. While these companies have been highlighted on the basis of the information provided, the remaining three enforcement cases are ongoing and all wastewater companies remain part of the regulator's wider investigation.

Thames Water could face a material fine if it was found to be in breach of its regulatory obligations. Ofwat can impose a financial penalties of up to 10% of relevant turnover, while Environment Agency fines follow sentencing guidelines⁶ and are unlimited, particularly for repeat or deliberate offenders.

Following changes to the definition of serious pollution incidents, Thames Water's environmental performance assessment dropped from 3 to 2 stars (defined as requiring improvement) in 2021 and remained at the same level in 2022. The company reported a growing amount of serious pollution incidents, 17 in 2022 out of 44 in aggregate for the English wastewater companies, up from 12 in 2021 (over a total of 62), partly as a result of severe weather events affecting its service area.

Relatively high leverage constrains credit quality

Thames Water's credit quality is constrained by its relatively high debt burden. While management had committed to reduce leverage at the operating company over AMP7, we expect that with the growing investment programme, gearing will remain broadly in the 80-85% range over the period. Although the receipt of the first £500 million equity injection in March 2023 temporarily reduced Moody's-adjusted gearing by approximately 3 percentage points to 79%, leverage is expected to rise again over the final two years of AMP7 with the investments required under the turn-around plan. 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 at March 2023.

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. Given the significant growth in the investment programme for AMP8, we expect this approach to continue into the next regulatory period.

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, including refinancing needs of around £1.7 billion until the end of the current regulatory period. 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 £882 million as of 30 September 2023 (excluding cash associated with the Tideway contract); and (3) around £2.6 billion available under undrawn, committed revolving facilities.

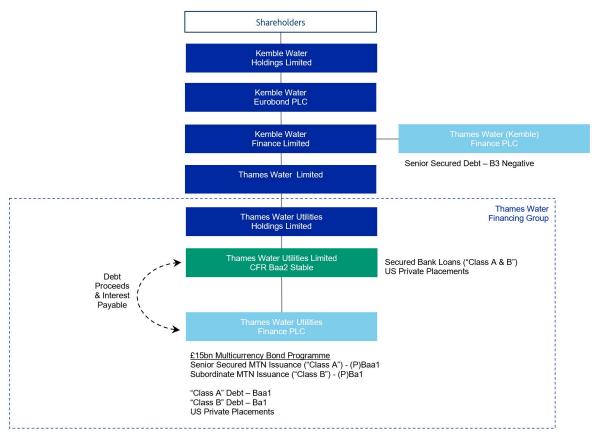
Since September 2023, £371 million of revolving credit facility drawdowns were repaid, and £164 million of term loans and £530 million of revolving credit loans were drawn. In October 2023, Thames Water also issued a £300 million 16-year bond and extended £325 million (based on accreted principal) RPI-linked loans from their original maturities in 2025 and 2026 to 2033.

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.

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.

Exhibit 11
Simplified organisational structure



Source: Company website, Moody's Investors Service

We also rate the bonds issued by TWUF under a £15 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.

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. In particular, our calculation includes accretion under swaps with frequent pay-down requirement or short maturities, executed as part of the company's swap restructurings in November 2019, as interest expense.

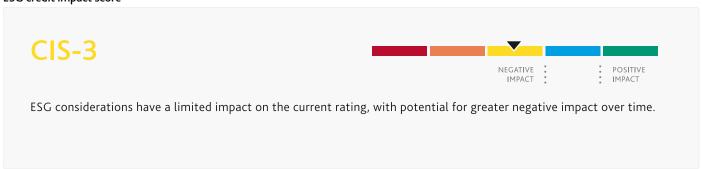
Additional event risk protection provided by the bond covenant and security package also include, inter alia, restrictions on acquisitions and disposals (subject to limited defined exceptions), maturity concentration limits and limitation on non-core activities. In addition, we consider creditor step-in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

ESG considerations

Thames Water Utilities Ltd.'s ESG credit impact score is CIS-3





Source: Moody's Investors Service

The **CIS-3** ESG Credit Impact Score for Thames Water Utilities Limited indicates that ESG considerations have a limited impact on the current credit quality with potential for greater negative impact over time. This reflects 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 **E-4** 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 (later extended to six), 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. In December 2023, three companies, including Thames Water, were notified of provisional findings on which to respond, and Ofwat expects to publish a draft decision during the first quarter of 2024. Thames Water's previous water pollution incidents have resulted in significant cumulative environmental fines. As of December 2022, Thames Water accounted for 25% of the £147 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 £3.33 million in July 2023 for a pollution incident in late 2017.

Social

Thames Water's **S-3** score reflects 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, public perception remains at an all time low. 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.

Governance

The **G-3** governance risk score takes into account regulatory requirements to 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 Moodys.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 is rated in accordance with our <u>Regulated Water Utilities</u> rating methodology, last published in August 2023. The scorecard-indicated outcome is currently depressed by weak cash flow based metrics, but credit quality remains underpinned by solid liquidity and shareholder support.

Exhibit 14 **Key rating factors**Thames Water Utilities Ltd.

			Moody's 12
	Curre	ent	
Regulated Water Utilities Industry [1][2]	FY 3/31	/2023	As o
Factor 1 : Business Profile(50%)	Measure	Score	Measur
a) Stability and Predictability of Regulatory Environment	Aa	Aa	Aa
b) Asset Ownership Model	Aa	Aa	Aa
c) Cost and Investment Recovery (Sufficiency & Timeliness)	А	Α	A
d) Revenue Risk	Aa	Aa	Aa
e) Scale and Complexity of Capital Programme & Asset Condition Risk	A	Α	A
Factor 2 : Financial Policy (10%)			
a) Financial Policy	Ва	Ba	Ba
Factor 3 : Leverage and Coverage (40%)		-	
a) Adjusted Interest Coverage Ratio (3 Year Avg)	0.7x	Caa	0.8x - 1.
b) Net Debt / Regulated Asset Base (3 Year Avg)	81.6%	Ва	80% - 83
c) FFO / Net Debt (3 Year Avg)	4.7%	В	4% - 6%
d) RCF / Net Debt (3 Year Avg)	4.4%	Ва	4% - 6%
Rating:			
Scorecard-Indicated Outcome Before Notch Lift		Ba3	
Notch Lift		1.5	
a) Scorecard-Indicated Outcome		Ba1	
b) Actual Rating Assigned			

Moody's 12-18 Month Forward						
View As of Dec	-					
Measure	Score					
Aa	Aa					
Aa	Aa					
Α	Α					
Aa	Aa					
А	A					
Ва	Ва					
0.8x - 1.1x	B/Caa					
80% - 83%	Ba/B					
4% - 6%	В					
4% - 6%	Ва					
	Ba2/Ba3					
	1.5					
	Baa3/Ba1					
	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 31/03/2023 (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 15

Category	Moody's Rating
THAMES WATER UTILITIES LTD.	
Outlook	Stable
Corporate Family Rating -Dom Curr	Baa2
Source: Moody's Investors Service	

Appendix

Exhibit 16

Selected peer comparison Thames Water Utilities Ltd.

	Thames Water Utilities Ltd. Baa2 Stable			Anglia	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	FYE	
(in GBP million)	Mar-21	Mar-22	Mar-23	Mar-21	Mar-22	Mar-23	Mar-21	Mar-22	Mar-23	Mar-21	Mar-22	Mar-23	
Revenue	2,033	2,092	2,181	1,352	1,400	1,495	1,101	1,119	1,145	820	845	816	
EBITDA	1,053	1,062	1,065	706	790	819	568	335	1,533	353	452	592	
Total Assets	19,933	20,563	22,870	11,274	12,229	12,470	10,010	10,853	11,007	7,265	7,568	7,645	
Regulated Asset Base (RAB)	15,070	16,664	18,945	7,993	8,780	9,959	7,024	7,746	8,715	5,149	5,665	6,455	
Total Debt	13,106	14,201	16,809	6,981	6,534	6,914	5,727	5,738	6,571	4,059	4,127	4,622	
Net Debt	12,615	13,781	14,979	6,695	5,663	6,281	5,529	5,709	6,278	3,702	3,677	4,476	
Net Debt / Regulated Asset Base	83.7%	82.7%	79.1%	83.8%	64.5%	63.1%	78.7%	73.7%	72.0%	71.9%	64.9%	69.3%	
Adjusted Interest Coverage Ratio	1.1x	0.7x	0.5x	1.4x	1.4x	1.4x	0.9x	1.0x	0.7x	0.4x	-0.1x	-0.1x	
FFO / Net Debt	6.0%	4.6%	3.8%	6.5%	8.4%	8.4%	6.2%	6.3%	5.8%	6.5%	1.4%	-2.3%	
RCF / Net Debt	5.7%	4.3%	3.5%	6.5%	6.7%	5.7%	6.2%	6.1%	5.1%	6.6%	1.5%	-2.3%	

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

Moody's Financial Metrics

**Total Review 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.

Exhibit 17 Moody's-adjusted debt breakdown Thames Water Utilities Ltd.

		FYE	FYE	FYE	FYE	FYE
(in GBP million)		Mar-19	Mar-20	Mar-21	Mar-22	Mar-23
As Reported Total Debt		11,854	13,196	12,829	13,360	15,795
	Pensions	339	209	277	257	182
	Non-Standard Adjustments	58	(61)	0	584	832
Moody's Adjusted Total Debt		12,251	13,344	13,106	14,201	16,809
	Cash & Cash Equivalents	(154)	(756)	(491)	(420)	(1,829)
Moody's Adjusted Net Debt		12,097	12,588	12,615	13,781	14,979

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.

FYE	FYE	FYE	FYE	FYE
Mar-19	Mar-20	Mar-21	Mar-22	Mar-23
1,071	1,189	1,007	1,158	1,125
0	21	96	4	8
(109)	(98)	(70)	(115)	(215)
(146)	(192)	(148)	(546)	(1,139)
3	6	0	0	0
0	(203)	(121)	(158)	43
(205)	32	(13)	286	740
613	755	751	629	562
	Mar-19 1,071 0 (109) (146) 3 0 (205)	Mar-19 Mar-20 1,071 1,189 0 21 (109) (98) (146) (192) 3 6 0 (203) (205) 32	Mar-19 Mar-20 Mar-21 1,071 1,189 1,007 0 21 96 (109) (98) (70) (146) (192) (148) 3 6 0 0 (203) (121) (205) 32 (13)	Mar-19 Mar-20 Mar-21 Mar-22 1,071 1,189 1,007 1,158 0 21 96 4 (109) (98) (70) (115) (146) (192) (148) (546) 3 6 0 0 0 (203) (121) (158) (205) 32 (13) 286

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-19	Mar-20	Mar-21	Mar-22	Mar-23
NCOME STATEMENT					
Revenue	2,037	2,109	2,033	2,092	2,181
EBITDA	1,059	1,125	1,053	1,062	1,065
EBITDA margin %	52.0%	53.3%	51.8%	50.8%	48.8%
EBIT	505	536	434	367	335
EBIT margin %	24.8%	25.4%	21.3%	17.5%	15.4%
nterest Expense	561	526	349	841	1,477
Net income	(33)	(94)	56	(728)	(1,093)
BALANCE SHEET					
Net Property Plant and Equipment	15,234	15,818	16,274	16,880	17,842
Total Assets	18,545	20,231	19,933	20,563	22,870
Total Debt	12,251	13,344	13,106	14,201	16,809
Cash & Cash Equivalents	154	756	491	420	1,829
Net Debt	12,097	12,588	12,615	13,781	14,979
Total Liabilities	15,835	17,157	17,195	18,826	21,219
Total Equity	2,710	3,074	2,738	1,737	1,651
CASH FLOW					
Funds from Operations (FFO)	613	755	751	629	562
Cash Flow From Operations (CFO)	724	810	792	877	885
Dividends	60	57	33	37	45
Retained Cash Flow (RCF)	553	699	718	592	517
Capital Expenditures	(1,108)	(1,137)	(1,001)	(1,192)	(1,326)
Free Cash Flow (FCF)	(443)	(384)	(242)	(352)	(487)
NTEREST COVERAGE					
FFO + Interest Expense) / Interest Expense	2.1x	2.4x	3.2x	1.7x	1.4x
Adjusted Interest Coverage Ratio	1.2x	1.5x	1.1x	0.7x	0.5x
EVERAGE					
FFO / Net Debt	5.1%	6.0%	6.0%	4.6%	3.8%
RCF / Net Debt	4.6%	5.6%	5.7%	4.3%	3.5%
Regulated Asset Base (RAB)	14,441	14,594	15,070	16,664	18,945
Net Debt / Regulated Asset Base	83.8%	86.3%	83.7%	82.7%	79.1%

All figures are calculated using Moody's estimates and standard adjustments. Source: Moody's Financial Metrics $^{\text{TM}}$

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.
- 3 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.

- 4 These intercompany loans were put in place at the time when the existing highly covenanted financing structure was put in place in 2007, to usptream amounts from the operating company to the holding company.
- $\underline{\textbf{5}} \hspace{0.1cm} \underline{\textbf{https://www.londonstockexchange.com/news-article/BA18/shareholder-funding-update/16033297} \\$
- 6 Please see Moody's July 2015 comment '<u>UK Water Sector: Environmental damage likely to attract more material fines</u>' as well as the sentencing council's guidelines for environmental offences effective from 1 July 2014: https://www.sentencingcouncil.org.uk/offences/magistrates-court/item/organisations-illegal-discharges-to-air-land-and-water-unauthorised-or-harmful-deposit-treatment-or-disposal-etc-of-waste/

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