Building a better future

Enhancing Thames Water's business plan for 2020 to 2025

Our improved ambition

	September business plan
Average annual combined bills	**Flat average household bills from AMP6; Increasing bills in AMP8**
Priority Services Register (Number of customers benefitting)	400,000
Key outcomes	
Pollutions	18% **reduction**
Internal sewer flooding	15% **reduction**
Supply interruptions	6% **reduction**
Leakage	**606Ml/d to 509 Ml/d, a 15% reduction**
Cost of improved outcomes	
Costs	
Average unit base opex efficiency per customer[1]	13.6% **reduction**
Totex	£11.7 billion
Fair balance	
Gearing Sharing	–
Customer acceptability for AMP7	67%

1 Normalised for power and rates; measured per property, from AMP6 to AMP7.

	April submission
→	£5 or 1.3% reduction by the end of AMP7; Flat average household bills in AMP8
→	410,000 (Ofwat's benchmark)
→	30% reduction
→	20% reduction
→	20% reduction
→	636Ml/d to 509 Ml/d, a 20% reduction
	No additional costs requested
→	22.5% reduction
→	£10.9 billion (£10.65 billion + c. £0.25 billion Uncertainty Mechanisms)
→	A Gearing Sharing Mechanism
→	87%

Enhancing our plan for 2020–2025

Steve Robertson, CEO, Thames Water Utilities Ltd

In September we published our Business Plan for 2020 to 2025. We laid out how we are going to invest to build a better future for our customers and our region, create customer advocacy and enhance the environment we rely on. Feedback from one million customers informed our plan and we stand by the principles of our September Business Plan.

We've been putting our plan into action and have already reached some key milestones, which will allow us to respond much better to customers now and in the future.

Evolving our plan

Since we submitted our Business Plan in September, we've listened to, and welcomed feedback from our customers, stakeholders and regulators. The majority of feedback has been positive, and stressing the need for investment to improve resilience and meet the needs of customers. We were also upgraded to Ofwat's 2nd tier for assurance, data quality and consistency in its company monitoring framework assessment.

In January 2019, Ofwat initially assessed our plan as requiring significant scrutiny. It challenged us to stretch our key performance commitments, including pollutions, supply interruptions and leakage; it questioned our enhancement investment cases; and at the same time it wanted us to deliver the plan for a lot less money – £9.4 billion instead of £11.7 billion.

We've listened carefully to Ofwat's feedback and have been through a rigorous process to re-interrogate our delivery plans, demanding more of our ambition for technical change and productivity improvements. During this review, a primary focus has been to see if we can reduce customers' bills. Affordability continues to be a key issue for both our customers and Ofwat, and I am pleased to report that we are able to reduce the average annual combined water and wastewater bill by £5 in real terms.

Delivering our improved plan will not be easy; however, it can be achieved. Since our plan remains focused on our customers, we've taken on some key additional challenges to enhance our plan and deliver an even better package. This April Submission commits us to:

- **Deliver better performance on pollutions, internal sewer flooding and supply interruptions, while stretching our leakage performance to reach the current target.**
- **Find a further £400 million in base cost efficiencies and £157 million in enhancement cost efficiencies.**
- **Remove the risk to customers from uncertainty about some costs – £175 million of uncertain costs have been removed into recovery mechanisms, with the option of a mechanism for a further £253 million.**
- **Agree a form of gearing sharing mechanism to incentivise de-gearing, while paying historically low dividends to shareholders.**
- **Reduce our average annual combined household bills by £5, equivalent to 1.3%, by 2024/25, in real terms.**

Clearly, these additional challenges will stretch us. If differences remain between our plan and Ofwat's assessment, we commit to work constructively with them to explain the merits of our April Submission.

Along with the changes we have made, we maintain our commitment to support improved water quality and resilience, including our ambitious lead pipe replacement programme, our catchment management programmes and investment in water production and distribution.

Our customers believe this is the right plan with 87% acceptability after testing the enhanced package with them.

Our shareholders, Board and executive team are committed to delivering this plan, a crucial stepping stone in the pursuit of our vision to be "Here for you, in a changing world".

Our strategic priorities are:

Deliver brilliant customer engagement to create lifelong advocacy

As active participants in the water cycle, it is essential our customers feel we are engaging with them in the right way, on their terms, and that we're making a positive connection in every interaction.

Invest in resilient systems and assets

Customers have told us they expect us to be more resilient in the future. Increasing and sustaining resilience requires us to take a long-term perspective on investment and operational performance across all cycles of the business.

Use data from customers, operations and the environment to make better decisions

To make smarter business decisions and deliver better customer outcomes, we will strengthen the principle of turning data into information and insight, to drive our actions, across all areas of our business.

Build a collaborative and capable team, dedicated to serving our customers

To deliver our vision for our customers, there are critical skillsets and characteristics we need to nurture and strengthen within our teams. We also need to work collaboratively with our supply partners and ensure alignment with our customer outcomes.

Protect and enhance the environment

We rely heavily on the environment for the provision of our services.

We are passionate about being responsible custodians of the water cycle and the environment.

Progress since September

Since September 2018, we have been busy implementing our plan to deliver more for our customers:

Improving customer interactions →

- The majority of our customers will be migrated to a new digital billing platform by the end of 2020.
- Launched in December 2018, with over 37,500 customers already transitioned, the system is simplifying how customers pay bills and register for our services.
- As part of the programme we've launched a new online platform to help customers transact more easily with us.

Step change in IT performance →

- As part of over £60 million investment in our IT infrastructure, we've now upgraded the network at key sites, including our head office and call centre, improving security and providing resilience.
- We migrated our mainframe from a physical box to a cloud based platform, providing additional capacity and resilience.
- IT stability and performance continues to show a marked year-on-year improvement and we continue to drive down the time it takes to restore services.

Better care for customers

- There has been a record increase in the number of customers we are helping with our social tariffs, increasing by over 20% between August 2018 and March 2019.
- We are now insourcing Local Housing Association customer relationships, giving direct line of sight to those customers. This enables us to be more proactive to ensure they are getting the help they need and are on a tariff appropriate to their financial circumstances.

More effective incident response

- The impact of recent extreme weather events on our network highlighted the urgent need for greater visibility of our operations in 'real-time'.
- We have real-time visibility of all our water systems, allowing us to see supply, demand, storage and predicted demand at 15 minute intervals. This is allowing us to respond better and ensure customers are kept in supply.
- We have secured a dedicated, bespoke water bottling capability which will deliver up to 1 million litres per day. To further improve resilience the plant is located outside the Thames Water region.
- As part of the upgrade to our incident management capability, we launched a new real-time incident viewer tool, which shows customer contacts, status of operational work, critical pressure points and bottled water stations during an incident.

'Smarter' blockage prevention

- We have now installed over 1,000 monitors on our sewer network that alert us when there is a potential blockage. These monitors enable more sophisticated network modelling, informing where we should focus sewer cleaning to prevent floods or pollution.
- We are in the process of developing a very low-cost sewer monitor and trials will begin shortly.

Focusing our approach to reducing leakage

- In November 2018 we set up a specialist, cross-functional Leakage Task Force to better understand our leakage performance and the most effective mitigation measures; such as using technology to improve detection and deploying CALM network technology.
- During the last two years, we've increased the number of crews dedicated to finding and fixing leaks by 75%.

Delivering better outcomes

Ofwat feedback

Ofwat's IAP challenged us to seek improvements across a range of performance commitments. Ofwat also challenged the financial incentives around key performance commitments to be more balanced and to provide greater protection for customers.

Our response

We are responding positively to the challenge of finding improved performance outcomes. Based on feedback from Ofwat, and work we have done since our submission in September, we have decided to stretch three performance commitments: pollutions, internal sewer flooding and supply interruptions. Further, we maintain our original leakage target despite our risk adjusted forecast for the end of this planning period being higher than our original assumption.

Pollutions

30%

reduction

Wastewater

Our performance is already better than average for **wastewater** outcomes. We recognise that our September plan fell short of the Environment Agency's ("EA") ambition to reduce pollutions. Therefore, we are challenging ourselves to find ways to **reduce pollutions by 30%** from 2019/20, to only 19.5 incidents per 10,000km of sewer by 2024/25, meeting the EA's expectation. This additional challenge would **take us to the upper quartile benchmark**.

We are also challenging ourselves to find ways to **reduce internal sewer flooding incidents by 20%**, to only 995 incidents by 2024/25. Using existing means, the additional cost of delivering these improved outcomes would have been £70 million; however, work we have done since September gives us a degree of confidence that we can meet these outcomes through innovation.

Internal sewer flooding

20%

reduction

- We are digitalising our network with low cost sensors to better understand "hotspot" areas and enable us to be more proactive in our maintenance – we plan to increase the number of sewer sensors up to 200,000 by 2025.
- This will allow us to improve our "virtual blockage" modelling capability to pinpoint areas for sewer cleaning.
- Use the data we have from this modelling to better target our "Bin it, don't block it" campaign.

Supply interruptions

20%

reduction

Water

We recognise that our water performance is below the industry average. Our London water pipes are over 70 years old, on average, which are the oldest in the country, which creates a unique challenge. Over the next 30 years, our ambition is to "replumb London" to ensure it has modern, world-class water infrastructure. We recognise the need to improve performance and over the last 18 months, we have continued to invest substantially. Therefore, we are challenging ourselves to find ways to **reduce supply interruptions by 20%** by 2024/25 to only 8 minutes 30 seconds per property, which is stretching in light of our legacy asset age. The main lever for the improving supply interruptions performance is the introduction of CALM network operations across our network.

There are two parts to this:

- Use our real-time data insight capability to identify pressure spikes and transients, which are more likely to cause bursts. This will allow us to improve network management and ensure the network operates within its design parameter more often.
- Install new technology across our network to ensure a "calmer" operation, such as variable speed drives which will reduce pressure spikes versus traditional fixed speed pumps.

Leakage

15%

reduction
(equivalent to 20% reduction from current 2019/2020 forecast)

We recognise the importance of reducing **leakage** from our ageing network. Our current leakage performance is not what we would like it to be, largely because of the extreme weather events in 2018. While we remain committed to the original 606 million litres per day target, we estimate that performance, on a risk adjusted basis, is more likely to be around 636Ml/d for 2019/20. This would still represent the best ever leakage performance in our history.

We have increased focus on our leakage activity since the submission of our September business plan. In November 2018, we set up a dedicated cross-functional Leakage Task Force to:

- Improve insight to understand why the network breaks, so we can be more proactive in preventing leaks.
- Make better use of new and existing data, to predict leaks and improve the accuracy of leakage detection.
- Ensure we maximise the productivity of our "find and fix" capability.
- Understand the implications of this level of "find and fix" on our network and whether it causes increased network deterioration.
- Accelerate the CALM networks programme to reduce pressure related bursts.

In our September Business Plan, we committed to a 2024/25 leakage target of 509 Ml/d. This represented a 15% reduction against our 2019/20 target. In spite of the challenges we have faced, we are committed to **maintain this ambition** in our AMP7 plan. This commitment is equivalent to a **20% leakage reduction over AMP7** from our current forecast for 2019/20.

Outcome Delivery Incentives

We have also set out a more balanced financial Outcome Delivery Incentive ("ODI") target exposure, by increasing focused incentives on the business. These changes have increased the upside return on regulated equity from +0.47% in our September Business Plan to +0.83% in our April Submission. The downside has remained unchanged at -1.53%.

While this April Submission forms a complete package of measures, we recognise the additional performance stretch, together with reduced budgets, can only increase delivery risk on our operation. While there are some remaining gaps between this April Submission and Ofwat's IAP modelling assessment, we have concerns about stretching the operation any further.

Addressing the cost challenge

Ofwat feedback

Ofwat's IAP challenged us to seek out further cost efficiencies. The regulator's initial assessment sought to reduce our total cost allowance (totex) by £2.3 billion, covering investment projects and our day-to-day running costs – in addition to the 13.6% average base cost efficiency per customer that we had already put into our September Business Plan[2].

Ofwat's initial assessment of reducing these budgets also gave no further allowances for meeting the extra stretch they sought on performance commitments.

Our response

In discussion with Ofwat, it is apparent that there is support for the majority of our investment programme, but that there is an expectation that we deliver it more efficiently.

Following this feedback, we have re-examined our projected expenditure to identify further efficiency opportunities beyond the 13.6% base cost reduction and the rigorous process we went through to validate an efficient capital maintenance and delivery programme.

We have categorised efficiency opportunities in to three areas:

i) Efficiency improvement;

ii) Deferring and descoping some projects; and

iii) Additional uncertainty mechanisms around less certain spend.

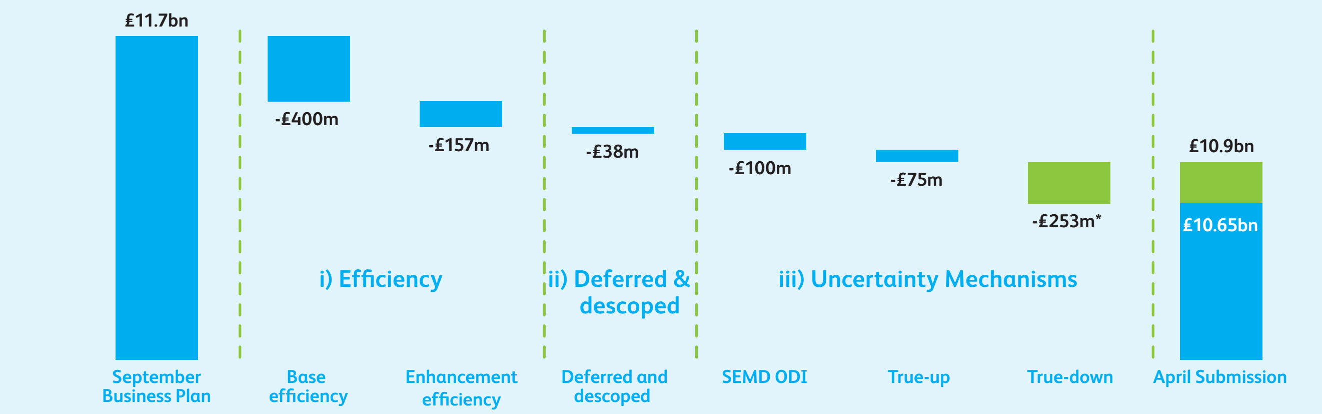
Average unit base opex reduction

22.5%
reduction per customer

Totex

£10.9 billion

Efficiency opportunities



* Retained in totex plan, but additional true down oversight mechanism.

2 Normalised for power and rates; measured per property, from AMP6 to AMP7.

Efficiency improvement

We believe we are able to reduce base costs by £400 million – £25 million in Retail, £187 million in Water and £187 million in Wastewater. This reduction is partially predicated on work that we have done since our September 2018 Business Plan; although this has yet to be locked in to firm plans, resulting in greater delivery uncertainty. However, we have listened to the feedback and are prepared to take the additional stretch challenge, by identifying more innovative ways of delivery and areas of efficiencies. The assumptions behind this reduction are:

- **Retail – £25 million:** Based on an acceleration of self-serve due to the implementation of Project Spring (our new customer billing platform) and the acceleration of our new web platform that offloads contact to lower cost, more effective channels.
- **Water – £187 million:** Based on reducing the quantum and cost of failure by applying our CALM network philosophy and rolling out a new digital work management platform to ensure maximum field productivity and minimal repeats.
- **Wastewater – £187 million:** Based on digitising our sewer network by rolling out low cost monitors and a more rapid expansion and exploitation of our Fieldworks Work Management platform (that has already been rolled out to all blockage engineers).

In addition we've identified £157 million of enhancement efficiency opportunities. These are:

- **£85 million efficiency challenge on our metering programme:** We have made several commercial and operational improvements over the last 12 months, since our original forecast was put together.
- **£20 million efficiency challenge on our Water Resource Management Plan (WRMP) programme:** A result of reviewing the activities already included in our botex programme alongside planned enhancement activities.
- **£20 million efficiency challenge on water network emerging growth projects:** The scope of some of our growth projects is as yet undefined and we have accepted an additional efficiency challenge using Ofwat's feeder model as a point of reference.
- **£32 million efficiency challenge on other activities:** Such as trunk mains monitoring, urban pollution management studies and our odour reduction programme.

Delivering this incremental efficiency, in addition to the 13.6% average unit base cost reduction we outlined in our September Business Plan, is a challenge and introduces additional risk in to our plan. We are currently working to finalise plans to ensure delivery of these stretching commitments.

Deferring and descoping some projects

We have deferred and descoped £38 million of enhancement programmes:

- Cancelled £5 million of solutions to reduce metaldehyde levels and £9 million of river flooding resilience.
- Deferred £24 million of spend on transferred private pumping stations and sewers into AMP8.

Uncertainty mechanisms

Over a number of spend items where there is uncertainty, we propose the following mechanisms:

- **Extra ODI:** In which allowances are only recovered if the external cost driver outturns:
  - SEMD: £100 million of spend, subject to Defra finalisation of the scope of work required.
- **True-up Uncertainty Mechanism:** In which allowances are only recovered if the external cost drivers outturn:
  - Business Rates: £75 million, which relates to the difference in assumptions between Ofwat's IAP and our plans.
- **True-down Uncertainty Mechanisms:** In which allowances are taken from the RCV, if an Ofwat gateway review concludes that the spend is unnecessary, given greater clarity at that point, funds are returned to customers:
  - *North East London resilience scheme:* £181 million for the first phase of a multi-decade investment into improve water supply resilience across London.
  - *National environment programme:* £72 million for a small number of atypical projects: sanitary parameters, phosphate, first time sewerage.

Strategic water resources: further, £151 million has been allocated by Ofwat for developing future water resources. Given the uncertainty, Ofwat has suggested a mechanism with gateways. The specific treatment of this item will be clarified through the remainder of the PR19 review.

Together with the cost efficiencies already included in our September Business Plan, this additional challenge **increases our average base cost efficiencies per customer from 13.6% to 22.5%** between AMP6 and AMP7. On a like-for-like basis, our April Submission reduces totex to £10.9 billion from £11.7 billion in the September Business Plan.

While this April Submission forms a complete package of measures, we recognise the additional performance stretch, together with reduced budgets, can only increase delivery risk on our operation. While there are some remaining gaps between this April Submission and Ofwat's IAP modelling assessment, we have concerns about stretching the operation any further.

Balancing a fair risk and return

Ofwat feedback

Ofwat's IAP challenged us to find greater balance in our plan. Specifically, Ofwat has asked the industry to share with customers the benefits it perceives from higher gearing. The regulator also challenged our distributions and executive pay policies.

Our response

We are responding positively to the challenge of finding extra balance in our plans. We are committed to being a responsible company for our customers.

Governance

We have already taken measures to meet the challenge on our governance arrangements. We have appointed three Independent Non-Executive Directors to our Board since September 2018. Our Board now consists of a majority of independent Directors and we have a more diverse Board with a broader range of skillsets than in the past.

Over the last 12 months, we have made considerable progress improving the governance of our Company. We have updated the matters reserved for shareholders and in February 2019, we completed the closure of our Cayman Island subsidiaries, which were a legacy from previous shareholders.

Distributions policy

After three consecutive years of no dividends to external shareholders during AMP6, our shareholders are supportive of the Board's decision to distribute minimal dividends during AMP7, in effect re-investing equity returns back into building operational and financial resilience into the business. However, it is important to ensure the interests of shareholders and management are aligned with our customers, so that investment and the performance of our future operations are appropriately incentivised. Therefore, we have clarified our approach to distributions, taking into account the principles promoted by "Back in Balance".

Executive pay

We are committed to meeting the "Back in Balance" expectations for executive pay. Therefore, we have revised our executive pay policy, to align management remuneration with customer outcomes, which are at the heart of our plans. We have also committed to greater governance oversight over remuneration, together with increased transparency.

Financial transparency

We want to continue to simplify our corporate structure, thereby increasing financial transparency. We are prioritising the repayment of our £1.97 billion intercompany loan (between TWUL and its immediate holding company) and reducing gearing. In April 2019, we will be de-gearing and reducing the intercompany loan by £250 million[3] and we plan a further £600 million reduction by end of AMP7. Subject to investor appetite and market conditions, we will explore the possibilities of stretching our de-gearing beyond these planned levels. In the event this is realised, this could potentially allow us to make even more significant reductions in the level of the intercompany loan.

Fair return

Ofwat will be assessing the appropriate fair returns for shareholders. This April Submission provides market based evidence to support this work. The evidence shows that the industry weighted average cost of capital is around 2.7% (real, RPI-stripped) for the appointed business. However, ahead of Ofwat's analysis, we continue to use the regulator's early view rate of 2.4% in our plans.

Gearing sharing mechanism (GSM)

Finally, while we have challenged the theoretical basis for creating a mechanism for gearing outperformance sharing, if Ofwat intends to apply a mechanism, this April Submission incorporates and recommends a progressive tiered gearing sharing mechanism. This is aimed at incentivising de-gearing in the interests of customers, through marginal penalty rates. We would like to engage with Ofwat to discuss this area and how our tiered GSM recommendation could work in practice.

3 We plan on injecting £250 million of cash into the business of which c. £220 million is expected to paid down the principal of the intercompany loan, the remaining will be used to repay the accrued interest associated with the intercompany loan.

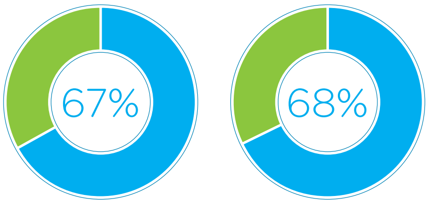
A fair package for customers

Priority services register (Number of customers benefitting)

410,000

(Ofwat's benchmark of 7%)

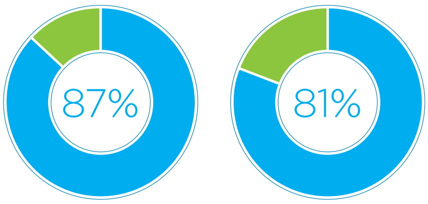
September



customers say it's acceptable

customers say it's affordable

April



customers say it's acceptable

customers say it's affordable

Average annual combined household bills

£5 or 1.3% reduction by the end of AMP7 2024/25 in real terms; Flat average household bills in AMP8

Customer feedback

Since September we have continued to engage with our customers to help improve customer service and to inform our April Submission, collecting feedback from around a further 182,000 customers. We have asked them about some key aspects of our business – including the WRMP, water supply resilience in North East London, drought resilience and protecting chalk streams, and on PCs and ODIs. We are pleased that a significant majority of customers support our April Submission positions for AMP7 (87% acceptable, 81% affordable) and for AMP8 (86% acceptable, 84% affordable). This compares favourably to the testing of our September Business Plan, where customers found our AMP7 plan to be acceptable (67%) and affordable (68%); while our AMP8 was found to be acceptable (60%) and affordable (60%). Our customer engagement and how we have reflected the findings in our Submission have been reviewed and challenged by our CCG.

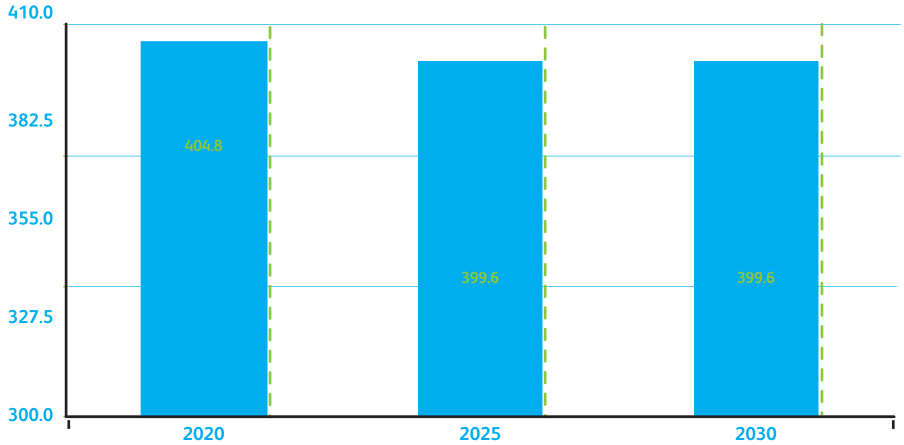
Helping customers and reducing bills

While we appreciated the recognition of our work for customers in the most financially vulnerable circumstances, we want to go further. Therefore in this April Submission, we commit to **increasing the number of customers on our priority services register to 410,000, meeting Ofwat's expectations** – this is over seven times the 57,000 customers who benefited in March 2018. In addition, we will continue to offer our social tariff to at least 200,000 households, which is over four times
the 49,000 households that benefited in March 2018. We will achieve this through collaboration with utility and third sector partners, as well as employee advocacy and direct marketing.

Our September Business Plan balanced investment in our future operation with no increase in average combined household bills from the end of AMP6. We have listened to Ofwat's feedback and have taken on additional cost, performance and risk/return balance challenges. We want to reflect this challenge through **reducing the annual average combined household bills paid by our customers by £5 or 1.3%**, by the end of 2024/25, in real terms.

Further, through careful analysis of our longer term plans, we expect there will be **no increase in annual average combined household bills in real terms for the following five-year period, up until 2029/30**; this is compared with an increase in AMP8 bills projected in the September Business Plan, as shown below.

Reduction in Thames Water bills over the next ten years[4]



4 Represents our current forecast of annual average combined household bills (pre-rebate) for AMP8, in 2019/20 prices, subject to PR24 regulatory review.

Delivering our plan

We are committed to investing in our business and infrastructure to improve the service we give to our customers. Since submitting our September Business Plan, we have already started its delivery and over the last few months have further enhanced performance and improved efficiency.

In this April Submission, we have responded to Ofwat's IAP challenges, as well as those of our customers and other stakeholders. This has led to us proposing a plan with even more ambitious performance outcomes, while bearing down on totex. Together with the efficiencies already in the September Business Plan, the additional commitments in this April Submission represent **a substantial efficiency challenge**. Inevitably, there is an increase in delivery risk associated with this package, however we are fully committed to delivering the right service for our customers.

Given the step up in investment, Ofwat is correctly scrutinising our plan to make sure it is in customers' interests. 87% of customers support our plan. We believe this is the right plan for our customers, our shareholders, the environment and the region, and while the plan is extremely stretching, we have confidence that we can deliver it. We look forward to engaging with Ofwat and other stakeholders over the coming months to finalise the plan and build a better future for all of our customers.