Annual Performance Report 2020
Anglian Water Services Limited

2020

love every drop.

anglianwater

Introduction

Annual Performance Report and required regulatory information

In accordance with Ofwat guidance, we present over the following pages the Annual Performance Report (APR), for the year ended 31 March 2020. This provides specific and transparent information on progress on delivery of customer outcomes, service levels, costs and financial and environmental performance. The APR is prepared to comply with Condition F of the Instrument of Appointment of Anglian Water Services Limited as a water and sewerage undertaker under the Water Industry Act 1991. Additional commentary on our Outcome Delivery Incentive achievements is explained in the Strategic Report in our separately published Annual Integrated Report, which can be found on our website: www.anglianwater.co.uk.

A full list of Ofwat's disclosure requirements is set out in the section called Ofwat disclosures.

The APR performance tables fall into the following four categories:

1. Regulatory financial reporting
2. Price control and additional segmental reporting
3. Outcome performance summary
4. Additional regulatory information.

Commentary has been included beneath the APR tables to explain significant year on year variances in performance, and to highlight assumptions where appropriate. The subheadings in the commentary refer to the APR table line numbers to aid navigation when reading the spreadsheet version of the APR.

In addition to the above, this report includes the data assurance summary which demonstrates the process carried out by Anglian Water Services to evidence that information provided is reliable.

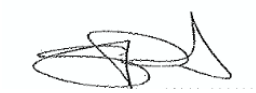
At the end of the report are the Independent Auditors' Report and our External Assurance Report.

The APR is prepared in accordance with the Regulatory Accounting Guidelines (RAGs) issued by Ofwat, which are based on International Financial Reporting Standards (IFRSs). There are differences between IFRSs and the RAGs and where there is a conflict, the RAGs take precedence.

In this report, Anglian Water Services Limited is also referred to as Anglian Water, AWS or the Company.

The Annual Performance Report was approved by the Board of Directors on 13 July 2020 and was signed on their behalf by:

Peter Simpson
Chief Executive



Steve Buck
Chief Financial Officer

Key Messages

Financial performance

- Strong performance drives a projected total of £59.3 million of outperformance payments for AMP6 (2015-2020), based on 2019/20 prices, with £9.5 million of rewards expected for 2019/20. Fifteen years of upper quartile service delivery have culminated in Anglian Water being ranked by Ofwat as top-performing water and water recycling company in its 2019 service delivery report, ending the AMP ranked top of Ofwat's Service Incentive Mechanism, based on ratings from customers, and as reigning Water Company of the Year - see table 3A.

- Appointed revenue for the year was £1,308.6 million, an increase of £48.7 million (3.9 per cent) on 2018/19 – see table 1A.

- Appointed operating profit was £311.9 million, down 1.9 per cent on the previous year (reflecting increased operating costs in the year, including the increase in the bad debt charge of £14.0 million largely as a result of Covid-19, and higher depreciation, partially offset by increased revenue) – see table 1A.

- Cash generated from appointed operations was £678.4 million, down £14.3 million on last year, reflecting the reduction in cash collection from non-household retailers as a result of the agreement to defer 50 per cent of the March invoice– see table 1D.

- The dividend paid was marginally down on prior year. Based on the available free cash flow there was capacity to pay a further dividend of £192 million. However, the Directors have not proposed to pay a final dividend in line with their de-gearing target. This decision to retain £192 million, follows on from the previous £165 million shareholder investment into the resilience of the Company. Both of these decisions reduced shareholders' returns in AMP6 for the benefit of the Company.

- A total of £876 million of Green Bond funding has been secured to date to fund around 850 capital projects, with £51 million of bonds issued in 2019/20.

- Totex efficiencies were delivered as a direct result of continued focus on innovation and ground-breaking approach to capital delivery alliances – see table 4B.

- Table 1F shows the financial flows of the business on a notional and actual gearing basis. It can be seen that over the AMP returns to shareholders have been driven by strong operational performance and that, rather than taking as dividends, a large proportion has been retained within the business. In summary table 1F demonstrates:

    - Exceptional totex outperformance generated a return of 2.48% which would have been even higher had the shareholders decided not to reinvest £165m into resilience of the company.

    - Average dividend of 6.15% means that in addition to the £165m reinvestment, 4.52% has been retained in the business compared to 3.77% expected by Ofwat.

    - 1.74% financing outperformance (gearing and cost of debt) driven by our Aligned Debt structure allowing us to raise debt at competitive rates.

    - Tax underperformance as a result of the introduction of new revenue standard creating a transitional tax charge not allowed funded by the PR14 Determination.

Responding to Covid-19

- On 23 March 2020 the government laid out a series of measures, to apply with immediate effect, in response to the global pandemic caused by the coronavirus Covid-19. The purpose of the measures was to significantly reduce movement of and close interaction between individuals to reduce the rate of viral transmission. All workers who were able to were instructed to work from home. For Anglian Water, this meant the majority of its office-base staff moved to immediate home working and changes to operational practices were introduced for field-based staff. Some operations, including meter reading, intrusive leakage work and water quality sampling at customer properties, were suspended. Due to the restrictions imposed, we pushed back commencement of major capital programmes for Smart Metering and the Strategic Pipeline. In addition the Company introduced the following initiatives:

Positive Difference Fund

- The Company has accelerated plans for a shareholder-funded £1 million Positive Difference Fund, which doubles the £1 million already available through the Anglian Water Assistance Fund.

- The fund is being distributed through a locally appointed partner which has expertise in getting money quickly to areas in which it is most needed. Organisations such as food banks, outreach programmes and those helping the most vulnerable will all be supported across our region. Half of the fund has immediately been made available to support community organisations on the front line of the battle against Covid-19, with the remainder released to meet emerging needs later in the year.

Supporting customers, employees and supply chain partners

- Anglian Water has continued to deliver its vital service to customers throughout the Covid-19 outbreak, while supporting its colleagues to work safely. The Company has offered an extensive package of support to customers in financial difficulty, including payment holidays, tariff schemes, affordable instalment plans and settlement agreements. To avoid placing customers in additional financial distress we temporarily suspended all doorstep collection visits, use of debt collection agencies and court enforcement actions. As well as this we are signposting customers to an extensive range of affordability measures, income benefit channels and relevant external charities and help organisations. Employees in financial difficulty are being supported via an Employee Assistance Fund, financed separately from the business.

- Some 3,000 employees have been transferred to home working, while clear safeguards have been put in place for those carrying out critical and essential tasks in the community and at our sites. Steps have also been taken to support the supply chain, including reducing the time taken to pay suppliers, advising small and medium suppliers and issuing key worker permits.

Financial impacts and liquidity

- In the early stages of the pandemic, we worked with PwC and a number of other water companies to forecast the potential financial impacts of Covid-19 on the water industry. This work supported early and positive engagement with Ofwat in this area.

- The Company has modelled a range of risks associated with the disruption caused by Covid-19, including potential reductions in revenue collection and cost shocks. The business has significant cash balances, including deposits of £1,048 million, following the drawdown of £600 million of liquidity facilities and access to a further £400 million if required. This drawdown is expected to provide an adequate buffer to ensure payments can be met as they fall due.

Safe, clean water

The delivery of safe, clean, high-quality drinking water is central to what Anglian Water does. This is why we are pleased to report that our results in the Drinking Water Inspectorate (DWI) Chief Inspector's Report for 2019 show us to be one of the leading companies in this area. This was our best ever year for Water Quality performance measures and we have performed better than industry averages for all key Water Quality measures.

- We have had another year of continued improved performance against the Compliance Risk Index (CRI) with our 2019 score of 1.75 (industry average for 2019 was 2.87). This is a new headline measure for drinking water quality performance introduced by the Drinking Water Inspectorate (DWI). Our score for 2019 places us as the third best water and sewerage company.
- Another key new measure is Event Risk Index (ERI) which looks at not only the severity of the event but also the actions taken by the company in response to the event. Again, we have excellent performance in this area with our 2019 ERI score of 8.28 for 2019 (industry average of 723 in 2019). Our score for 2019 places us as the second best water and sewerage company.
- The number of contacts received from customers about the appearance or taste and odour of their water has again dropped to our lowest ever level in 2019 of 1.15 contacts per thousand customers (industry average for 2019 1.2 contacts per thousand customers). This is due to our continued focus on distribution maintenance, proactive customer messaging through social media and prompt response to small number of contacts in a geographical area. Again our score for 2019 places us as the second best water and sewerage company.

Significant rainfall events

The 2019/20 reporting year has seen three distinct periods of significant rainfall. Each has differed in duration and intensity, but all have reflected significantly above average levels of rainfall.

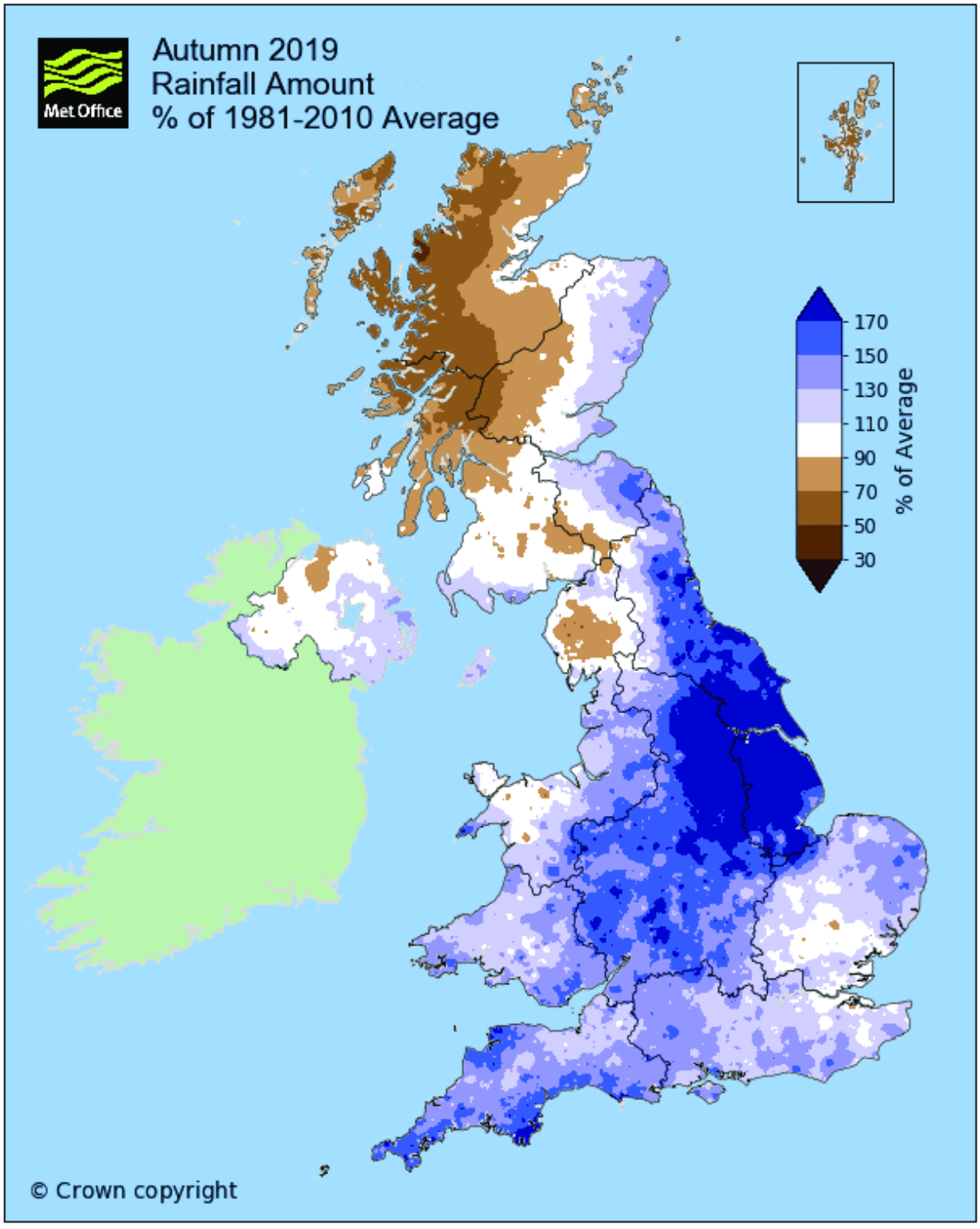
- In mid-June 2019 the UK experienced a spell of very wet weather as a low pressure system and associated fronts brought widespread and slow moving heavy rainfall. In parts of Lincolnshire around 2.5 times the monthly average rainfall fell from 10 to 12 June.

- The worst affected area was Lincolnshire, with around 600 homes in Wainfleet evacuated and nearly 130 properties flooded when the River Steeping burst its banks.

- It was during this period of rainfall that bathing water quality samples were taken by the Environment Agency on two consecutive days at Cleethorpes, Humberston Fitties and Ingoldmells. As a result these bathing waters declined from 'Excellent' to 'Good' in 2019.

- The Autumn (September to November) of 2019 saw significant flooding across parts of the Anglian region after days of prolonged rainfall.

- Autumn rainfall records were broken for parts of the UK with previous records set in 2000, as a whole England had its fifth wettest Autumn with 348mm.



- Rainfall in February was the highest on record for both England and the UK as a whole. Although most parts of our region were spared the worst of this rainfall, parts of Lincolnshire received over 350% of the average monthly rainfall for February compared to the period 1981-2010.
- For the East Anglian region the annual rainfall was above the average for 1981-2010 period at 678mm compared to 623mm.
- The intense rainfall caused problems, increasing incidents of pollution and flooding as well as affecting Bathing Water results. It also had benefits and helped to restore water resources levels, which had been low before the rain arrived.

ODI performance – see table 3A

In 2019/20 we have earned a net reward for ODIs of £9.5m (2019/20 prices). This brings the total reward for AMP6 to £59.3m.

The rewards this year came for performance in eight ODIs: leakage, low pressure, water quality contacts, pollution incidents, internal sewer flooding, Service Incentive Mechanism (SIM) and the two of the customer perception ODIs. This has been offset by incurred penalties for performance against six ODIs: supply interruptions, bathing waters, per property consumption, water infrastructure serviceability and two of the customer perception ODIs.

Performance highlights include:

- We beat our leakage target for the ninth year running.
- We recorded the fewest ever number of contacts from customers about the taste, odour and appearance of their drinking water (1.15 per thousand customers).
- We achieved our 2020 carbon reduction targets, setting us on the right road to reach net zero by 2030.
- We have reduced the amount of homes supplied by a single source from 46.9 per cent in 2015 to 24.1 per cent in 2020. This includes the commissioning of our Grafham resilience scheme, which provides resilience for over 600,000 customers served by the Water Treatment Works,
- We were the top water and water recycling company for Ofwat's Service Incentive Mechanism for customer service across AMP6 (2015-2020).
- We completed all of our regulatory obligations for our Environmental Compliance ODIs. This includes the scheme at Heigham near Norwich, which provides extra capacity for abstraction from the River Wensum and allows us to reduce abstraction elsewhere and to protect more sensitive sections of the river.

December 2019 saw a significant interruption to supply event in Leighton, Buckinghamshire, which affected 17,997 properties for over 24 hours, contributing 12 minutes 40 seconds to the 2019/20 score. This interruption proved very complex to manage and verify, largely due to the number of District Metered Areas and population size affected. The total time lost due to interruptions per property in 2019/20 is 18 minutes 39 seconds (2018/19: 8 minutes 44 seconds). The score without the 'one off' Leighton event would have been 5 minutes and 59 seconds for 2019/20.

Planning for the future

- We received our Final Determination of price controls for the 2020/25 period in December 2019.
- In February our Board asked Ofwat to refer the determination to the Competition and Markets Authority for their re-determination.
- In March 2020 Ofwat referred the disputed determination to the CMA and the re-determination process started.
- The CMA aims to complete its re-determination by December 2020, with a statutory deadline of March 2021. We will reflect the CMA-determined price controls in bills from April 2021/22.

Recognition for excellent all-round performance

- We were awarded the Queen's award for Enterprise: Sustainable Development for the second time.
- We were ranked as the number one company for service delivery 2018/19 in Ofwat's Service Delivery Report.
- We were named as the best place to work in 2019 by Glassdoor.

Protecting and enhancing our environment

- We committed to biodiversity net gain for capital investment and land management activities.
- We facilitated important research on nightingales with the British Trust for Ornithology.
- Our RiverCare and BeachCare programme has established over 50 volunteer groups looking after stretches of river and beach across our region.
- We have prevented 168 possible pollution events by upgrading our alarm response system enabling us to take a proactive approach to pollution prevention.

Board Statement of Company Direction and Performance

This statement explains how the Board of Anglian Water Services Ltd (the Company) sets the long-term ambitions of the Company, to meet the significant challenges facing the business and the region it serves, and its performance against targets in pursuit of these ambitions.

It also explains how customers' and stakeholders' views are an integral part of setting these ambitions within our long-term strategic ambitions and Business Plan, ensuring the Company delivers for everyone it serves.

Finally, it describes how management rewards and changes to the Company's structure and financing are designed to support an efficient, sustainable and effective business, improving transparency, trust and confidence in the Company and the wider industry.

Operating environment

Climate change, population and housing growth and the need to protect and enhance the natural environment are all particularly acute issues in our region, where they combine to pose a unique challenge.

Ours is the driest region in the UK. Water resources are already scarce, and climate change could reduce them further. At the same time we face the threat of more frequent flooding in this low-lying part of the country. We serve three of the five fastest-growing cities in the UK and the region's population could increase by up to a million in the next 25 years.

This year, these challenges have been compounded by the onset of the Covid-19 pandemic, which is testing the resilience of every company and nation in the world, and which is likely to have long-term impacts which are, as yet, not fully understood. Throughout the crisis we have kept water flowing to our customers, while seeking to protect and support our employees and to offer help and advice, as we have always done, to customers in financial difficulties (see Covid-19, below).

We must also acknowledge the significant financial challenge we face in delivering our Business Plan for 2020-2025. We did not accept the Final Determination set by Ofwat in December 2019 and asked it to instigate a redetermination process which is currently ongoing with the Competition and Markets Authority. Our reasons for doing so are set out in our Statement of Case, submitted in April 2020.

In the face of all these challenges, it is critical that we continue to deliver an excellent service for our customers, who number close to seven million across the East of England and Hartlepool, while working to fulfil our Purpose: to bring social and environmental prosperity to the region we serve. In doing so we must ensure that we keep our services affordable and support the vulnerable.

Covid-19

As in every other organisation, the first few months of 2020 has brought one of the most challenging business continuity incidents in our history. A pandemic is recognised as the highest risk the UK faces on the national risk register published by the government. We use the National Risk Assessment to inform our planning and have robust plans and processes in place ready to respond to incidents such as these.

As the impacts and situation of the coronavirus pandemic began to escalate, we rapidly implemented our contingency plans to ensure we could continue to deliver uninterrupted supply, as well as supporting customers with concerns relating to vulnerability and affordability.

Our frontline staff have continued throughout the lockdown period to complete the critical and emergency work needed in the community to keep the network flowing, while observing social distancing. The vast majority of our 3,000 office-based staff have been moved to

working from home. This involved a large-scale logistical operation from mid-March to transfer more than 70 per cent of our contact centre teams to home working, with the remainder working in remote parts of our near-empty offices.

A particular priority has been to make sure that those who need to speak to us are able to do so, especially those needing extra help, those who are self-isolating and those in a vulnerable situation. We have offered a wide range of support and advice to customers who may be worried about household bills, ranging from special tariffs to short-term support, forgiveness schemes, payment 'holidays', instalment plans and settlement agreements. All of this support was already in place before the crisis; however, we have also updated our ExtraCare assessments, which help customers understand all the benefits they may be entitled to, in order to help people navigate the new financial support being offered by the Government. Our new ExtraCare teams, launched in June 2019, have signposted customers to an extensive range of affordability measures, income benefit channels and relevant external charities and help organisations.

Communications have formed a key element of our response to the pandemic, with a coronavirus hub on our website, targeted emails sent to registered customers, regular social media updates and outreach via non-digital channels to ensure we reach customers who may not be regular internet users with information and advice, including how to access our Priority Services Register.

In April we launched the £1 million Anglian Water Positive Difference Fund, funded by our shareholders, to support our communities through this challenging time. The fund is being distributed through a locally appointed partner which has expertise in getting money quickly to areas in which it is most needed. Organisations like food banks, outreach programmes and those helping the most vulnerable will all be supported across our region. Half of the fund has immediately been made available to support community organisations on the front line of the battle against coronavirus, with the remainder released to meet emerging needs later in the year.

Through our regional leadership of Business in the Community (BITC) we were also instrumental in setting up the National Business Resilience Network, a virtual notice board that promotes a brokerage service between BITC members and organisations within our community that needed help.

Our support for our customers and our communities will continue as we begin to emerge from the crisis.

Anglian Water's aspirations

Our ultimate goal is to fulfil our Purpose as set out above.

To that end, the Board's aim is to ensure the effective delivery of the Company's Love Every Drop strategy, rooted in finding solutions to the challenges our region faces whilst providing safe, clean drinking water, protecting our environment and delivering world-class customer service. The strategy has forged an efficient, sustainable, responsible business that has delivered frontier performance on bills, leakage, carbon reduction and demand management.

In 2017 we updated our 25-year Strategic Direction Statement (SDS), first published in 2007. The process was informed by in-depth discussions with more than 1,300 household customers and nearly 500 non-household customers. Our online community gave us an 'advisory board' made up of engaged customers with whom we could talk in depth about their needs and our plans.

Our revised SDS set out four long-term ambitions for us and our region:

- Make the East of England resilient to the risks of drought and flooding
- Enable sustainable economic and housing growth

- Be a carbon neutral business by 2050
- Work with others to achieve significant improvement in ecological quality across our catchments.

Since revising the SDS, we have led the industry in setting a target to achieve net zero carbon emissions by 2030, and beaten our own ambitious carbon targets for 2020.

Revising our SDS is just one aspect of an on-going programme of engagement with all stakeholders across the region. This programme informs not only our long-term ambitions, but also our 10 Outcomes and the Performance Commitments (with linked Outcome Delivery Incentives) that we use to measure our progress towards them.

During the past year we published our final 2019 Water Resources Management Plan (WRMP), having undertaken public consultation in 2018. This plan sets out how we will manage the water supplies in our region to meet current and future needs over a minimum of 25 years. We will focus on demand for water in the first instance, to reduce the amount used, which is our customers' preferred priority, and we will also invest in the supply side, via ambitious measures including the creation of up to 500km of interconnecting pipelines across our region, to maintain the amount of water available.

We also published our latest Drought Plan, which sets out how we will safeguard public water supplies during extended periods of low rainfall, and what we will do to minimise any potential environmental impacts that may arise as a result.

Alongside plans for water resources management, we are focusing attention on long term planning for water recycling. In 2018, we published our first Water Recycling Long-Term Plan (WRLTP). Endorsed by a wide range of stakeholders, it was the industry's first long-term plan to manage the supply of water recycling services and is equivalent to the Water Resources Management Plan.

The WRLTP is due to be replaced by our first Drainage and Wastewater Management Plan (DWMP) – the new industry-standard way for organisations to work together to improve drainage and environmental water quality.

To be published in 2022, the DWMP will be our next phase in long-term planning, covering the period 2025-2050. The framework puts emphasis on strong co-creation to ensure the plan joins up the approach and considers all risks from growth, climate change and customer behaviours. The first step, begun this year, is to agree with all stakeholders what measures the DWMP will focus on in the form of a Strategic Context.

This year we also became the first company to publish a Climate Change Adaptation Report in response to the third round of reporting under the Climate Change Act (2008), doing so in draft form to enable a wide range of stakeholders to review and help to shape our plans. The report, which will be submitted to the UK Government, describes our climate-related risks and the steps we are taking to deliver sustainable adaptation action through innovation, collaboration, investment and education. These steps will be more critical than ever as we seek to build a stronger, more resilient future in the wake of Covid-19.

We are also working with the multi-sector Water Resources East network which we set up in 2014, and which now operates as an independent company, to create a blueprint for the future of the Fens – an area rich in agriculture and biodiversity yet challenged with significant social deprivation and at risk from a changing climate. We believe one coherent plan can concurrently address these challenges.

Our Business Plan for 2020-25 built on customer engagement that indicates a clear desire for us to take action to increase resilience to the challenges of climate change and population growth now, rather than to wait.

It proposed a record £6.5 billion investment programme to drive resilience, protect and enhance the environment and support sustainable growth, while maintaining affordability.

As set out above, the Plan is currently subject to a redetermination by the Competition and Markets Authority, due to be completed by March 2021. In the intervening period, we will operate within the budget set by Ofwat in its Final Determination for the first year of the AMP.

Embedding customer and stakeholder engagement

Our Business Plan for 2020-2025 was written following the most extensive engagement we have ever had with customers – no fewer than half a million customer interactions, ten times more than for our previous business plan. This engagement shaped our plan like never before, eschewing traditional consultations for on-going dialogue, ensuring rapid response to changing customer expectations.

However, our engagement with customers and communities goes far beyond our Business Plan. It is fundamental to the development of our strategies and plans, as well as shaping the day-to-day delivery of our service.

Our Customer Engagement Forum was set up in 2011, and has an ongoing role which involves challenging us on how we engage with customers and monitoring performance in relation to commitments made to customers. Its members come from a wide range of backgrounds to represent the interests of household and business customers, communities, the environment and the economy. We engage weekly with an online community of 500 customers, asking their views on a wide range of topics. We also have a Customer Board, running alongside the CEF, which comprises a representative selection of members from the online community to provide further guidance and directly feed in customers' views, running alongside the CEF.

Company performance

Anglian Water has delivered a decade of first class performance, most notably in leakage reduction, customer service and sustainability. Our approach – to innovate, learn and share – has again seen us pushing the frontier for the whole industry, while enabling the continued growth and prosperity of the region.

We have already:

- Reduced leakage by a third since privatisation to reach industry-leading levels, with the water lost per kilometre of pipe at half the national average
- Kept the amount of water we supply every day at 1989 levels, despite supplying an extra 600,000 properties – the equivalent of saving 170 litres per property
- Cut our capital carbon emissions by 61 per cent on 2010 levels and reduced operational carbon emissions by 34 per cent in comparison to the 2014/15 baseline. This has driven innovation and efficiencies that feed into lower bills
- Increased bills by just 20p for every extra £1 charged by other companies since privatisation. Our bills have fallen around 10 per cent in the last five years – twice the industry average – in part due to efficiencies we have shared with customers.

Alongside planning for the future, we maintained focus on delivering our Business Plan for AMP6, 2015-20, based around ten outcomes which cover the issues that matter most to our customers.

As described in detail in our 2020 Annual Integrated Report (AIR), in the concluding year of the AMP we have made tangible progress towards delivering these outcomes.

We were ranked as the top-performing water and water recycling company in Ofwat's Service Delivery Report in 2019, scoring in the top 25 per cent of companies for seven out of the 10 measures. We were also named number one for customer service based on Ofwat's

qualitative measures in the Service Incentive Mechanism (SIM) measure for water companies for the year ended 31 March 2019. This builds on almost two decades of consistent upper-quartile service performance and makes us number one across the AMP.

We also continued pushing our leakage performance even further, beating our regulatory leakage target for the ninth year running. Customer contacts regarding drinking water quality are at best-ever levels.

This excellent all-round performance was recognised when Anglian Water was named Water Company of the Year in 2019 at the Water Industry Awards.

Continually delivering this leading performance relies on the passion and dedication of our people. We work hard to create a culture where our colleagues feel supported and valued, recognised in 2019 by Glassdoor naming us as the best place to work in the UK – a particularly welcome award as it is voted for by the people who know Anglian Water best: our employees.

The safety and wellbeing of our employees is of paramount importance. This year our approach was recognised again by the Royal Society for the Prevention of Accidents (RoSPA) with a 'Gold' Health and Safety award, the 16th consecutive year we have been recognised by RoSPA. We were also the first UK water company to be awarded the ISO 45001 standard for health and safety.

In 2017, Anglian Water became the first European utility to issue a Sterling Green Bond; we have since issued a further five Green Bonds worth a total of £876 million to fund around 850 projects.

We also publish details of our performance against our outcomes on our website: https://www.anglianwater.co.uk/about-us/our-reports/

Overall, we have performed strongly across a wide range of our performance commitments in AMP6. In the first four years of the AMP (with data for other companies not available at present), we have earned the second highest amount of reward for our performance.

In 2019/20 we have earned outperformance payments for performance in eight ODIs: leakage, properties at risk of persistent low pressure, water quality contacts, pollution incidents, internal sewer flooding, fairness of bills perception, affordability perception and the Service Incentive Mechanism. We have also attracted penalties for six ODIs: interruptions to supply, water infrastructure serviceability, value for money perception - water, value for money perception - wastewater, per household consumption and bathing water quality.

We have ended the AMP with 12 out of 13 Serviceability measures within the allowable limits and only three other measures were outside their limits on one occasion in the rest of the five-year period.

Reaching beyond regulatory compliance and performance targets

Company performance reaches far beyond regulatory compliance and meeting targets. We are proud to be a purpose-led business rooted in long-term sustainable ambitions, continually examining our impact on the communities we serve.

We have been at the heart of leading this approach across the industry and became the first major utility to enshrine public interest into the fabric of our company constitution, when we amended our Articles of Association in July 2019. By doing so we have ensured that consideration for our customer, communities and the environment will always sit alongside the need to deliver fair returns for our shareholders. This change underlines our commitment to deliver a sustainable future for the East of England.

We are also playing a leading role in driving forward the water industry's five shared goals through the Public Interest Commitment made in April 2019. Our CEO Peter Simpson is co-sponsor of the leakage and net zero carbon goals – areas on which Anglian Water's track record is particularly strong.

Our approach to sustainability was recognised in April 2020 by the award, for a second time, of the Queen's Award for Enterprise: Sustainable Development. We will hold the award for the next five years, to 2025 – a hallmark of confidence at the highest level in our long-term commitment to sustainable working practices across our whole business and supply chain.

The relationship between financial performance, executive rewards and delivery of services

The Board is committed to implementing the recommendations included in the 'Back in Balance' paper and in Ofwat's Board Leadership Transparency and Governance ('BLTG') Principles which were published in January 2019. In fact, the Board was keen to adopt more stretching corporate governance requirements and has adopted the Anglian Water Services Corporate Governance Code 2019 which incorporates both Ofwat's BLTG Principles and the majority of provisions of the 2018 UK Corporate Governance Code.

We take our responsibility as a monopoly supplier of water and water recycling in the Anglian Region very seriously, going beyond the required disclosure to demonstrate that our executives are rewarded for delivering outcomes that directly benefit our customers.

A significant proportion of director and senior management reward is based on performance against demanding targets. For the 2020/2021 performance year, Deferred Bonus Plan Awards will incorporate three measures that take account of regulatory targets:

- Customer satisfaction: CMeX and DMeX.
- Customer delivery: a small number of ODIs that reflect the priorities determined by our customers to be the most important.
- Customer efficiency: a measure of financial efficiency shared with customers.

We have continued increasing our transparency on remuneration, including publishing the ratio of CEO pay to median company pay. The Remuneration Committee has also made sure that all variable reward is aligned to the outcomes that reflect customers' priorities. This means that our executives must deliver extremely stretching outcomes set out in our Business Plan to receive any maximum rewards in our bonus scheme. More details of how the Board is rewarded for achieving targets are set out in the Remuneration Report, contained in the AIR.

As part of its PR19 process Ofwat has introduced a mechanism which penalises more highly geared companies (such as Anglian Water) and therefore provides these companies with an incentive to reduce their level of gearing. Anglian Water is challenging this mechanism as part of its case with the CMA. The company's approach to de-gearing will be reviewed in the light of the CMA's decision which is expected by December 2020 with a statutory deadline of March 2021.

Assurance

This Board Statement forms part of our APR and, as such, falls within the scope of our Independent Auditors' Report.

Our Data Assurance Summary, also included within the APR, describes how we ensure that the information we report is accurate, clear and transparent. It includes the assurance that the Board has received on performance and compliance for 2019/20.

This Board statement was approved by the Board of Directors on 13 July 2020 and signed on its behalf by Claire Russell, Company Secretary.

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Claire Russell

Company Secretary

Dated 13 July 2020

Risk and Compliance Statement

As the Board of Anglian Water Services, we confirm the following:

- We have sufficient understanding of our obligations as set out in the Water Industry Act and our licence ('our Obligations').
- We are satisfied that we have sufficient processes and internal systems of control to meet our Obligations.
- Subject to the exceptions listed below, we believe we are meeting all our material obligations.
- We have taken adequate steps to understand the range of expectations of our diverse customer base. We have sought to provide a service offering that best meets those expectations, taking into account the requirements of other stakeholders, the sustainability of the business and the level of water bills that customers are willing and able to pay.
- We have appropriate systems and processes in place to allow us to identify, manage and mitigate our material risks.

Furthermore, we confirm the following:

- We have sufficient financial and management resources to enable us to carry out our regulated activities and have submitted to Ofwat the certificate to this effect required by section I.17 of our Instrument of Appointment.
- The Company has available to it sufficient rights and assets to enable a special administrator to manage the affairs, business and property of the Company in the event that a special administration order were made, as required by condition K.3 of our Instrument of Appointment.
- All trade between the Company and associate companies in the year has been at arm's length, as required by condition I of our Instrument of Appointment.
- With our Annual Integrated Report for the year we have published a statement linking Directors' pay to standards of performance, as required under section 35A of the Water Industry Act 1991.
- We have maintained for the whole year an issuer credit rating for Anglian Water Services Financing Group of investment grade (Baa1) in accordance with condition I.30 of our Instrument of Appointment.

As set out in the business viability statement on pages 18 to 21 of this Annual Performance Report, the Directors have a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the period set out in that statement.

Exceptions

The section below identifies obligations set out in the Water Industry Act, our Instrument of Appointment and the Regulatory Accounting Guidelines which – with Ofwat's knowledge – we are not complying with.

- The Water Industry Act places an obligation on wastewater companies to maintain maps of their sewers. In common with all other wastewater companies in England and Wales, not all of our sewers are so mapped because the cost of doing so is generally agreed to be uneconomic.

- Condition J of our Instrument of Appointment creates certain obligations regarding the setting, monitoring and reporting of service targets. Because of changes to the regulatory approach we are no longer required to fulfil these obligations.

Certified by

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Claire Russell

Company Secretary

Dated 13 July 2020

Business Viability Statement

Background

The Directors are responsible for ensuring the resilience or viability of the Company's water and wastewater services to meet the needs of its customers in the long term. This means the Company must be able to avoid, manage and recover from disruptions to its operations and finances.

The Directors' review of the longer-term prospects and viability of the Company is an extension of our business planning process, which includes financial forecasting, a robust risk management assessment, regular budget reviews and scenario planning. This activity is strengthened by a culture throughout the Company of review and challenge. Our vision and business strategy aim to make sure that our operations are resilient and our finances are sustainable and robust.

As part of AWS's approach to defining risk appetite, each year the Directors review our specific risk tolerance levels and consider whether our decision-making behaviours over the past year have been consistent with these risk levels. The Directors confirmed that the Company's behaviours over the past year had been in line with our risk appetite.

Look forward period

As one of the 10 regional water and sewerage services companies operating in the UK, Anglian Water's prices are set by the industry regulator Ofwat for five-year Asset Management Plan (AMP) periods, which support the Company's underlying costs. This provides the basis for future tariffs, revenues, costs and cash flows over the current AMP (April 2020 to March 2025). We note, however that we did not accept the PR19 Final Determination and Ofwat has referred it to the Competition and Markets Authority (CMA) at the request of the Board of Directors. The CMA will complete its determination by March 2021. In the interim period we are using the Final Determination in our assessment of viability.

Assessment of prospects

The Directors have assessed Anglian Water's financial prospects over the next 10 years from April 2020 to March 2030. A 10-year period has been chosen to ensure that our business plan for the current AMP does not impact on the longer term viability of the company:

- The first five years takes us to the end of the current AMP for which there is reasonable certainty and clarity (pending the CMA appeal), with a stretching 5-year plan to deliver in line with the Final Determination allowing realistic assessments of our principal risks to be made.
- The next five years of the period are outside the current AMP and therefore subject to the final outcome of the following five-year price review (PR24) for which uncertainty exists. Our assumptions for AMP8 align to the AMP8 forecasts submitted in our PR19 Business Plan submission.
- The Board considered whether there are specific, foreseeable risk events relating to the principal risks that are likely to materialise within a 10-year period, and which might be substantial enough to affect the Company's viability and therefore should be taken into account when setting the assessment period. These events were modelled appropriately within our downside scenarios.
- The Board has considered the impact of the wider activities of other group companies and transactions and of the overall group structure.

- The Board considers the maturity profiles of debt and the availability of new finance over ten years as part of its review of financial modelling and forecasting, as well as considering the credit ratings of the debt.

- We also note that in an incentive-based regulatory regime we have the opportunity to be rewarded for outperforming the regulatory determination. However, given the low PR19 weighted average cost of capital (WACC) rate and the significant gap between required and allowed Totex, we have had to take mitigating action in our planning, resulting in substantial reductions in dividends paid to shareholders in order to achieve financial resilience. Finally, we take note of the Water Industry Act, which requires Ofwat to ensure that water companies can (in particular through securing reasonable returns on their capital) finance the proper carrying out of their statutory duties.

Principal risks

We have set out the details of the principal risks facing our Company in our Annual Integrated Report, described in relation to our ability to deliver our 10 outcomes. We identify our principal risks through a robust assessment that includes a continuous cycle of bottom-up reporting and review, and top-down feedback and horizon scanning. Through this assessment, priorities are elevated appropriately and transparently.

The Directors regularly review business plans that show projected cash flows for the current AMP period, and long-term cash flow modelling projections which extend into AMP8 and beyond. This includes reviewing the expected outcome relating to the principle risks with this impact included in our business plans.

Stress testing the business plan

In reviewing its financial viability, Anglian Water considers the stringent covenant tests required under its securitised structure to provide comfort to our bondholders that our business is viable to the end of the current AMP period and beyond, and to ensure the availability of debt to finance the Company's investment programme. At each regulatory price review and throughout the AMP, the Board satisfies itself that the agreed five-year business plans ensure adequate covenant headroom throughout the AMP period and beyond. This includes extensive downside scenario testing at both Anglian Water and Group level from severe, plausible and reasonable scenarios chosen because they pose the greatest risk to the business. The following scenarios have been used individually and in combination to model the impact on the overall performance of the business, the ability of the business to service its debt and the impact on its credit rating:

Scenario	Impact modelled	Potential mitigations required
Material totex underperformance against the Final Determination allowance	Overspend of 10 per cent across an AMP	Reduced dividends and/or equity injection
Material Outcome Delivery Incentive (ODI) penalties	Up to £50 million applied in a single year	No mitigations required
Regulatory fines and legal penalties	Up to 3 per cent of turnover applied in a single year	No mitigations required
Unfunded pension liabilities and potential cost impacts of Brexit	Up to £15 million applied per annum	No mitigations required

Risks associated with the disruption caused by Covid-19, potential reductions in revenue collection	Up to 7 per cent decrease in cash collection	Cost base reduction, reduction in financing costs
The potential impact of credit rating agencies downgrading the debt for any companies in the group	2 per cent increase in cost of new debt	No mitigations required
Cost of debt increases	2 per cent above base level assumptions across an AMP	No mitigations required
Significant inflation fluctuations	1 per cent above and below base level assumptions for each AMP	No mitigations required
Combined scenario based on totex underperformance for a whole AMP, along with a significant ODI penalty	Overspend of operating costs of £15m per annum and £50 million ODI penalty in a single year	Reduced dividends and/or equity injection
Combined scenario based on totex underperformance and lower inflation	Overspend of Totex by 2.8% over AMP combined with inflation 1 per cent below base	No mitigations required

In April 2019 Ofwat issued Information Notice IN 19/07 setting out its expectations for companies in issuing long-term viability statements. Additional detail on the processes and assumptions underpinning our long-term viability statement and how we demonstrate our compliance with IN 19/07 is provided immediately after the Directors' statement in the following pages.

Mitigating actions

For each sensitivity and combined scenario, we identify the appropriate mitigations against the potential risks. In the event that the situations used for stress testing were to result in an unacceptable level of deterioration in the Company's financial metrics, management's principal actions would include further reducing the level of shareholder distributions, potential shareholder equity injections, reviewing the financing structure and identifying further opportunities to reduce the Company's cost base or reduce financing costs. Evidence of the shareholders' support for equity injections is provided by the equity injection made in 2018 of £22.0 million, and the fact that our AMP7 five-year business plan includes further equity injections in order to reduce our gearing. Another example of shareholder support occurred in 2009 when the shareholders provided funds of £90m in order to improve headroom in near-term debt covenants.

As a further mitigation we have a significant portfolio of insurance cover in place to provide protection against many catastrophic scenarios such as dam failure, pluvial and fluvial flood, terrorism, and public and employer's liability. There would still be a short-term liquidity impact from such events due to the time it would take between incurring the expenditure and recovering this through the insurance claim; however, it is an important consideration in terms of medium-term liquidity.

The Board formally reviews the output of the stress testing twice a year.

Benefits of the securitised structure

The highly covenanted nature of our financing arrangements (often described as a whole business securitisation) enhances our financial resilience by imposing a rigorous governance framework. This requires continuous monitoring and reporting of our financial and operating

performance by senior management, through a well-established business process, to ensure compliance with our financing arrangements, and provides an additional layer of control over how we transact with our stakeholders, including suppliers, business partners, customers, shareholders and lenders compared to the regulatory frameworks by which we are governed. We announced in March 2018 that we expect to see a significant reduction in dividends to reduce leverage in Anglian Water; the Company's approach to de-gearing will be reviewed in the light of the CMA's decision which is expected no later than March 2021.

Assurance

Robust internal assurance is provided by the Board reviewing and challenging the stress test scenarios selected and the risk mitigation strategies. The Directors also obtain annual independent third-party assurance on the integrity of the long-term cash flow model which underpins the financial projections. In addition, our external auditor, Deloitte, reviews this viability statement and the outputs of our stress testing as part of its normal audit procedures. It considers whether these are consistent with the Directors' conclusion with respect to business viability, and if the processes undertaken are sufficient to support the statements made.

Directors' statement

In making this statement, the Directors have assumed that funding for capital expenditure in the form of capital markets or bank debt will be available in all reasonable market conditions. They have also considered the impact of the Group structure, intra-Group transactions and any other Group activities on the viability of the regulated business.

Ofwat published its PR19 Final Determination in December 2019. This will form the basis for setting customer charges in 2020/21. Funding for the remaining years of AMP7 will be set by the CMA redetermination.

Ofwat's Final Determination included a reduced cost of capital which will be a significant challenge to our financeability in AMP7 with headroom to accommodate moderate to severe downside shocks is limited for the period under assessment. Whilst the viability of the business is not significantly affected the number of downside scenarios requiring mitigations has increased. This impact is primarily as a result of the PR19 FD and therefore this is one of the reasons why we requested that Ofwat refer the FD to the CMA.

However, Anglian Water Services is an efficient company with a history of outperformance and we would expect the CMA to reach a determination that is financeable and meets both the respective obligations and responsibilities of the Company and the regulator. There is a remote risk that the final outcome of the CMA redetermination is worse than the Final Determination but, on the assumption that the redetermination is materially aligned with our base plan, the Directors can be satisfied that the business has a reasonable expectation of being able to continue in operation and meet its liabilities as they fall due at least to March 2030, and is financially resilient in the face of moderate downside shocks.

This is based on the reasonable certainty of its future revenue stream, the strength of the balance sheet (in particular the substantial cash balance and strong net assets), the availability of undrawn debt facilities in the unlikely event that debt markets were temporarily restricted, and by reviewing the business plans and strategic models, combined with the robust risk management process and mitigations described above.

Supplementary information to the above viability statement in support of meeting the requirements of Ofwat Information Notice IN 19/07 "Expectations for companies in issuing long term viability statements"

Plans reflect an accurate up to date view and take account of anticipated changes in financing and gearing

Our future operational and expenditure plans which have been stress tested in support of our long term viability statement (LTVS), fully reflect the PR19 FD and our assumptions for AMP8 are aligned to those submitted with our PR19 Business Plan. This plan includes the anticipated degearing in AMP7 with a continuation of degearing into AMP8. The regulatory regime incentivises good operational performance and customer service though the use of financial and reputational rewards. We are a leading company, which has consistently delivered totex outperformance, achieved net ODI rewards across both Water and Water Recycling price controls and was the leading company in the SIM customer service measure for 2018/19 (the final year of measurement). As a leading company we would therefore expect to continue to deliver some net outperformance against price review determinations. Our base AMP7 position to which we apply stresses and shocks, assumes no AMP7 outperformance or financial rewards; in itself we view this as a prudent position.

Justification for scenarios selected

As part of our stress testing we have modelled appropriate scenarios and sensitivities which reflect the risks that the business faces. We have listed the scenarios tested (both individual and in combination) in our viability statement, including where appropriate, the severity of the stress testing. Our stresses and cost shocks that we have applied and tested are substantially more extreme than any actual risk that has crystallised in AWS since privatisation, some 30 years ago. Macroeconomic impacts have been set with consideration of recent economic trends. We have also considered the size of historic cost shocks experienced by the wider industry since privatisation.

Consideration of full range of categories of risk and link to wider risk assessment reported in statutory accounts

Our stress testing aligns to the principal risks identified in our Annual Integrated Report. These risks consider individual company risks, as well as common external risks that affect the sector as a whole, including severe, but plausible macroeconomic impacts. Available mitigations against downside shocks, where necessary are detailed in our long term viability statement.

Our approach to risk management is detailed in our Annual Integrated Report (AIR). In our AIR we describe in detail our processes for identifying, assessing and mitigating risks. We have considered the full range of categories of risk which could impact the company; these include financial risks, operational risks and regulatory risks.

Methodology used and justification

We maintain a comprehensive long term cashflow model against which we test the impact of downside scenarios. This model is subject to annual independent third party assurance to ensure its integrity, which underpins the financial projections and outputs. As well as future cashflows, this model includes metrics testing our forecast compliance against our lending covenants and key Rating Agency metrics (for example PMICR and FFO/net debt). The robustness of this cashflow model, together with the internal and external assurance applied to the outputs of the stress testing, provide reassurance to the Board, that our approach to viability testing is appropriate.

Workforce considerations

As part of our risk management framework we actively consider the need to continue to attract and retain a workforce with the talent and skills to ensure our long term success. This is enhanced by our leading status in both operational and customer service measures and demonstrated in the recognition in 2019 by Glassdoor as the best place to work in the UK.

Pension risk

With regard to pension risk, our defined benefit pension schemes are closed to future accrual of benefits, and therefore the only remaining risk relates to pension deficit recovery payments. As part of our stress testing we have included the impact of downside risks which would trigger additional pension deficit payments and have modelled these impacts as part of our stress testing.

Revenue variation risk

Our stress testing included plausible, but severe reductions in revenue, through testing of large ODI revenue penalties and increases in bad debt. We have also included stress testing of severe reductions in revenue cash collection as a result of the economic impacts of Covid-19.

Credit rating risk assessment and mitigations

Our downside stress tests include the impact on key Ratings Agencies metrics and where metrics come under pressure, appropriate mitigations have been identified. These mitigations have been quantified and tested for ability to implement in the necessary timeframe and are sufficient to avoid the risk of downgrade to sub-investment grade in all scenarios.

Our LTVS considers the need to raise further funding for investment and we have assessed the impact on key Ratings Agencies metrics in all of our downside scenarios. In addition our shareholders have demonstrated their long term commitment and support of the business as evidenced by their past actions which have included injecting additional capital into the business, reducing gearing through dividend reduction and re-investing operational outperformance and efficiencies for the benefit of customers.

Company Monitoring Framework assessment assurance and actions

Ofwat have stated that they will not publish further Company Monitoring Framework assessments. In the absence of this we did receive feedback from Ofwat on our 2019 APR. We have considered that feedback relating to our long term viability statement. Two minor concerns were raised: The first was that the statement lacked evidence to show the mitigating actions for each specific scenario. We have now included a table, detailing the mitigation actions against each specific scenario where actions are required. The second minor concern was that little detail was provided on the internal review process within the company's statement. Our viability statement and associated downside scenarios are subject to rigorous internal review, including scrutiny and challenge by our Board and Audit Committee prior to being approved by the Board.

Impact on financing plans

We have tested the impact of a credit rating downgrade through increasing the cost of raising new debt, and our mitigations are sufficient to maintain our business viability. Our Board policy of maintaining at least 18 months of liquidity, together with a policy of refinancing maturing debt at least three months in advance of maturity, ensures significant protection against downside shocks and credit market availability. We have significant committed liquidity facilities of just under £1 billion and plan to maintain this throughout AMP7. We currently have £600 million of the working capital facility drawn to guarantee the liquidity is available during the lockdown due to Covid-19. This protects us from any short term restrictions in the availability of credit markets and provides substantial liquidity to meet severe but plausible short term cash flow impacts.

Reflecting impact of gearing benefit sharing mechanism

Our long term plan and the stress testing undertaken includes the impact of the gearing benefit sharing mechanism as included in the PR19 FD when gearing exceeds the glidepath to 70 per cent. For the purposes of stress testing, the benefit is assumed to be passed back to customers in the subsequent AMP in the form of lower bills, spread evenly across the AMP on an NPV neutral basis. We currently have no regulatory investigations being undertaken, therefore we have not had to take these into account for our viability statement.

Statement of Directors' Responsibilities

Further to the requirements of company law, the Directors are required to prepare accounting statements which comply with the requirements of Condition F of the Instrument of Appointment of the Company as a water and sewerage undertaker under the Water Industry Act 1991 and Regulatory Accounting Guidelines issued by Ofwat.

This additionally requires the Directors to:

a. Confirm that, in their opinion, the Company has sufficient financial resources and facilities, management resources and methods of planning and internal control for the next 12 months.

The Directors have submitted to Ofwat a certificate which confirms the adequacy of resources and facilities as set out above and in accordance with section I.17 of the Instrument of Appointment.

b. Confirm that, in their opinion, the Company has sufficient rights and assets which would enable a special administrator to manage the affairs, business and property of the Company.

The Directors confirm this requirement has been met throughout the year - see note confirming compliance with Condition K3.1 of the Instrument of Appointment.

c. Confirm that, in their opinion, the Company has contracts with any associate company with the necessary provisions and requirements concerning the standard of service to be supplied to ensure compliance with the Company's obligations as a water and sewerage undertaker.

The Directors have submitted to Ofwat a certificate which confirms the adequacy of resources and facilities as set out above and in accordance with section I.17 of the Instrument of Appointment.

d. Report to Ofwat changes in the Company's activities which may be material in relation to the Company's ability to finance its regulated activities.

The Directors hereby confirm there no such changes in the year ended 31 March 2020.

e. Undertake transactions entered into by the appointed business, with or for the benefit of associated companies or other businesses or activities of the appointed business, at arm's length.

This has been confirmed within note 7 'Information in respect of transactions with any other business or activity of the appointee or any associated company'.

f. Keep proper accounting records which comply with Condition F.

The Directors of the company hereby confirm that the company has kept proper accounting records, which comply with Condition F.

g. Undertake that the Company's procurement of services activities was in compliance with paragraph 3.1 of Condition F1 of the Licence throughout the year.

The Directors hereby confirm compliance with this requirement throughout the year.

These responsibilities are additional to those already set out in the statutory financial statements.

In the case of each of the persons who are Directors at the time when the Report is approved under Section 418 of the Companies Act 2006 the following applies:

a. So far as the Director is aware, there is no relevant audit information of which the Company's auditors are unaware; and

b. He/she has taken all the steps that he/she ought to have taken as a Director in order to make himself/herself aware of any relevant audit information and to establish that the Company's auditors are aware of that information.

Ofwat Disclosures

The table below sets out the Ofwat disclosure requirements (principally from RAG 3.11) and where they may be found in this and other published reports.

Disclosure	**Where can I find this?**
AWS statutory and accounts, ultimate UK holding company accounts	On the AWS company website https://www.anglianwater.co.uk/about-us/ and the group website:https://www.awg.com/reports/
Accounting Separation Methodology Statement	On the AWS company website: https://www.anglianwater.co.uk/about-us/our-reports/
Audit Reports on the APR	Deloitte audit report on pages 212 to 215 Halcrow assurance report on pages 216 to 219
Disclosures required in the Annual Performance Report	
Statement on directors' pay	Page 198 and the Remuneration Report in the Annual Integrated Report Annual Integrated Report
Statement on disclosure of information to auditors	Statement of directors' responsibilities on page 27
Dividend policy	Notes to the Annual Performance Report, note (7), (d), page 199
Accounting policy note for price control units	Notes to the Annual Performance Report, note (4), page 198
Revenue recognition note, and measured income accrual	Includes the requirement to comment on the measured income accrual, notes 2(a) and 6, pages 196 and 198
Capitalisation policy note	Notes to the Annual Performance Report, note (2), (c), page 198
Bad debt policy note	Notes to the Annual Performance Report, note (2), (b) page 197
Sufficiency of non-financial resources (compliance with condition K)	Notes to the Annual Performance Report, note (7), (i) page 203
Certificate of adequacy / Sufficiency of financial resources & facilities (Ring Fencing Certificate)	Risk and compliance statement, page 18 Separate certificate submitted to Ofwat
Tax strategy for the appointed business	On the company website https://www.anglianwater.co.uk/about-us/
Differences between statutory and RAG definitions	Included in section 1 tables, pages 31 to 43
Long Term Viability Statement	Pages 20 to 26
RORE Statement	Table 4H, page 123
Narrative disclosures on performance	
Outcomes - explain how information in 3A relates to information it as published and reported to customer challenge group, and (if applicable) explain why it thinks forecasting rewards is inappropriate	Table 3A page 77 to 95
Totex - explain differences between actual and allowed totex in 4B, including references to efficiency savings, timing, outputs not delivered and exceptional / atypical costs	Table 4B page 109 to 110

Disclosure	Where can I find this?
Retail - explain differences explained between actual and allowed totex in 2C, including references to efficiency savings, customer numbers, changes in metering levels and exceptional / atypical costs	Table 2C page 64 to 65
Wholesale revenue control reconciliation - Explain differences explained between actual and allowed revenue in 2I, including references to customer numbers, customer demand, changes in metering levels, new connections and voids	Table 2I page 73 to 74
Current tax reconciliation - reconcile the appointed tax charge / credit to the that resulting from applying the standard corporate tax rate to the appointed P&L, and to the tax charge allowed in price limits	Notes to the Annual Performance Report, note (8), page 204
Financial Flows	Table 1F, pages 47 to 58
New Connections	Table 2K, pages 76
Transactions to be disclosed	
Transactions between the appointee and associate businesses - including loans, dividends, guarantees, transfer of assets, transfer of corporate tax losses and supply of services	Notes to the Annual Performance Report, note (3), page 198, and note (7), page 199
Others	
Data Assurance Summary	Pages 206 to 211
Board Statement of Company Direction and Performance	Pages 11 to 17
Risk and Compliance Statement	Pages 18 to 19
Ofwat Principles on Board leadership, Governance and Transparency, published April 2019. Reporting should include: Group structure, dividend policy and payments, risk management, board and committee membership and executive pay	Covered in the Board Statement of Company Direction and Performance on pages 11 to 17, and the Annual Integrated Report
Additional requirements for 2019/20 added in Ofwat Information Notice IN20/03	
IFRS16 - leasing	Table 1A page 31
Leakage and per capita consumption shadow reporting	Separate submission made to Ofwat
SIM Proxy	Tables 3A and 3D pages 77 and 107
C-MeX and D-MeX shadow year reporting	Alongside table 3A commentary
Transition expenditure	Table 4B page 109
PR14 reconciliation	Separate submission made to Ofwat

Table 1A - Income Statement

For the year ended 31 March 2020

	Line description	Statutory	Adjustments			Total appointed activities
			Differences between statutory and RAG definitions	Non - appointed	Total adjustments	
		£m	£m	£m	£m	£m
1	Revenue	1,419.870	(88.585)	22.693	(111.278)	**1,308.592**
2	Operating costs	(1,033.786)	21.452	(13.361)	34.813	**(998.973)**
3	Other operating income	12.975	(10.711)	0.004	(10.715)	**2.260**
4	**Operating profit**	399.059	(77.844)	9.336	(87.180)	**311.879**
5	Other income	-	90.166	-	90.166	**90.166**
6	Interest income	4.681	-	-	-	**4.681**
7	Interest expense	(329.915)	(18.119)	-	(18.119)	**(348.034)**
8	Other interest expense	-	0.271	-	0.271	**0.271**
9	**Profit before tax and fair value movements**	73.825	(5.526)	9.336	(14.862)	**58.963**
10	Fair value gains/(losses) on financial instruments	(30.350)	-	-	-	**(30.350)**
11	**Profit before tax**	43.475	(5.526)	9.336	(14.862)	**28.613**
12	UK Corporation tax	14.500	-	(1.774)	1.774	**16.274**
13	Deferred tax	(134.900)	7.991	-	7.991	**(126.909)**
14	**Profit for the year**	(76.925)	2.465	7.562	(5.097)	**(82.022)**
15	Dividends	(67.800)	-	(7.562)	7.562	**(60.238)**

A Tax Analysis

16	Current year	(11.400)	-	1.774	(1.774)	**(13.174)**
17	Adjustments in respect of prior years	(3.100)	-	-	-	**(3.100)**
18	**UK Corporation tax**	(14.500)	-	1.774	(1.774)	**(16.274)**

B	Analysis of non-appointed revenue	
19	Imported Sludge	0.031
20	Tankered waste	3.397
21	Other non-appointed revenue	19.265
22	**Revenue**	**22.693**

1 The figures in the statutory columns in tables 1A to 1D are based on the company only accounts of Anglian Water. The principal differences between the statutory accounts and the APR are in respect of capitalised interest and the classification of grants and contributions income. For regulatory reporting capitalised interest is not permitted and therefore the adjustments are to reverse out the impact on depreciation, interest and deferred tax. Grants and contributions income in the statutory accounts is classified as revenue (in accordance with IFRS 15 'Revenue from Contracts with Customers'), whereas in the regulatory accounts it is classified as 'other income'. The other adjustments are reclassifications of the following items:

- Profit on disposals of fixed assets is treated as operating costs in the statutory accounts and other operating income in the APR.
- Rents received are classified as other operating income in the statutory accounts, and other income in the regulatory accounts.
- Contributions received for rechargeable works and fluoridation are other operating income in the statutory accounts, but classified as revenue in the regulatory accounts.
- Certain income treated as negative expenditure in the regulatory accounts (table 2B) is classified as operating income in the statutory accounts in accordance with IFRS 15.
- Interest charges in respect of defined benefit pension schemes are classified as interest expense in statutory accounts and other interest expense in the APR.

2 These adjustments explaining the difference between statutory and RAG definitions are summarised in the following table.

Difference between statutory and RAG definitions

Line description	Adjustments					Total adjustments £m
	Reclassification of profit on disposal of assets £m	Capitalisation of interest and related depreciation £m	Reclassification of other operating income £m	Grants and Contributions income £m	Reclassification of pension scheme interest £m	
Revenue	-	-	0.695	(89.280)	-	**(88.585)**
Operating costs	(2.264)	12.322	11.394	-	-	**21.452**
Other operating income	2.264	-	(12.975)	-	-	**(10.711)**
Other income	-	-	0.886	89.280	-	**90.166**
Interest expense	-	(17.848)	-	-	(0.271)	**(18.119)**
Other interest expense	-	-	-	-	0.271	**0.271**
Deferred tax	-	7.991	-	-	-	**7.991**
Total	**-**	**2.465**	**-**	**-**	**-**	**2.465**

3 The following commentary is in relation to the appointed business only. It is noted that IFRS 16 'Leases' came into effect on 1 April 2019. It introduces significant changes to lessee accounting by removing the distinction between operating and finance leases, requiring the recognition of a right-of-use asset and a lease liability at commencement for all leases, except for short-term leases and leases of low value assets.

4 The impact of IFRS 16 on the results for the period compared with the previous IAS 17 accounting was to reduce operating costs by £3.7 million and increase depreciation and finance costs by £4.7 million and £0.8 million respectively. In addition to this, £1.5 million of lease costs would have previously been capitalised in the period.

Revenue (1A.1)

5 Total revenue for the year was £1,308.6 million, an increase of £48.7 million (3.9 per cent) on last year. This primarily reflects the regulatory pricing mechanism, offsetting reduced demand for both household and non-household customers.

Operating costs (including depreciation) (1A.2)

6 Operating costs of £999.0 million comprise opex of £644.0 million and depreciation of £355.0 million. Overall operating costs (including depreciation) for the year increased by £55.8 million in nominal terms (5.9 per cent) from £943.2 million in 2019. The key movements in operating costs are highlighted in the following table.

Summary of changes in operating expenditure

Category	£m
One-off net costs in 2018/19 not repeating	(3.3)
General inflationary increases	15.6
Increase in energy prices and costs	5.0
Increase in below ground infrastructure maintenance	4.0
Providing more effective solutions through operational maintenance, rather than capital investment	2.0
Operating costs of newly commissioned plant	4.4
Restructuring costs	5.0
Increase in bad debt charge	14.0
Net efficiency savings achieved	(10.5)
Increase in depreciation	19.6
Net increase in operating costs	**55.8**

7 The increase in bad debt charge primarily reflects an additional £12 million provision in relation to the impact of Covid-19, which has resulted in lower post year-end cash collection.

8 The cost and efficiency savings are derived from a range of initiatives including energy conservation and self-generation, optimising the sourcing of commodities, centralised management of operations, renegotiating supplier contracts on improved terms, and a number of productivity improvements from embedding more lean thinking and processes into the business, and more efficient asset maintenance programmes.

9 Depreciation and amortisation is up 5.8 per cent compared with last year, consistent with the impact of newly commissioned assets in the year, and a reduction in the useful life of various operational assets.

Other operating income (1A.3)

10 This line comprises primarily profits on fixed asset disposals. More disposals were made in 2019/20, hence the increase compared with the prior year.

Operating profit (1A.4)

Operating profit for the year was £311.9 million, a fall of 1.9 per cent compared with the previous year. This reflects the increase in operating costs and depreciation, partially offset by the increased revenue, as discussed above.

Other income (1A.5)

11 Other income has increased by £17.5 million from the previous year. This line primarily represents the cash and asset contributions made principally by property developers and local authorities for connecting new property developments to the water and sewerage network, and for diverting existing infrastructure. The movement in the year reflects an increased level of adopted sewers and pumping stations in relation to new housing developments.

Interest income (1A.6)

12 Interest income for the year was £4.7 million, compared with £2.8 million for the prior year - the increase is primarily due to an increase in the average deposits held in the year.

Interest expense (1A.7)

13 Interest expense has decreased from £353.9 million in 2019 to £348.0 million in 2020. This was primarily the result of the non-cash impact of lower inflation on index-linked debt where the year on year average Retail Price Index (RPI) fell from 3.2 per cent to 2.6 per cent partially offset by an increase in interest costs and a decrease in interest capitalised, the latter reflecting a lower level of capital projects in progress.

Other interest expense (1A.8)

14 Other interest expense is made up of the actuarial pension charge or credit on the defined benefit pension scheme, which is partly driven by the level of the pension scheme accounting deficit or surplus at the start of the year. There was a credit for the year of £0.3 million, compared with a credit of £0.4 million in the previous year. This is consistent with there having been a significant accounting surplus on the funded defined benefit scheme.

Profit before tax and fair value movements (1A.9)

15 The profit before tax and fair value movements has increased from £42.6 million in the previous year to £59.0 million in 2019/20. This increase is consistent with the reduced operating profit referred to above offset by favourable movements in other income and interest.

Fair value gains and (losses) on financial instruments (1A.10)

16 There was a fair value loss of £30.4 million on derivative financial instruments in 2019/20, compared with a loss £98.4 million in 2018/19. This reduction was due to movements in market expectations of long-term interest, inflation and exchange rates. Fair value gains and losses in the prior year include a charge of £11.7 million relating to the restructuring of derivatives which were cash settled in the period. The fair value losses in the current year are all non-cash in nature and have no material effect on the underlying commercial operations of the business. The driving factors for the smaller loss in 2020 compared to 2019 were a significant fall in forward inflation expectations substantially offset by a fall in forward interest rates. During the year, forward inflation increased by circa 62 basis points (2019: 12 basis points), and forward interest rates decreased by 68 basis points (2019: 16 basis points).

(Loss)/profit before tax (1A.11)

17 The loss before tax for the year was £28.6 million, compared with a loss of £55.8 million in the previous year. This reflects the fall in profit before tax and fair value movements referred to above, and the fair value losses on derivatives in the year which in the previous year had been a significant gain.

Current tax and deferred tax (1A.12 / 1A.13)

18 The current tax credit for the year was £14.5 million (2019: charge of £55.9 million).

19 The current tax charge for 2019 included payments to other group companies for losses surrendered from those companies and also reflects a charge on the transition to IFRS 15 and the disclaiming of capital allowances to utilise the Surplus ACT asset held on the balance sheet.

20 In 2020, the current tax credit reflects receipts from other group companies for losses surrendered to those group companies. No capital allowances have been disclaimed in 2020, as well as some income not being taxable and the availability of tax relief on pension contributions paid in the year.

21 The deferred tax charge has increased by £189.5 million from a credit of £62.6 million in 2019 to a charge of £126.9 million this year.

22 The corporation tax rate was expected to reduce from 19% to 17% effective from 1 April 2020 and the deferred tax balances at 31 March 2019 were measured using the rate of 17%.

23 This reduction in corporation tax rate was reversed in March 2020 and so those deferred tax balances have been re-measured using the rate of 19%.

24 Our relatively low level of cash tax reflects the fiscal incentives available to all UK companies for sustained high levels of capital investment and the interest we pay to fund that investment.

(Loss) / profit for the year (1A.14)

25 The loss for the year was £82.0 million, compared with a loss of £47.6 million for the previous year. This increase in losses is consistent with the lower loss before tax offset by the tax charge described above.

Dividends (1A.15)

26 Dividends of the appointed business paid that are available to the ultimate investors in the year were £60.2 million (2019: £61.5 million). The reduction in dividend is principally due to the Directors' decision to de-gear to 80 per cent or less by 2020 and further reduce gearing through to 2025. This dividend was retained within the AWG Group and no dividend was paid to the ultimate investors.

Table 1B - Statement of Comprehensive Income

	Line description	Statutory	Adjustments			Total appointed activities
			Differences between statutory and RAG definitions	Non - appointed	Total adjustments	
		£m	£m	£m	£m	£m
1	Profit for the year	(76.925)	2.465	7.562	(5.097)	**(82.022)**
2	Actuarial gains/(losses) on post employment plans	89.600	-	-	-	**89.600**
3	Other comprehensive income	22.700	-	-	-	**22.700**
4	**Total Comprehensive income for the year**	35.375	2.465	7.562	(5.097)	**30.278**

1 The principal difference between the statutory accounts and the APR for this table is in respect of capitalised interest. For regulatory reporting, capitalised interest is not permitted and therefore the adjustments are to reverse out the impact on profit for the year.

2 Appointed comprehensive income for the year of £30.3 million, comprising loss for the year of £82.0 million, actuarial gains on post employment benefits of £89.6 million and other comprehensive income which are gains on cash flow hedges of £22.7 million.

3 Other than the changes to the profit for the year as detailed in the commentary for table 1A, there are no differences between the statutory and regulatory accounts on the statement of other comprehensive income.

Actuarial gains/(losses) on post employment plans (1B.2)

4 Actuarial gains on retirement benefit obligations for the year were £89.6 million (2019: losses of £15.7 million), comprising actuarial gains of £108.4 million partially offset by deferred tax on these gains of £18.8 million. This resulted in Anglian Water reporting a net retirement benefit asset of £130.0 million as at 31 March 2020 (2019: £3.5 million).

Other comprehensive income (1B.3)

5 Other comprehensive income for the year comprises gains on cash flow hedges of £25.8 million (2019: £39.9 million), partially offset by deferred tax on these gains of £3.1 million (2019: £6.5 million).

Table 1C - Statement of Financial Position

	Line description	Statutory	Adjustments			Total appointed activities
			Differences between statutory and RAG definitions	Non - appointed	Total adjustments	
		£m	£m	£m	£m	£m
A	**Non-current assets**					
1	Fixed assets	9,940.267	(342.151)	11.376	(353.527)	**9,586.740**
2	Intangible assets	217.286	(10.440)	0.393	(10.833)	**206.453**
3	Investments - loans to group companies	-	-	-	-	**-**
4	Investments - other	0.013	-	-	-	**0.013**
5	Financial instruments	317.771	-	-	-	**317.771**
6	Retirement benefit assets	171.634	-	-	-	**171.634**
7	**Total non-current assets**	10,646.971	(352.591)	11.769	(364.360)	**10,282.611**
B	**Current assets**					
8	Inventories	12.413	-	-	-	**12.413**
9	Trade & other receivables	530.610	-	-	-	**530.610**
10	Financial instruments	16.827	-	-	-	**16.827**
11	Cash & cash equivalents	1,048.041	-	-	-	**1,048.041**
12	**Total current assets**	1,607.891	-	-	-	**1,607.891**
C	**Current liabilities**					
13	Trade & other payables	(472.211)	(84.787)	(9.995)	(74.792)	**(547.003)**
14	Capex creditor	(97.219)	-	-	-	**(97.219)**
15	Borrowings	(1,022.991)	84.787	-	84.787	**(938.204)**
16	Financial instruments	(81.393)	-	-	-	**(81.393)**
17	Current tax liabilities	(198.201)	-	(1.774)	1.774	**(196.427)**
18	Provisions	(6.208)	-	-	-	**(6.208)**
19	**Total current liabilities**	(1,878.223)	-	(11.769)	11.769	**(1,866.454)**
20	**Net current assets / (liabilities)**	(270.332)	-	(11.769)	11.769	**(258.563)**

D Non-Current liabilities

21	Trade & other payables	-	-	-	-	**-**
22	Borrowings	(6,702.332)	-	-	-	**(6,702.332)**
23	Financial instruments	(996.010)	-	-	-	**(996.010)**
24	Retirement benefit obligations	(41.591)	-	-	-	**(41.591)**
25	Provisions	(10.518)	-	-	-	**(10.518)**
26	Deferred income - G&C's	-	-	-	-	**-**
27	Deferred income - adopted assets	-	-	-	-	**-**
28	Preference share capital	-	-	-	-	**-**
29	Deferred tax	(1,093.558)	66.992	-	66.992	**(1,026.566)**
30	**Total non-current liabilities**	(8,844.009)	66.992	-	66.992	**(8,777.017)**

31	**Net assets**	1,532.630	(285.599)	(0.000)	(285.599)	**1,247.031**

E Equity

32	Called up share capital	32.000	-	-	-	**32.000**
33	Retained earnings & other reserves	1,500.630	(285.599)	-	(285.599)	**1,215.031**
34	**Total Equity**	1,532.630	(285.599)	-	(285.599)	**1,247.031**

1 The statement of financial position is based on the statutory Company only balance sheet with adjustments for interest capitalised and associated deferred tax, and reclassifications of trade and other payables as detailed below.

2 The principal difference between the statutory accounts and APR is in respect of capitalised interest. For regulatory reporting, capitalised interest is not permitted and therefore the adjustments are to reverse out the impact on accumulated depreciation, deferred tax and reserves. The only other adjustments are the reclassification of current grants and contributions and accrued interest to trade and other payables and of capital creditors.

3 These adjustments are summarised in the table below.

Line description	Adjustments			Total adjustments £m
	Reversal of capitalised interest cost £m	Reclassifi - cation of interest accrual on debt £m	Deferred tax impact of reversal of capitalised interest cost £m	
Fixed assets	(342.151)	-	-	(342.151)
Intangible assets	(10.440)	-	-	(10.440)
Trade & other payables	-	(84.787)	-	(84.787)
Capex creditor	-	-	-	-
Borrowings	-	84.787	-	84.787
Provisions	-	-	-	-
Deferred tax	-	-	66.992	66.992
Retained earnings & other reserves	352.591	-	(66.992)	285.599

4 The following commentary is in relation to the appointed business only.

Fixed assets (1C.1)

5 The net book value (NBV) for tangible fixed assets has increased by £165.9 million due to capital expenditure in the year, partially offset by the depreciation charge.

Intangible assets (1C.2)

6 The NBV of intangible assets increased by £18.3 million over the year, reflecting expenditure on IT systems, partially offset by the amortisation charge for the year.

Investments - loans to group companies (1C.3)

7 On 29 March 2018, following our commitment to simplify our corporate structure, a repayment of a loan from the Company to its intermediary parent company of £1,602.6 million was made, therefore this balance is nil in the current and previous years.

Retirement benefit surpluses/obligations (1C.6 and 1C.24)

8 Net retirement benefit assets were £130.0 million comprising a surplus of £171.6 million on the combined Anglian Water Services and Hartlepool schemes, and a £41.6 million obligation on an unfunded scheme.

Current assets (1C.8-1C.12)

9 Total current assets have increased by £539.3 million (50.5 per cent) in the year. This is primarily due to an increase in cash and cash equivalents of £497.0 million and an increase in trade an other receivables of £44.9 million. The increase in trade and other receivables was due to billing delays in response to Covid-19.

Trade and other payables (1C.13)

10 Compared with the prior year, trade payables have increased by £24.9 million (4.8 per cent) to £547.0 million. This is consistent with the increase in operating costs.

Capex creditor (1C.14)

11 Capital creditors have increased by 10.6 per cent to £97.2 million at 31 March 2020. This movement reflects increased costs in the final quarter compared to 2018/19.

Borrowings (1C.15 and 1C.22)

12 Total borrowings have increased by £788.7 million in the year. This primarily reflects new term loans of £815.9 million less loan repayments of £220.3 million, increase due to indexation (£77.8 million) and fair value gains and losses and foreign exchange (£117.7 million). A full reconciliation can be found in the analysis of net debt in our statutory accounts.

Current tax liabilities (1C.17)

13 Current tax liabilities have reduced by £55.1 million in the year. The liability solely reflects amounts owed to other group companies where the regulated company, Anglian Water Services Limited, has increased its taxable profits by disclaiming capital allowances only for the benefit of these other companies. There is agreement that the regulated company will pay the tax liabilities arising from the increased taxable profits when it receives the benefit of the disclaimed capital allowances. No amounts are owed to the tax authorities.

Deferred income - adopted assets (1C.27)

14 Following the adoption of IFRS 15 'Revenue from Contracts with Customers' the Company is recognising income from adopted assets at a point in time as opposed to deferring these amounts as in the prior year. Therefore the balance on this line for the current year is nil.

Deferred tax (1C.29)

15 The deferred tax credit is £67.0 million lower than the statutory accounts due to the reversal of capitalised interest on fixed and intangible assets, lines 1 and 2. Compared with last year the balance is £148.8 million higher which is primarily due to the remeasurement of tax balances due to the corporation tax rate staying at 19 per cent.

Retained earnings (1C.33)

16 The difference of £285.6 million between the statutory and regulatory accounts is the reversal of capitalised interest less the related movement in deferred tax as a result of this.

Table 1D - Statement of Cash Flows

	Line description	Statutory	Adjustments			Total appointed activities
			Differences between statutory and RAG definitions	Non - appointed	Total adjustments	
			£m	£m	£m	£m
A	**Statement of cashflows**					
1	Operating profit	399.059	(77.844)	9.336	(87.180)	**311.879**
2	Other income	(37.069)	90.166	-	90.166	**53.097**
3	Depreciation	368.453	(12.322)	1.164	(13.486)	**354.967**
4	Amortisation - G&C's	-	-	-	-	**-**
5	Changes in working capital	(27.173)	-	(1.164)	1.164	**(26.009)**
6	Pension contributions	(18.511)	-	-	-	**(18.511)**
7	Movement in provisions	5.200	-	-	-	**5.200**
8	Profit on sale of fixed assets	(2.264)	-	-	-	**(2.264)**
9	**Cash generated from operations**	687.695	-	9.336	(9.336)	**678.359**
10	Net interest paid	(227.770)	2.638	-	2.638	**(225.132)**
11	Tax paid	(40.300)	-	(1.774)	1.774	**(38.526)**
12	**Net cash generated from operating activities**	419.625	2.638	7.562	(4.924)	**414.701**
C	**Investing activities**					
13	Capital expenditure	(452.505)	-	-	-	**(452.505)**
14	Grants & Contributions	-	-	-	-	**-**
15	Disposal of fixed assets	2.311	-	-	-	**2.311**
16	Other	(22.000)	-	-	-	**(22.000)**
17	**Net cash used in investing activities**	(472.194)	-	-	-	**(472.194)**
18	**Net cash generated before financing activities**	(52.569)	2.638	7.562	(4.924)	**(57.493)**
D	**Cashflows from financing activities**					
19	Equity dividends paid	(67.800)	-	(7.562)	7.562	**(60.238)**
20	Net loans received	593.888	(2.638)	-	(2.638)	**591.250**
21	Cash inflow from equity financing	-	-	-	-	**-**
22	**Net cash generated from financing activities**	526.088	(2.638)	(7.562)	4.924	**531.012**
23	**Increase (decrease) in net cash**	473.519	-	-	-	**473.519**

1 The principal differences between the statutory accounts and the APR are in respect of capitalised interest, and the classification of grants and contribution income. For regulatory reporting, capitalised interest is not permitted and therefore the depreciation of capitalised interest has been removed here. Grants and contributions (G&C) income is included in revenue within the statutory accounts, but classified as other income in the regulatory

accounts. The other adjustments are a reclassification of debt issue costs from interest paid to net loans received and a reclassification of pensions operating expenditure from contributions to movements in provisions.

2 These adjustments, explaining the difference between statutory and RAG definitions, are summarised in the table below.

Line description	Adjustments			Total adjustments £m
	Reclassifi - cation of issue costs £m	Capitali - sation of interest and related depreciation £m	Reclassification of G&C and rental income £m	
Operating profit	-	12.322	(90.166)	(77.844)
Other income	-	-	90.166	90.166
Depreciation	-	(12.322)	-	(12.322)
Net interest paid	2.638	-	-	2.638
Net loans received	(2.638)	-	-	(2.638)

3 The following commentary is in relation to the appointed business only.

Operating profit (1D.1)

4 The reduction in operating profit is explained in the commentary to table 1A. Increases in revenue have been more than offset by increases in operating costs.

Other income (1D.2)

5 Other income has remained consistent with the prior year at £53.1 million, a decrease of £0.3 million.

6 The £37.1 million included within the statutory column relates to assets adopted for nil consideration. This is shown within a separate line within the statutory accounts as an adjustment within operating activities, therefore this has been included within Other income within the regulatory accounts.

Changes in working capital (1D.5)

7 Changes in working capital increased £28.6 million on the prior year to £26.0 million. This is largely as a result of the increase seen in trade and other receivables of £44.9 million due to billing delays in response to Covid-19. The remainder of the movement is due to the timing of certain payments around the year end.

Pension contributions (1D.6)

8 The pension contributions primarily comprises of the defined benefits scheme deficit reduction payment of £15.1 million.

Profit on sale of fixed assets (1D. 8)

9 The increase in profit on sale of fixed assets reflects the higher number of disposals in the year.

Cash generated from operations (1D.9)

10 Net cash inflow from operating activities reduced by £14.3 million from £692.7 million in 2019 to £678.4 million in 2020 reflecting the movements discussed above.

Net interest paid (1D.10)

11 Net interest paid increased from £11.4 million in the previous year to £225.1 million in the current year - this is primarily as a result of the increase borrowings attracting additional interest costs in comparison to the prior year.

Tax paid (1D.11)

12 The increase in tax paid to Group reflects the additional tax arising on increased taxable profits than in the previous year.

Equity dividends paid (1D.19)

13 Equity dividends paid in the year were £60.2 million compared to £61.5 million in 2018/19. This reflects the Director's commitment to reduce gearing. This dividend was retained within the AWG Group and no dividend was paid to the ultimate investors.

Table 1E - Net Debt Analysis

	Line description	Units	Interest rate risk profile			
			Fixed rate	Floating rate	Index linked	Total
1	Borrowings (excluding preference shares)	£m	2,585.499	1,042.309	3,910.070	**7,537.878**
2	Preference share capital	£m				**-**
3	Total borrowings	£m				**7,537.878**
4	Cash	£m				**(329.041)**
5	Short term deposits	£m				**(719.000)**
6	Net Debt	£m				**6,489.837**
7	Gearing	%				**78.74%**
8	Adjusted gearing	%				**78.40%**
9	Full year equivalent nominal interest cost	£m	114.280	11.358	197.460	**323.098**
10	Full year equivalent cash interest payment	£m	114.280	11.358	93.811	**219.449**
A	**Indicative interest rates**					
11	Indicative weighted average nominal interest rate	%	4.42%	1.09%	5.05%	**4.29%**
12	Indicative weighted average cash interest rate	%	4.42%	1.09%	2.40%	**2.91%**
13	Weighted average years to maturity	nr	6.12	5.28	15.73	**11.24**

Borrowings (excluding preference shares) (1E.1)

1 As per the guidance, borrowings are shown at nominal values plus indexation to 31 March 2020. Accrued interest and fair value adjustments are excluded (and so the numbers shown are different to our statutory accounts prepared on an IFRS basis). Debt issue costs have also been excluded. A reconciliation of debt between regulatory accounts and statutory accounts is shown below. The mix of debt has moved from prior year as discussed in more detail in the commentary in table 4H.

	Total £m
Borrowings (per regulatory definition)	**7,537.9**
Fair value IFRS adjustments[1]	237.6
Strip out accreted indexation on swaps[2]	(103.7)
Adjust issue costs[3]	(31.3)
Non-current and Current Debt as per Table 1C	7,640.5
Debt interest accrual[4]	84.8
2020 IFRS debt (per statutory accounts)	**7,725.3**

[1]This represents the IFRS fair value accounting adjustment to applicable debt and derivatives due to spot foreign exchange and fair value hedge adjustments.

[2] Strip out accreted indexation of RPI linked derivatives included in the regulatory definition but classified as derivatives under IFRS

[3] Directly attributable debt issue costs added to the reflect IFRS treatment but excluded from the regulatory definition.

[4] Under the RAGs debt is shown excluding accrued interest. Under IFRS debt is shown including accrued interest.

2 Fixed rate debt has increased year on year due to the following movements:

- Addition of £100 million term-loan facility which is a fixed rate debt in the year,
- £150 million public bond which was previously reported as index linked debt but, with the final variable rate confirmed in November 2019, it is now reported as fixed rate debt,

3 These are offset by reductions in fixed rate debt due to the following:

- Repayment of £25.1 million on a matured Japanese Yen bond which had been swapped to fixed sterling,
- £11.3 million of payments in relation to leases,

4 Floating rate debt has increased year on year due to the drawdown on the revolving credit facilities.

5 Index linked debt has decreased due to the following:

- £185.6 million of accretion and amortisation paydowns in the year,
- £150 million debt reported in the fixed rate section above,

6 These are offset by the following:

- New issue of £65 million fixed rate US private placement with the fixed interest payments matched to a CPI swap,
- £114.6 million indexation in the year,

Cash and short term deposits (1E.4)

7 Cash and short-term deposits are split as per RAG 4.08. This differs from the statutory accounting treatment in that all money market deposits are shown as short-term deposits here, whereas in the statutory accounts these are split based on their original term to maturity with those with an initial term of 3 months or less classified as cash and cash equivalents.

Adjusted gearing (1E.8)

8 The adjusted gearing shown is Anglian Water's 'Senior RAR' ratio as at 31 March 2020 – representing net debt divided by year-end RCV.

Interest (1E.9-1E.12)

9 Fixed interest has increased year on year in line with the increase in fixed rate debt.

10 The decrease in floating interest reflects the downward movement in LIBOR year on year.

11 RPI year on year has slightly increased from 2.4 per cent in the prior year to 2.6 per cent at 31 March 2020. This has contributed to the marginal increase in the weighted average nominal interest rate on index linked debt. The interest cash balance is on debt based on the year end position, therefore will be different to the statutory accounts. Nominal interest is calculated based on the cash number plus year end inflation of 2.6 per cent for index-linked debt as per the definition.

12 The decrease in weighted average cash interest on index linked debt reflects the cheaper more recent issuances of CPI linked debt and derivatives.

Weighted average years to maturity (1E.13)

13 The weighted average maturity has moved downwards in line with natural lifecycle of debt being one year on, being offset slightly by the raising of new debt. The weighted average maturity of floating rate debt has moved downwards further due to the drawdown on the revolving credit facilities.

Table 1F - Financial Flows

	Line description	Units	DPs	12 Months ended 31 March 2020						Average 2015-20					
				%			£m			%			£m		
				Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity
A															
1	Return on regulatory equity	£m	3	5.55%	3.16%	5.55%	143.000	81.428	81.428	5.58%	3.06%	5.58%	140.146	76.887	76.887
2	Actual performance adjustment 2010-15	£m	3	-0.36%	-0.20%	-0.36%	(9.276)	(5.282)	(5.282)	-0.33%	-0.18%	-0.33%	(8.288)	(4.547)	(4.547)
3	Adjusted Return on regulatory equity	£m	3	5.19%	2.96%	5.19%	133.724	76.146	76.146	5.25%	2.88%	5.25%	131.857	72.340	72.340
4	Regulatory equity	£m	3	2,576.576	2,576.576	1,467.167				2,511.570	2,511.570	1,377.897			
B	**Financing**														
5	Gearing	£m	3	0.00%	1.97%	1.97%	-	28.894	28.894	0.00%	2.20%	2.20%	-	30.359	30.359
6	Variance in corporation tax	£m	3	0.00%	0.84%	1.48%	-	21.700	21.700	0.00%	-1.78%	-3.25%	-	(44.805)	(44.805)
7	Group relief	£m	3	0.00%	0.00%	0.00%	-	-	-	0.00%	0.83%	1.51%	-	20.87	20.87
8	Cost of debt	£m	3	0.00%	-0.09%	-0.21%	-	-2.344	-3.014	0.00%	-0.19%	-0.46%	-	(4.816)	(6.334)
9	Hedging instruments	£m	3	0.00%	-0.01%	-0.02%	-	(0.249)	(0.249)	0.00%	-0.01%	-0.01%	-	(0.147)	(0.147)
10	Financing total	£m	3	5.19%	5.67%	8.42%	133.724	124.147	123.477	5.25%	3.93%	5.25%	131.857	73.801	72.283

C	**Operational performance**														
11	Totex out / (under) performance	£m	3	0.00%	0.32%	0.57%	-	8.302	8.302	0.00%	1.36%	2.48%	-	34.162	34.162
12	ODI out / (under) performance	£m	3	0.00%	-0.32%	-0.56%	-	(8.230)	(8.230)	0.00%	0.27%	0.49%	-	6.733	6.733
13	Retail out / (under) performance	£m	3	0.00%	-0.40%	-0.71%	-	(10.351)	(10.351)	0.00%	-0.08%	-0.14%	-	(1.937)	(1.937)
14	Other exceptional items	£m	3	0.00%	0.00%	0.00%	-	-	-	0.00%	0.03%	0.06%	-	0.848	0.848
15	Operational performance total	£m	3	0.00%	-0.40%	-0.70%	-	(10.279)	(10.279)	0.00%	1.58%	2.89%	-	39.806	39.806
16	Total earnings	£m	3	5.19%	5.27%	7.72%	133.724	113.868	113.198	5.25%	5.52%	8.13%	131.857	113.607	112.089
17	RCV growth from RPI inflation	£m	3	2.59%	2.59%	2.59%	66.733	66.733	38.000	2.52%	2.52%	2.52%	63.292	63.292	34.723
18	Total shareholder return	£m	3	7.78%	7.86%	10.31%	200.458	180.601	151.198	7.77%	8.04%	10.65%	195.149	176.898	146.812
19	Net dividend	£m	3	4.00%	1.97%	3.46%	103.063	50.711	50.711	4.00%	3.38%	6.15%	100.463	84.805	84.805
20	Retained value	£m	3	3.78%	5.89%	6.85%	97.395	129.890	100.487	3.77%	4.66%	4.50%	94.686	92.093	62.007
E	**Dividends reconciliation**														
21	Gross dividend	£m	3	4.00%	1.97%	3.46%	103.063	50.711	50.711	4.00%	19.40%	35.36%	100.463	487.161	487.161
22	Interest received on intercompany loans	£m	3	0.00%	0.00%	0.00%	-	-	-	0.00%	16.02%	29.20%	-	402.356	402.356
23	Net dividend	£m	3	4.00%	1.97%	3.46%	103.063	50.711	50.711	4.00%	3.38%	6.15%	100.463	84.805	84.805

Footnotes:

1. Numbers included in the above table are in 2012/13 prices in line with Ofwat Regulatory Accounting Guidelines (RAGs).

2. The numbers in the percentage column above are subject to rounding difference as a result of the way that the percentages are calculated in the Ofwat table templates. These differences do not have a material impact on the numbers presented.

3. In the dividends reconciliation the line '1F.22: Interest Receivable on Inter-company Loans' also includes, for 2017/18 only, the one off dividends to fund the settlement of an inter-company loan of £1,602.6 million (2012/13 prices: £1,426.6 million) and to fund the transfer of the non-household retail business (£62.2 million (2012/13 prices: £55.3 million)). From 1 April 2018, following the settlement of inter-company loan in full, the internal interest and corresponding dividend payments are no longer necessary.

Introduction

1) The actual returns and actual regulated equity versus actual returns and notional regulated equity

1 Where actual regulated equity is different from Ofwat's notional regulated equity of 37.5 per cent of RCV, the actual returns and actual regulated equity column in the table above will show different percentage returns for the same performance. In our case, as a consequence of having higher gearing and less regulated equity than the notional company, any underperformance will adversely impact returns disproportionately for shareholders. Conversely, any outperformance will deliver proportionately greater returns. This is evident in the financing and operational performance shown in table 1F.

2) The impact of gearing on cost of debt (1F.5 and 1F.8)

2 The gearing outperformance in row 1F.5 above should be read in conjunction with row 1F.8 which measures the actual cost of debt out/under-performance compared to the FD. All else being equal, the benefit of higher gearing in 1F.5 above should be offset by an increase in cost of debt in row 1F.8 associated with higher gearing (Modigliani-Miller theorem).

3 However, Anglian Water is able to mitigate the additional debt costs due to higher gearing as our 'securitised', highly covenanted structure and associated operational covenants protect customers and lenders. Our covenants, which include commitments to support strong credit ratings, are one of the main reasons we can raise debt at rates that are competitive with those of our peers with lower gearing. This structure transfers a higher proportion of risk on to the shareholders in the event of any operational or financial underperformance.

4 Our customers benefit from higher gearing as the tax benefit of higher tax deductible interest costs have been passed on to them through lower bills. This is a consequence of the price setting mechanism whereby the tax revenue building block reflects actual gearing as opposed to notional gearing.

5 We raise debt on debt plus derivative arrangements in order to achieve the most efficient financing costs. Derivatives are only used to optimise the overall cost of debt of an instrument and are not implemented for speculative purposes which our covenants prohibit. This allows the business to access a broader range of markets for funding (including US and EU debt investors) and as such allows the business to select the best priced market for each issuance as funding is required. As a consequence we report this as cost of debt on row '1F.8 Cost of Debt' as these are not transactions for hedging purposes.

6 A recent example being two transactions that were raised in Autumn 2018; a fixed sterling US Private Placement debt transaction was swapped to CPI with a strong UK Financial Institution with all cash flows matching resulting in a lower net cost of debt of CPI + 0.348%. This compared with a sterling CPI UK Private Placement debt transaction with a cost of debt CPI + 0.835%.

3) Group relief out/(under) performance (1F.7)

7 Where losses are surrendered to Anglian Water under the group relief regulations it pays for this group relief at the current rate of corporation tax. This charge is currently accrued for as there is an agreement in place that Anglian Water will pay for these losses when it receives the benefit of the capital allowances that were disclaimed in order to generate the taxable profits against which the losses were utilised.

8 The exception to this has been where losses were surrendered from our intermediary parent company, Anglian Water Services Holdings Limited (AWSH), which were as a result of the inter-company interest that was paid to us under the inter-company loan which was repaid in March 2018. This is detailed in the table below, these losses were surrendered at no charge.

	2015/16 2012/13 Prices £m	2016/17 2012/13 Prices £m	2017/18 2012/13 Prices £m	2018/19 2012/13 Prices £m	2019/20 2012/13 Prices £m	Average 2012/13 Prices £m
Interest paid by parent	181.9	177.6	170.7	0.0	0.0	106.0
Interest received by Anglian Water	181.9	177.6	170.7	0.0	0.0	106.0
Tax rate	20%	20%	19%	19%	19%	19.4%
Tax payable on interest received	36.4	35.5	32.4	0.0	0.0	20.9
Group relief received from parent	36.4	35.5	32.4	0.0	0.0	20.9

9 As the FD tax calculation discounts the impact of this inter-company interest when calculating the appointee profit/loss and corresponding tax allowance, there is an equal and opposite tax underperformance in 1F.B6 'Variance in Corporation tax' as illustrated in the reconciliation table for each year.This has been agreed with HM Revenue & Customs and is consistent with the FD. In the table above, the interest paid by the parent and interest received by Anglian Water is zero in 2018/19 and 2019/20 as the inter-company loan was settled in full in 2017/18.

10 There is therefore no financial benefit to the shareholders in relation to these group relief arrangements.

4) Effect of inflation on cost of debt out/(under) performance (1F.8)

11 The real cost of fixed rate debt is influenced by the actual inflation rate which is subtracted from the nominal cost of debt to derive the real cost of debt. In setting the FD, Ofwat assumed an inflation rate of 2.80 per cent for embedded and new debt in order to derive the real allowed cost of debt.

12 All else being equal, higher inflation will therefore decrease the real cost of non-index linked debt and vice versa for lower inflation. In years when inflation is higher than the Ofwat assumed 2.80 per cent, all else being equal, the real cost of debt outperformance will increase (with the exception of the real cost of index linked debt which is not directly impacted by the actual level of inflation). This is illustrated in the table in appendix 1 to this section.

13 The mix of embedded debt between fixed, floating and index linked debt, will also therefore impact real cost of debt out/(under) performance, when inflation differs from Ofwat's 2.80 per cent assumption. The greater the proportion of fixed debt, the greater real cost of debt outperformance when inflation is higher than Ofwat's assumed 2.80 per cent and vice versa.

14 Over half of our debt is index linked debt and will therefore not be impacted by any movement in the annual rate of inflation away from the 2.80 per cent inflation assumed by Ofwat at the PR14 FD.

5) Effect of hedging instruments on real cost of debt out/(under) performance (1F.9)

15 The RAGs require an impact of hedging "as calculated by the business". In the absence of any further clarification and in line with RAG 3.11, we have calculated this using the IFRS 9 cost of hedging concept which is consistent with the treatment in the statutory accounts. IFRS 9 identifies 'costs of hedging' as the time value of options, the forward element of forward contracts and foreign currency basis spreads on cross currency interest rate swaps as applicable for hedge accounting. Anglian Water holds a number of cross currency interest rate swaps which generate the cost of hedging reported in line 1F.9. Other debt plus derivatives used to raise debt at the lowest cost is reported in cost of debt line 1F.8 as explained in paragraphs 5 and 6.

Key messages from the AMP

- Exceptional totex outperformance generated a return of 2.48% which would have been even higher had the shareholders decided not to reinvest £165m into resilience of the company.
- Average dividend of 6.15% means that in addition to the £165m reinvestment, 4.52% has been retained in the business compared to 3.77% expected by Ofwat.
- 1.74% financing outperformance (gearing and cost of debt) driven by our Aligned Debt structure allowing us to raise debt at competitive rates.
- Tax underperformance as a result of the introduction of new revenue standard creating a transitional tax charge not allowed funded by the PR14 Determination.

Commentary – 12 Months ended 31 March 2020

A – Equity base

Actual performance adjustment 2010-2015: (0.36) per cent vs. (0.20) per cent notional (1F.2)

16 This relates to the PR09 out/(under) performance adjustments, contained in the 'companies populated PR14 financial models file' (Post financeability adjustments). The small underperformance relates to adjustments in respect of the previous AMP, namely the Revenue Correction Mechanism offset, in part, by the reward received for Service Incentive Mechanism (SIM) and an Opex Incentive Adjustment. The above excludes totex menu additional income adjustments as this is not related to PR09 out/(under) performance.

B - Financing

Gearing out/(under) performance: 1.97 per cent vs. 1.97 per cent notional (1F.5)

17 The actual regulated equity to RCV ratio of 21.4 per cent compares to the 37.5 per cent assumed by Ofwat for a notional company. The calculation in row 1F.5 shows that the favourable impact of replacing more expensive cost of equity, 5.19 per cent, with cheaper cost of debt, 2.59 per cent, is 1.97 per cent for 2019/20. We note that, as explained in paragraphs 2-6 of the introduction section above, this line should be read in conjunction with 1F.8 below.

Cost of debt out/(under) performance: (0.21) per cent vs. (0.09) per cent notional (1F.8)

18 The reason for the cost of debt underperformance in row 1F.8 for 2019/20 of (0.21) per cent can be largely explained by the impact of average RPI inflation in the year, 2.59 per cent, being lower than assumed by Ofwat, 2.80 per cent. As explained in paragraphs 11-14 as a consequence of lower inflation, our actual real cost of fixed debt in the year is higher than assumed in the FD.

Hedging instruments out/(under) performance: (0.02) per cent vs. (0.01) per cent notional (1F.9)

19 The cost of hedging for the year of £0.2 million as defined in paragraph 15 represents the premium paid on certain swaps as a result of funds being raised in currency other than sterling. As there was no allowance for hedging in the FD, this cost results in an underperformance of 0.02 per cent in the actual returns and actual regulatory equity column.

Variance in corporation tax and group relief out/(under) performance: 1.48 per cent vs. 0.84 per cent notional (1F.6 and 1F.7)

20 The variance in corporation tax compares the tax allowance included in the FD to the actual tax charge in the regulatory accounts.

21 As detailed in the introduction in paragraphs 7-10, in order to understand the underlying tax out/(under) performance of the business, lines 1F.6 and 1F.7 should be viewed in totality as the group relief outperformance is matched by a corresponding underperformance in the variance in corporation tax line. The outperformance in the year of 1.53 per cent primarily reflects more capital allowances being claimed compared to that assumed in the FD. A full reconciliation can be seen in the following table. The effect of a change in tax rate refers to the reduction in corporation tax from 20 per cent, which was allowed in the FD, to 19 per cent in 2018. The percentage underperformance is higher than the notional company reflecting the lower regulated equity used as a denominator.

	2020							
	Actual Outturn	Actual 12/13 price	FD	Variance	Tax rate	Tax effect	Return on notional regulated equity	Return on actual regulated equity
	A	B	C	D=C-B	E	D*E		
	£M	£M	£M	£M	(derived)	£M	%	%
The tax payable at the standard rate of corp tax on the profit/(loss) on appointed activities								
Profit for the year per regulatory accounts	28.6	24.1						
IFRS 9 adjustments	30.4	25.6						
Interest received from Parent Company	-	-						
	59.0	49.7	29.5	20.2	20%	-4.0		
Any adjustment for accelerated or deferred capital allowances								
Disallowable depreciation (1)	267.4	225.1	253.6	(28.5)				
Allowable capital allowances	(338.1)	(284.6)	(216.4)	(68.2)				
	(70.7)	(59.5)	37.2	(96.7)	20%	19.3		
Other adjustments								
Other FD adjustments (2)	(57.8)	(48.7)	(26.8)	(21.9)	20%	4.4		
Effect of change in tax rate						(0.6)		
Taxable Profit	(69.5)	(58.5)	39.9	(98.4)		19.1		
Corporation tax charged at applicable tax rate	13.2	11.1	(8.0)	19.1				
Any amounts for prior year adjustments	3.1	2.6	-	2.6		2.6		
Corporation tax charge	16.3	13.7	(8.0)	21.7		21.7	0.84%	1.48%
Tax on internal interest income group relieved						0.0	0.00%	0.00%
Variance in corporation tax						**21.7**	**0.84%**	**1.48%**
Regulated equity base £m							2,577	1,467
Group relief								
Group relief in respect of tax on internal intercompany interest received (2012-13 prices)						**0.0**	**0.00%**	**0.00%**

1 Disallowable depreciation disclosed above includes both permanent differences and timing differences. This differs from that described as depreciation and amortisation in the tax reconciliation in the notes to the APR, which only includes timing differences, with permanent differences disclosed in 'Items not deductible for tax purposes'.

2 Other FD adjustments primarily relate to adjustments for pension prepayments and non-infrastructure grants and contribution amortisation.

C - Operational out/(under) performance actual: (0.70) per cent vs. (0.40) per cent notional

Totex out/(under) performance: 0.57 per cent vs. 0.32 per cent notional (1F.11)

22 Totex outperformance in the year, as anticipated in last year's APR, reduced from the levels achieved in the early years of the AMP, but remained positive. This outperformance is amplified in the percentage return on actual equity column because of higher gearing which concentrates the outperformance on a smaller equity base. Conversely, any underperformance would have a similar proportional effect on the equity return. It was lower in this last year of the AMP reflecting the commitment of shareholders to reinvest in the business.

23 By maximising the benefits of our alliances, along with innovation, supply chain efficiencies, lean process improvements, energy efficiency projects and general tight cost control, we are delivering efficiencies across our programme. These continue to be key areas of focus as we progress into the last year of the AMP.

ODI out/(under) performance: (0.56) per cent vs. (0.32) per cent notional (1F.12)

24 Our ODI performance, which has historically shown strong operational performance resulting in net rewards, was impacted by two major incidents in the year. The first resulted in a penalty in relation to bathing waters. This calculation is based on samples undertaken by the Environment Agency, which we are currently challenging. The second was over the weekend of 13—15 December 2019, when we faced an exceptionally challenging operational incident, with some customers off water for up to 53 hours. The incident was triggered by a faulty valve on a water main in Leighton Buzzard, and although we were able to fix the initial issue relatively quickly, air trapped in pipes as a result proved difficult and time-consuming to resolve. The work we carried out throughout the weekend — with more than 700 colleagues and alliance partners pitching in to help — meant the number of customers without water reduced steadily, but regrettably, some went the whole weekend without water.

Retail out/(under) performance: (0.71) per cent vs. (0.40) per cent notional (1F.13)

25 The retail underperformance is a result of an additional £12 million bad debt charge being required due to the impact of Covid-19 on expected household cash collection rates, offset in part by various minor efficiencies.

Total earnings: 7.72 per cent vs. 5.27 per cent notional (1F.16)

26 Strong financial performance (cost of debt and gearing) combined with the benefit of additional capital allowances resulting in a tax credit have driven the additional earnings over and above the adjusted return of 5.19% set at PR 14.

RCV growth from RPI inflation: 2.59 per cent (1F.17)

27 This is calculated as RCV times average RPI inflation in the year, of 2.59 per cent, and represents the inflationary impact on the value of the RCV.

Net dividends: 3.46 per cent vs. 1.97 per cent notional (1F.19)

28 This represents dividends available to the parent company. The net dividend of £50.7 million is lower than the £103.1 million accounted for in the FD. As a consequence, the actual dividend yield based on the notional regulated equity is 1.97 per cent compared to 4.00 per cent accounted for in the FD (for a company performing in line with the FD). This reflects our commitment to reduce leverage as announced in March 2018, which means that despite our outperformance and good cash performance during the AMP, we have paid reduced dividends.

29 Based on the available free cash flow there was capacity to pay a further dividend of £192.2 million. However, the Directors have not proposed to pay a final dividend in line with their commitment to reduce leverage.

30 This decision to retain £192m, follows on from the previous £165m shareholder investment into the resilience of the company. Both of these decisions reduced shareholders returns in AMP6 for the benefit of the company.

31 As part of its PR19 process Ofwat has introduced a mechanism which penalises more highly geared companies (such as Anglian Water) and therefore provides these companies with an incentive to reduce their level of gearing. Anglian Water is challenging this mechanism (together with many other aspects of Ofwat's AMP 7 determination) by way of an application to the CMA for a redetermination. The company's approach to de-gearing will be reviewed in the light of the CMA's decision which is expected by December 2020 (with a statutory deadline of March 2021).

32 Based on the actual regulated equity the dividend yield is 3.46 per cent reflecting the lower equity denominator as discussed above.

Commentary – 2015/16 – 2019/20 Average

33 The average for the period 2015/16 - 2019/20 is calculated as the sum of the five years divided by five, rather than the average of the opening and closing positions. Although not defined in the RAGs, this is consistent with prior year.

A – Equity base

Actual performance adjustment 2010-2015: (0.33) per cent vs. (0.18) per cent notional (1F.2)

34 This relates to the PR09 out/(under) performance adjustments, contained in the 'companies populated PR14 financial models file' (Post financeability adjustments). The small underperformance relates to adjustments in respect of the previous AMP, namely the Revenue Correction Mechanism offset, in part, by the reward received for Service Incentive Mechanism (SIM) and an Opex Incentive Adjustment. The above excludes totex menu additional income adjustments as this is not related to PR09 out/(under) performance.

B - Financing

Gearing out/(under) performance: 2.20 per cent vs. 2.20 per cent notional (1F.5)

35 The actual regulated equity to RCV ratio of 20.5 per cent compares to the 37.5 per cent assumed by Ofwat for a notional company. The calculation in row 1F.5 shows that the favourable impact of replacing more expensive cost of equity, 5.19 per cent, with cheaper cost of debt, 2.59 per cent, is 2.20 per cent for the period 2015/16 - 2019/20. We note that, as explained in paragraphs 2-6 of the introduction section above, this line should be read in conjunction with 1F.8 below.

Cost of debt out/(under) performance: (0.46) per cent vs. (0.19) per cent notional (1F.8)

36 As set out in paragraphs 11-14 of the introduction above, our cost of debt out/(under) performance is heavily impacted by the rate of actual inflation in the period. In the early years of the AMP, inflation was lower than the 2.80 per cent assumed by Ofwat. As a consequence of lower inflation, our actual real cost of debt in these years was higher than assumed in the FD and this largely explains the cost of debt underperformance in the first two years of the AMP and the AMP average. The underperformance of the actual company (0.46) per cent is higher than the notional company (0.19) per cent due to the higher equity denominator as discussed in the introduction section above.

Hedging instruments out/(under) performance: (0.01) per cent vs. (0.01) per cent notional (1F.9)

37 The average yearly cost of hedging for the period 2015/16 – 2019/20 of £0.2 million as defined in paragraph 15 represents the premium paid on certain swaps as a result of funds being raised in currency other than sterling. As there was no allowance for hedging in the FD, this cost results in an underperformance of 0.01 per cent in both the actual returns and actual regulatory equity column and the actual returns and notional regulatory equity column.

Variance in corporation tax and group relief out/(under) performance: (1.74) per cent vs. (0.95) per cent notional (1F.6 & 1F.7)

38 The variance in corporation tax compares the tax allowance included in the FD to the actual tax charge in the regulatory accounts.

39 As detailed in the introduction in paragraphs 7-10, in order to understand the underlying tax out/(under) performance of the business, lines 1F.6 and 1F.7 should be viewed in totality as the group relief outperformance is matched by a corresponding underperformance in the variance in corporation tax line. The underperformance in the AMP of 1.73 per cent is primarily due to the additional tax charges relating to the disclaiming of capital allowances

in order to recover surplus Advance Corporation Tax (ACT) and the transitional tax charge as a result of adoption of IFRS 15 in 2018/19, details of which can be seen in the reconciliations on page 49 of our 2019 APR. The percentage underperformance is higher than the notional company reflecting the lower regulated equity used as a denominator.

C - Operational out/(under) performance: 2.89 per cent vs. 1.58 per cent notional

Totex out/(under) performance: 2.48 per cent vs. 1.36 per cent notional (1F.11)

40 Totex outperformance in the AMP was strong, albeit with a lower level of outperformance in years four and five, as a result of the shareholder decision to reinvest £165 million into resilience in the company. This outperformance is amplified in the percentage return on actual equity column because of higher gearing, which concentrates the outperformance on a smaller equity base. Conversely, any underperformance would have a similar proportional effect on the equity return.

41 By maximising the benefits of our alliances, along with innovation, supply chain efficiencies, lean process improvements, energy efficiency projects and general tight cost control, we are delivering efficiencies across our programme. These continue to be key areas of focus as we progress through the AMP.

42 This level of expenditure is broadly in line with management expectations, and concludes our commitment to reinvest £100 million of efficiencies and £65 million in resilience. We have successfully delivered a number of our obligations for the Environment Agency through some innovative and lower build approaches which has enabled us to both reduce carbon and deliver best whole-life cost solutions.

43 These schemes at places such as Ingoldisthorpe, Great Dunmow and Stanbridgeford will form the basis not only of our Green Bond funded investment plan, but will also serve as a blueprint for the approach we want to take in AMP7 (2020 – 2025) the next 5 year regulatory period.

44 Over the 2015–2020 five-year period, we have invested £2 billion through our capital investment programme, delivering our business plan in terms of both regulatory outputs and in support of our Outcome Delivery Incentives (ODIs).

ODI out/(under) performance: 0.49 per cent vs. 0.27 per cent notional (1F.12)

45 Our ODI outperformance reflects good operational performance in the AMP resulting in net rewards earned primarily on leakage, SIM and pollution incidents. Again, the percentage return, of 0.49 per cent is higher than the notional company, 0.27 per cent, reflecting the lower regulated equity used as the denominator.

Retail out/(under) performance: (0.14) per cent vs. (0.08) per cent notional (1F.13)

46 Retail performance is largely in line with the FD, the small adverse result is due to the £12 million bad debt charge in 19/20 in relation to Covid-19, offset in part by various minor efficiencies.

Other exceptional items: 0.06 per cent vs. 0.03 per cent notional (1F.14)

47 This reflects the £4.8 million (2012/13 prices: £4.2 million) profit on the disposal of the Retail non-household part of the business on 1 April 2017.

Total earnings: 8.13 per cent vs. 5.52 per cent notional (1F.16)

48 A strong operational performance, primarily driven by totex efficiencies and ODIs, has resulted in positive returns over the AMP worth 2.89 per cent. There is a further net upside on pre tax financing of 1.73 per cent. Adding this to the adjusted return on regulated equity of 5.25 per cent and the tax underperformance of 1.73 per cent results in total earnings over the four years of 8.15 per cent on actual regulated equity.

RCV growth from RPI inflation: 2.52 per cent (1F.17)

49 This is calculated as RCV times average RPI inflation in the period, of 2.52 per cent, and represents the inflationary impact on the value of the RCV.

Net dividends: 6.15 per cent vs. 3.38 per cent notional (1F.19)

50 This represents dividends available to the parent company. The net average annual dividend of £84.8 million is lower than the £100.5 million accounted for in the FD. As a consequence, the actual dividend yield based on the notional regulated equity is 3.38 per cent compared to 4.00 per cent accounted for in the FD (for a company performing in line with the FD). This reflects our commitment to reduce leverage as announced in March 2018, which means that despite our outperformance on totex and ODIs as well as good cash performance during the AMP and relatively high distributable free cash flow for the last year of the previous AMP, 2014/15, we have paid reduced dividends in this AMP.

51 This decision follows on from the previous £165m shareholder investment into the resilience of the company. Both of these decisions reduced shareholders returns in AMP6 for the benefit of the company.

52 As part of its PR19 process Ofwat has introduced a mechanism which penalises more highly geared companies (such as Anglian Water) and therefore provides these companies with an incentive to reduce their level of gearing. Anglian Water is challenging this mechanism (together with many other aspects of Ofwat's AMP 7 determination) by way of an application to the CMA for a redetermination. The company's approach to de-gearing will be reviewed in the light of the CMA's decision which is expected by December 2020 (with a statutory deadline of March 2021).

53 Based on the actual regulated equity the dividend yield is 6.15 per cent reflecting the lower equity denominator as discussed above.

Appendix 1: Impact of RPI on allowed real fixed cost of debt out/(under) performance

54 The following table illustrates that, all else being equal, higher inflation will decrease the real cost of non-index linked debt and vice versa for lower inflation. In years when inflation is higher than the Ofwat assumed 2.80 per cent, all else being equal, the real cost of debt outperformance will increase, with the exception of the real cost of index linked debt which is not directly impacted by the actual level of inflation.

Impact of RPI on allowed real fixed cost of debt out/(under) performance

		Using assumed FD RPI	Lower RPI impact 2015/16	Higher RPI impact 2017/18
a	Nominal cost of debt	5.46%	5.46%	5.46%
b	Less RPI	2.80%	1.05%	3.74%
c	Real cost of debt[1]	2.59%	4.36%	1.66%
	Out/(under) performance vs allowed real cost of debt of 2.59%		(1.78%)	0.93%

The above table shows that the actual real cost of debt is more expensive than the FD in years when RPI is lower than 2.8% and less expensive in years when RPI is higher than 2.8%

1 The above example uses the Fisher equation to calculate the real cost of debt. This is consistent with the approach used in setting the allowed real cost of debt. We note that for the purposes of table 1F (Financial Flows), the RAGs require the Fisher equation not to be used in any calculation.

Table 2A - Segmental Income Statement

	Line description	Retail		Wholesale						Total
		Household	Non-Household	Water resources	Water Network+	Water Total	Wastewater Network+	Sludge	Wastewater Total	
		£m	£m	£m	£m	£m	£m	£m	£m	£m
1	Revenue - price control	84.142	-		481.134	**481.134**	726.629		**726.629**	**1,291.905**
2	Revenue - non price control	-	-		13.694	**13.694**	2.993		**2.993**	**16.687**
3	Operating expenditure	(88.622)	-	(37.331)	(222.667)	**(259.998)**	(235.380)	(60.008)	**(295.388)**	**(644.008)**
4	Depreciation - tangible fixed assets	(0.784)	-	(8.446)	(106.833)	**(115.279)**	(146.387)	(49.802)	**(196.189)**	**(312.252)**
5	Amortisation - intangible fixed assets	(1.601)	-	(1.886)	(3.277)	**(5.163)**	(35.296)	(0.653)	**(35.949)**	**(42.713)**
6	Other operating income	0.005	-	0.103	0.411	**0.514**	1.842	(0.101)	**1.741**	**2.260**
7	Operating profit before recharges	(6.860)	-			**114.902**			**203.837**	**311.879**
A	**Recharges in respect of 'principal use' assets**									
8	Recharges from other segments	(4.166)	-	(1.612)	(11.098)	**(12.710)**	(0.004)	(4.413)	**(4.417)**	**(21.293)**
9	Recharges to other segments	0.008	-	-	-	**-**	21.285	-	**21.285**	**21.293**
10	Operating profit	(11.018)	-			**102.192**			**220.705**	**311.879**
11	Surface water drainage rebates									**0.615**

Revenue (2A.1 and 2A.2)

1 Total revenue for the year was £1,308.6 million, up £48.7 million (3.9 per cent) on last year, which is explained in table 1A commentary. Non-price control revenue reflects bulk supplies and rechargeable works income which is above 2018/19 level as a result of higher demand.

Operating expenditure, depreciation and amortisation (2A.3-2A.5)

2 Operating costs of £999.0 million comprise operating expenditure of £644.0 million and depreciation (including amortisation) of £355.0 million. Overall operating costs (including depreciation) for the year increased by £55.8 million in nominal terms (5.6 per cent) from £943.2 million and £31.2 million in real terms (3.2 per cent) from £967.7 million in 2018/19. The increase in opex costs (on a statutory, nominal basis for the whole business, excluding depreciation) is explained in the commentary to table 1A.Other operating income

3 (2A.6) Other operating income represents the profit on disposal of fixed assets which was £1.1 million higher than the previous year due to an increased number of small value land and vehicle disposals which were completed in the current year.

Recharges from/to other segments (2A.8 and 2A.9)

4 This is the recharge of depreciation on assets used by multiple price controls, primarily shared information technology and vehicle assets. As the business unit of principal use, wastewater network+ incurs the gross depreciation charge for these shared assets in the first instance. There has been a £2.8 million increase in total recharges due to additional commissioning of assets allocated to Wastewater Network+ which are shared.

Surface water drainage rebates (2A.11)

5 The value of surface water drainage rebates has dropped to a more typical level this year following a significant rise last year. The higher level last year was as a result of social media sharing leading to an increase in the number of customers applying for rebates, compared with previous years. This has not been repeated in the current year.

Table 2B - Totex Analysis - Wholesale

	Line description	Water Resources £m	Water Network+ £m	Wastewater Network+ £m	Sludge £m	Total £m
A	**Operating expenditure**					
1	Power	7.877	27.754	40.789	(0.508)	**75.912**
2	Income treated as negative expenditure	(0.068)	(0.440)	(0.649)	(10.237)	**(11.394)**
3	Abstraction charges/ discharge consents	10.042	0.535	8.502	(0.011)	**19.068**
4	Bulk supply/ Bulk discharge	-	2.040	-	-	**2.040**
5	Other operating expenditure - renewals expensed in year (Infrastructure)	-	36.628	21.769	-	**58.397**
6	Other operating expenditure - renewals expensed in year (Non-Infrastructure)	-	-	-	-	**-**
7	Other operating expenditure - excluding renewals	14.191	110.320	142.572	67.063	**334.146**
8	Local authority and Cumulo rates	3.065	37.244	21.468	3.301	**65.078**
9	Total operating expenditure excluding third party services	35.107	214.081	234.451	59.608	**543.247**
10	Third party services	2.224	8.586	0.929	0.400	**12.139**
11	Total operating expenditure	37.331	222.667	235.380	60.008	**555.386**
B	**Capital Expenditure**					
12	Maintaining the long term capability of the assets - infra	0.190	25.664	18.116	-	**43.970**
13	Maintaining the long term capability of the assets - non-infra	13.385	55.021	104.775	15.571	**188.752**
14	Other capital expenditure - infra	0.515	42.727	19.244	-	**62.486**
15	Other capital expenditure - non-infra	10.900	39.278	57.390	5.959	**113.527**
16	Infrastructure network reinforcement	-	26.907	15.286	-	**42.193**
17	Total gross capital expenditure excluding third party services	24.990	189.597	214.811	21.530	**450.928**
18	Third party services	-	7.969	7.012	-	**14.981**
19	Total gross capital expenditure	24.990	197.566	221.823	21.530	**465.909**
C	**Grants and contributions**					
20	Grants and contributions	-	31.648	20.562	-	**52.210**
21	Totex	62.321	388.585	436.641	81.538	**969.085**
D	**Cash Expenditure**					
22	Pension deficit recovery payments	0.575	4.738	5.915	2.336	**13.564**
23	Other cash items	-	-	-	-	**-**
E	**Total**					
24	Totex including cash items	62.896	393.323	442.556	83.874	**982.649**

1 Total operating costs were £555.4 million, an increase of £8.8 million (1.6 per cent) in real terms on the previous report year (including atypical items).

2 Wholesale regulated capital expenditure for 2019/20 was £465.9 million, split between water £222.6 million and wastewater £243.3 million.

A change in operating expenditure compared to 2018/19

3 Water services operating expenditure decreased by £1.3 million (0.5 per cent) in real terms against an underlying baseline. Wastewater costs increased by £6.0 million (2.1 per cent) in real terms.

Movement in costs 2018/19 to 2019/20

	Water £m	Wastewater £m	Total £m
2018/19 reported total operating expenditure	**253.3**	**279.6**	**532.9**
Inflation @ 2.6%	6.5	7.2	13.7
2018/19 underlying costs indexed to 2019/20 prices	**259.8**	**286.8**	**546.6**
2019/20 total operating expenditure	**260.0**	**295.4**	**555.4**
Atypical re-structuring costs	(1.5)	(2.9)	(4.4)
2019/20 costs re-stated to underlying position	258.5	292.5	551.0
(Increase) / decrease in underlying expenditure from 2018/19	**1.3**	(5.7)	**(4.4)**

A Operating expenditure

Key variances in underlying costs (real terms)

Water

4 The net decrease in water services is due to a number of relatively small variances during the year. Water resources operating expenditure saw a £1.4 million favourable variance due to a reduction in power costs in relation to river abstraction. People and material costs increased by £1.3 million in water treatment due to additional maintenance. Treated water distribution saw renewals expenditure increase by £1.0 million and with a reduction in power costs of £1.3 million.

Wastewater

5 Total collection costs increased by £6.1 million in real terms, all in relation to wet weather costs particularly in the early part of 2020. Sewage treatment increased by £1.3 million and was due to the increase in chemical costs during the year, generally as a result of worsening exchange rates and demand. Sludge costs decreased by £1.7 million is due to improved CHP output and income from renewable obligation certificate (ROCs) plus a number of other smaller savings.

B Capital expenditure

6 The figures presented relate to all our regulated capital investment on wholesale services, including the Hartlepool region. Total capital investment comprises wholesale expenditure of £465.9 million and retail expenditure of £5.0 million.

7 Where possible, expenditure is allocated directly to the applicable price control. Where this is not possible because use of the asset is shared between two or more price controls (for example with capital expenditure on shared information systems, central offices and vehicles used by support services), expenditure is allocated to the price control of principal use and a subsequent recharge of the relevant depreciation charge is made between price controls.

8 This approach differs from that used in the preparation of the 2014 business plan submission where shared capital expenditure was allocated across price controls on the basis of asset use.

9 There have been no other material changes in allocation methodology since the 2014 business plan.

10 Total capital expenditure includes £15.0 million of spend on assets used to fulfil third-party agreements.

D Cash expenditure

11 The only cash expenditure incurred that is not included in our operating cost totals relates to pension deficit payments. The total paid in the year was £15.1 million, of which £13.6 million is in relation to wholesale.

Table 2C - Operating Cost Analysis - Retail

	Line description	Household £m	Non-household £m	Total £m
	Operating expenditure			
1	Customer services	16.930	-	**16.930**
2	Debt management	10.615	-	**10.615**
3	Doubtful debts	40.048	-	**40.048**
4	Meter reading	3.645	-	**3.645**
5	Services to developers		-	**-**
6	Other operating expenditure	17.384	-	**17.384**
7	Total operating expenditure excluding third party services	88.622	-	**88.622**
8	Third party services operating expenditure	-	-	**-**
9	**Total operating expenditure**	88.622	-	**88.622**
10	Depreciation - tangible fixed assets	0.784	-	**0.784**
11	Amortisation - intangible fixed assets	1.601	-	**1.601**
12	**Total operating costs**	91.007	-	**91.007**
13	Debt written off	18.889	-	**18.889**

1 Total operating expenditure was £88.6 million, a headline increase of £13.6 million (18.1 per cent) on the previous report year in real terms. However, this includes atypical costs of £12.6 million, £0.6 million of which relates to re-structuring costs and £12.0 million is in relation to an exceptional bad debt charge taken to reflect the forecast impact on debt collection resulting from the Covid-19 pandemic.

2 Our underlying operating expenditure of £76 million is £2.7 million favourable to the amount allowed for retail costs at PR14.

3 Household retail capex was £5.0 million, primarily for the introduction of new and enhanced information services software used within the retail business. This spend on new software is primarily responsible for the increase in amortisation of intangible retail assets from the prior year.

4 Total household customers increased by c.28,000 in the year (1.0 per cent), with unmeasured customers down by c.28,000 (4.7 per cent) and measured customers increasing by c.56,000 (2.5 per cent).

Change in retail operating expenditure compared to 2018/19

Movement in costs 2018/19 to 2019/20

	Total £m
2018/19 total operating expenditure	75.0
Inflation @ 2.6%	2.0
2018/19 expenditure indexed to 2019/20 prices	**77.0**

	Total £m
2019/20 reported operating expenditure	**88.6**
Atypical costs - re-structuring provision	(0.6)
Atypical cost - IFRS9 bad debt provision recognising potential impact of Covid 19	(12.0)
2019/20 costs re-stated to underlying position	76.0
Decrease in underlying retail operating costs	1.0

Key Variances (real terms)

5 The underlying reduction in costs of £1.0 million from the prior year is due to reductions across a number of headings, of which, customer queries and complaints accounted for £0.8 million and general and support costs £1.0 million. The total reductions in the year were partially offset by an underlying increase of £1.3 million in the bad debt charge in real terms.

Debt written off

6 Total household debt written off was £18.9 million, an increase of £2.7 million over the prior year write offs of £16.2 million (these figures differ slightly to those quoted in our statutory accounts which include the write off of some legacy non-household debt). Our write off policy has not changed in the year and the increase seen in total write-offs is due to a larger number of customer accounts meeting our ageing threshold and other criteria for assessing that collection is deemed highly unlikely or is uneconomic to pursue (e.g. old, small account balances).

Table 2D - Historic Cost Analysis of Fixed Assets - Wholesale and Retail

	Line description	Wholesale				Retail		Total
		Water Resources	Water Network+	Wastewater Network+	Sludge	Household	Non-Household	
		£m	£m	£m	£m	£m	£m	£m
A	**Cost**							
1	At 1 April 2019	301.814	5,487.936	7,132.839	719.743	10.420	-	**13,652.752**
2	Disposals	(1.280)	(10.651)	(22.668)	(1.990)	(0.065)	-	**(36.654)**
3	Additions	20.855	194.443	177.701	17.061	(0.250)	-	**409.810**
4	Adjustments	-	-	-	-	-	-	**-**
5	Assets adopted at nil cost	-	-	37.065	-	-	-	**37.065**
6	At 31 March 2020	321.389	5,671.728	7,324.937	734.814	10.105	-	**14,062.973**
B	**Depreciation**							
7	At 1 April 2019	(85.897)	(1,422.993)	(2,319.632)	(362.053)	(8.232)	-	**(4,198.807)**
8	Disposals	1.276	10.580	21.096	1.810	0.064	-	**34.826**
9	Adjustments	-	-	-	-	-	-	**-**
10	Charge for the year	(8.446)	(106.833)	(146.387)	(49.802)	(0.784)	-	**(312.252)**
11	At 31 March 2020	(93.067)	(1,519.246)	(2,444.923)	(410.045)	(8.952)	-	**(4,476.233)**
12	Net book amount at 31 March 2020	228.322	4,152.482	4,880.014	324.769	1.153	-	**9,586.740**
13	Net book amount at 1 April 2019	215.917	4,064.943	4,813.207	357.690	2.188	-	**9,453.945**
D	**Depreciation charge for year**							
14	Principal services	(8.446)	(106.799)	(146.387)	(49.802)	(0.784)	-	**(312.218)**
15	Third party services	-	(0.034)	-	-	-	-	**(0.034)**
16	**Total**	(8.446)	(106.833)	(146.387)	(49.802)	(0.784)	-	**(312.252)**

1 The net book amount includes £351.6 million in respect of assets in the course of construction, £147.1 million of newly constructed adopted assets and £2,998.7 million of revaluation of assets undertaken 1 April 2013. Adopted asset additions increased from £22.0 million in 2018/19 to £37.1 million in 2019/20 thanks to a proactive effort to assist developers bring their sewer developments up to standard and finalise long running Section 104 agreements.

2 Table 2D excludes intangible assets with a net book amount at 31 March 2020 of £206.5 million (31 March 2019: £188.7 million).

3 The opening balance of cost in line 1 has been increased by £33.1 million from the 31 March 2019 closing balance due to the adoption of the new lease treatment standard IFRS 16 with effect from 1 April 2019. New leases form a net increase to cost of £5.5 million during the year and the net book amount of assets includes £34.6 million of lease assets which would not have been included but for the adoption of IFRS 16.

4 The sludge depreciation charge for the year is again higher than years prior to 2018/19 due to the depreciation on assets which have been retained for resilience purposes being accelerated over the remainder of AMP 6 as these assets no longer form part of the sludge treatment strategy from 1 April 2020. The resilience assets depreciation increase was effective from 1 October 2017 resulting in a higher charge for the second half of 2017/18 and the whole of 2018/19 and 2019/20.

5 Retail Household additions appear negative but this is caused by a reclassification of assets from tangible to intangible (intangible assets are not reported in 2D) following a reassessment in 2019/20 of assets included as Retail Household in the prior year.

6 The depreciation charge for third party services relates to fluoridation assets. None of our other third party expenditure is incurred on assets used solely for the fulfilment of third party agreements. As such all other third party expenditure is included within the principal services asset values.

Assumptions used

7 In accordance with RAG 2.07, section 2.3.2, where assets are used by more than one business unit, these have been reported in full in the business unit of principal use. A recharge based on depreciation is made between business units to account for the use of these assets by the non-principal user(s).

8 Due to the above, all management and general assets have been assigned to wastewater or water according to their project types except where they have been identified as being principally Retail assets.

9 An offline assessment is made to determine whether assets are solely wholesale, solely retail or shared between the two.

Table 2E - Analysis of Capital Contributions and Land Sales - Wholesale

	Line description	Current year		
		Fully recognised in income statement	Capitalised and amortised (in income statement)	Fully netted off capex
		£m	£m	£m
A	**Grants and contributions - water**			
1	Connection charges (s45)	11.778	-	-
2	Infrastructure charge receipts (s146)	10.874	-	-
3	Requisitioned mains (s43, s55 & s56)	5.224	-	-
4	Other contributions (price control)	-	-	-
5	Diversions (s185)	2.405	-	-
6	Other contributions (non-price control)	1.367	-	-
7	**Total**	31.648	-	-
8	Value of adopted assets	-	-	
B	**Grants and contributions - wastewater**			
9	Infrastructure charge receipts (s146)	12.156	-	-
10	Requisitioned sewers (s100)	0.301	-	-
11	Other contributions (price control)	3.579	-	-
12	Diversions (s185)	4.433	-	-
13	Other contributions (non-price control)	0.093	-	-
14	**Total**	20.562	-	-
15	Value of adopted assets	37.065	-	

	Line description	Current year		
		Water	Wastewater	Total
		£m	£m	£m
C	**Movements in capitalised grants and contributions**			
16	Brought forward	-	-	-
17	Capitalised in year	-	-	-
18	Amortisation (in income statement)	-	-	-
19	Carried forward	-	-	-

	Line description	Current year		
		Water	Wastewater	Total
		£000	£000	£000
D	**Land sales**			
20	Proceeds from disposals of protected land	393.880	1,293.239	1,687.119

A - Grants and contributions - water

Diversions (2E.5)

1 Diversion income has decreased in 2019/20 due mainly to reduced income from the major A14 road diversion project on which the water mains was largely completed in the previous year 2018/19.

Other contributions (non-price control) (2E.6)

2 Other contributions (non-price control) includes a £1.3 million landlord contribution towards the renovation of a rented office in Lincoln.

B - Grants and contributions - wastewater

Requisition sewers (2E.10)

3 General Section 98 requisition contributions have decreased by £0.2 million due to the completion and final payment of a number of schemes in 2018/19 not being repeated in 2019/20. In addition to this Section 98 requisition contributions include a number of developments accounted for under what is known as the Serviced Site Contribution Model (SSCM) which is intended to enable developer contributions to more closely match actual build rates of the developments instead of the normal higher payment upfront thereby assisting developers' cashflow. The SSCM method relies on information from developers on actual build numbers and since this has sometimes proved difficult to acquire, Anglian Water has been forced to make an estimate on occasion. An estimate was made in 2018/19 which, upon receipt of lower actual build numbers during 2019/20, proved to have been high. The resulting true up in SSCM contribution income was a net £1.0 million reduction in 2019/20.

Diversions (2E.12)

4 Diversion income has increased in 2019/20 due mainly to the major A14 road diversion project on which most of the sewer mains was undertaken during this year.

Other contributions (non-price control) (2E.13)

5 These include new sewer connections to existing sewers.

D - Land sales

Proceeds from disposals of protected land (2E.20)

6 Proceeds are net of costs. Most proceeds are from the sale of minor pieces of land. There were no items requiring prior approval from Ofwat.

Table 2F - Household - Revenues by Customer Type

	Line description	Wholesale charges revenue £m	Retail revenue £m	Total revenue £m	Number of customers (000s)	Average household retail revenue per customer £
1	Unmeasured water only customer	20.218	1.917	22.135	91.558	**20.94**
2	Unmeasured wastewater only customer	71.201	5.175	76.376	236.201	**21.91**
3	Unmeasured water and wastewater customer	126.951	10.263	137.214	239.520	**42.85**
4	Measured water only customer	22.285	3.030	25.315	145.464	**20.83**
5	Measured wastewater only customer	125.189	12.115	137.304	584.521	**20.73**
6	Measured water and wastewater customer	576.729	51.642	628.371	1,535.917	**33.62**
7	**Total**	**942.573**	**84.142**	**1,026.715**	**2,833.181**	**29.70**

Total (2F.7)

1 The increase in total household revenue year on year reflects primarily the allowed regulatory price increase of 3.2 per cent and the growth in customer numbers, together with the value of the net under-accrual of £0.3 million recognised for 2018/19 (2017/18 under-accrual of £4.9 million) partly off-set by a decrease in demand and the net impact of switching from unmeasured to measured supply.

2 The household retail revenue control is a total revenue control, which can be recovered across the household customer base. The allowed revenue is calculated by multiplying the cost to serve per service category by the number of unique customers served on each basis. The costs to serve including an allowed margin by service category are set out in the modification factor table (Table AA2.2) in the company specific appendix to the Final Determination.

3 Actual reported unmeasured retail revenue is £2.2 million above allowed revenue based on the weighted average number of unique customers by service. Measured retail revenue is £6.5 million lower than allowed revenues. This reflects the smearing of revenue recovery across the customer base, as allowed by the control.

4 The net position of £4.3 million under recovery (5.1 per cent of retail revenue) reflects the increased take up of the concessionary tariff LITE compared to forecast when setting charges.

Table 2G - Non-household Water - Revenues by Customer Type

	Line description	Wholesale charges revenue £m	Retail revenue £m	Total revenue £m	Number of connections (000s)	Average non-household retail revenue per connection £
A	**Non-Default tariffs**					
1	Total non-default tariffs	-	-	-	-	-
B	**Default tariffs**					
2	Unmeasured (potable water)	-	-	-	-	-
3	Hartlepool Unmeasured (potable water)	-	-	-	-	-
4	Streamline Green (potable water) - (0.0Ml to 0.5Ml)	-	-	-	-	-
5	Streamline Orange (potable water) - (0.5Ml to 5.0Ml)	-	-	-	-	-
6	Streamline Orange (non-potable) - (0.0Ml to 5.0Ml)	-	-	-	-	-
10	Hartlepool Commercial (potable water) - (0.0Ml to 50.0Ml)	-	-	-	-	-
17	Special Agreements (potable water) - (0.0Ml +)	-	-	-	-	-
18	Special Agreements (non potable water) - (0.0Ml +)	-	-	-	-	-
19	Water supplies 5 to 50 MI	-	-	-	-	-
20	Water supplies 50 MI and over	-	-	-	-	-
21	Total default tariffs	-	-	-	-	-
22	**Total**	-	-	-	-	-

		Number of customers (000s)	Average non-household retail revenue per customer £
C	**Revenue per customer**		
23	Total	-	-

1 Line numbers shown are as per the Ofwat table template. These numbers are not sequential due to lines marked as "n/a" not being included. Table has been left blank as the company has exited all non-household retail market activities. The value of wholesale revenue for the year is £132.9 million.

Table 2H - Non-household Wastewater - Revenues by Customer Type

	Line description	Wholesale charges revenue £m	Retail revenue £m	Total revenue £m	Number of connections (000s)	Average non-household retail revenue per connection £
A	**Non-Default tariffs**					
1	Total non-default tariffs	-	-	-	-	**-**
B	**Default tariffs**					
2	Unmeasured (Sewerage)	-	-	-	-	**-**
3	Streamline Green (Sewerage) - (0.0Ml to 0.5Ml)	-	-	-	-	**-**
4	Streamline Orange (Sewerage) - (0.5Ml to 5.0Ml)	-	-	-	-	**-**
7	Unmeasured (Trade Effluent)	-	-	-	-	**-**
8	Streamline Green (Trade Effluent) - (0.0Ml to 0.5Ml)	-	-	-	-	**-**
9	Streamline Orange (Trade Effluent) - (0.5Ml to 5.0Ml)	-	-	-	-	**-**
12	Wastewater services 5 to 50 MI	-	-	-	-	**-**
13	Wastewater services 50 MI and over	-	-	-	-	**-**
24	Total default tariffs	-	-	-	-	**-**
25	Total	-	-	-	-	**-**

	Line description	Number of customers (000s)	Average non - household retail revenue per customer £
C	**Revenue per customer**		
26	Total	-	**-**

1 Line numbers shown are as per the Ofwat table template. These numbers are not sequential due to lines marked as "n/a" not being included. Table has been left blank as the company has exited all non-household retail market activities. The value of wholesale revenue for the year is £132.3 million.

Table 2I - Revenue Analysis and Wholesale Control Reconciliation

	Line description	Household £m	Non-household £m	Total £m
A	**Wholesale charge - water**			
1	Unmeasured	78.961	0.351	**79.312**
2	Measured	269.271	120.054	**389.325**
3	Third party revenue	-	12.497	**12.497**
4	**Total**	348.232	132.902	**481.134**
B	**Wholesale charge - wastewater**			
5	Unmeasured	139.409	0.738	**140.147**
6	Measured	454.932	131.550	**586.482**
7	Third party revenue	-	-	**-**
8	**Total**	594.341	132.288	**726.629**
9	Wholesale Total	942.573	265.190	**1,207.763**
C	**Retail revenue**			
10	Unmeasured	17.355	-	**17.355**
11	Measured	66.787	-	**66.787**
12	Other third party revenue	-	-	**-**
13	**Retail total**	84.142	-	**84.142**
D	**Third party revenue - non-price control**			
14	Bulk Supplies - water			**11.073**
15	Bulk Supplies - wastewater			**2.993**
16	Other third party revenue			**1.736**
E	**Principal services - non-price control**			
17	Other appointed revenue			**0.885**
18	**Total appointed revenue**			**1,308.592**

	Line description	Water £m	Wastewater £m	TTT
19	Wholesale revenue governed by price control	481.134	726.629	-
20	Grants & contributions	27.876	16.036	-
21	**Total revenue governed by wholesale price control**	509.010	742.665	-
22	Amount assumed in wholesale determination	506.763	736.362	-
23	Adjustment for in-period ODI revenue	6.642	-	-
24	Adjustment for WRFIM	(6.598)	1.183	-
25	**Total assumed revenue**	506.807	737.545	-
26	Difference	2.203	5.120	-

Amount assumed in wholesale determination (2I.22)

1 Wholesale revenue controls are set for water and wastewater separately. The values set out in the Final Determination in 2012/13 prices are repriced based on RPI to give the allowed revenue for 2019/20. This calculation of allowed revenue was adjusted for actual over recovery of allowed revenue for the 2017/18 charging year net of the forecast over-recovery of allowed revenue for the 2017/18 charging year taken into charge setting for 2018/19, in line with the mechanisms as set out in the PR14 reconciliation rulebook, revised in December 2017. It also included the in-period ODI reward for leakage performance in 2017/18. The resulting calculation of revenue is then used for setting charges for the 2019/20 Charges Scheme.

2 Allowed wholesale water revenue and wholesale wastewater revenue was calculated as £506.8 million and £737.5 million respectively.

Difference (2I.26)

3 The level of wholesale water revenue recovered from household customers is £2.2 million above allowed revenues. This over-recovery represents 0.4 per cent of allowed revenue. This reflects an over-recovery of grants & contributions (£2.6 million) off-set by an under-recovery of main charges revenue (£0.4 million).

4 The level of wholesale wastewater revenue is £5.1 million above allowed revenues. The over-recovery represents 0.6 per cent of allowed revenues. This reflects an over-recovery of main charges (£5.8 million) off-set by an under-recovery of grants & contributions (£0.7 million). The over-recovery results from higher demand from customers of Water Only Companies than forecast when setting charges and revised trade effluent strength discharge consents.

Grants & contributions (2I.20)

5 We do not receive any grants. All current year contributions revenue governed by the wholesale price control were received in relation to new development activities.

6 Contributions in respect of water were greater than forecast by £2.6 million as a result of the higher than originally anticipated levels of new development activity seen across our region. Contributions in respect of wastewater were less than forecast by £0.7 million, primarily due to the impact of removing certain types of requisition offers to developers.

Table 2J - Infrastructure Network Reinforcement

	Line description	Network reinforcement capex £m	On site / site specific capex (memo only) £m
A	**Wholesale water network+ (treated water distribution)**		
1	Distribution and trunk mains	23.111	34.003
2	Pumping and storage facilities	3.796	-
3	Other	-	-
4	**Total**	26.907	34.003
B	**Wholesale wastewater network+ (sewage collection)**		
5	Foul and combined systems	12.756	0.326
6	Surface water only systems	-	-
7	Pumping and storage facilities	2.530	-
8	Other	-	-
9	**Total**	15.286	0.326

General assumptions (2J.1-2J.9)

1 Table 2J shows the total capital expenditure on network reinforcement split between below ground infrastructure assets and pumping and storage facilities, classified in accordance with the definition set out in Ofwat's "Charging rules for new connections services" document.

2 The onsite / site specific capex shows the network enhancement expenditure incurred in relation site specific new developments.

3 The source of the data is the project systems module of our SAP business management system. Each project holds as part of its master data Business Investment Category (BIC) codes which map the expenditure to infrastructure and non-infrastructure, and between Water and Wastewater Network+.

4 All network reinforcement spend is in relation to below ground infrastructure, pumping stations and storage facilities. No expenditure is therefore shown within "other".

Wastewater below ground infrastructure (2J.5-2J.6)

5 For Wastewater Network+ infrastructure spend, an assessment of all projects has been performed to determine whether the costs are in relation to foul and combined or surface water only systems. No surface water only schemes were included in the current year.

Table 2K - Infrastructure Charges Reconciliation

	Line description	Water £m	Wastewater £m	Total £m
A	**Impact of infrastructure charge discounts**			
1	Infrastructure charges	10.874	12.156	23.030
2	Discounts applied to infrastructure charges	-	-	-
3	**Gross infrastructure charges**	10.874	12.156	23.030
B	**Comparison of revenue and costs**			
4	Variance brought forward			(6.666)
5	Revenue	10.874	12.156	23.030
6	Costs	(26.907)	(15.286)	(42.193)
7	Variance carried forward	(16.033)	(3.130)	(19.163)

1 For the financial year 2019/20 total network infrastructure reinforcement costs were £42.2 million which is £19.1 million higher than the corresponding revenues of £23.0 million. Within this, water costs were £16.0 million higher than the equivalent revenues and wastewater costs were £3.1 million higher.

2 Over a rolling five year period we expect to fully recover the costs of network infrastructure reinforcement from developers. However, owing to the long-term nature of these infrastructure schemes, the uneven profile of network reinforcement spend over an AMP period and the fact that we aim to recover these infrastructure costs over a five year period, we would not expect the costs and revenues to match in any given financial year. This is borne out in the costs and revenues seen in 2019/20.

3 Our region is currently experiencing a significant uplift in the level of new development, much of which is in the early stages. This is driving significant new infrastructure reinforcement needs resulting in the high levels of infrastructure reinforcement spend seen in 2019/20.

4 Additionally, the charges scheme has been designed to maintain the pre-existing balance between developers and customers and the timing of expenditure is such that it is often out of sync with the collection of revenues, with expenditure being on the more linear basis of plots connected.

5 We therefore believe the differences in expenditure and revenue seen in 2019/20 to be temporary in nature and would expect this gap to narrow over time, particularly as the new development activity reaches maturity and all network reinforcement expenditure incurred to enable this growth is recovered from developers.

6 No discounts have been applied to infrastructure charges in 2019/20.

Table 3A - Outcome Performance

Row	Unique ID	Performance commitment	Unit	2019-20 performance level - actual	2019-20 CPL met?	2019-20 outperformance payment or underperformance payment - in-period ODIs (indicator)	2019-20 outperformance payment or underperformance payment - in-period ODIs (£m, to 4 dp)	2019-20 outperformance payment or underperformance payment - ODIs payable at the end of AMP6 (indicator)	2019-20 outperformance payment or underperformance payment - ODIs payable at the end of AMP6 (£m, to 4 dp)
1	PR14ANHWSW_W-A2	W-A2: Water supply interruptions	time	18.65	No	-		Underperformance payment	-8.5620
2	PR14ANHWSW_W-A3	W-A3: Properties at risk of persistent low pressure	nr	148	Yes	-		Outperformance payment	6.0000
3	PR14ANHWSW_W-A4	W-A4: Water quality contacts	nr	1.15	Yes	-		Outperformance payment	0.0942
4	PR14ANHWSW_W-B1	W-B1: Value for money perception - variation from baseline against WaSCs (water)	%	-1	No	-		Underperformance payment	-0.0250
5	PR14ANHWSW_W-C1	W-C1: Percentage of population supplied by single supply system	%	24.1	Yes	-		-	
6	PR14ANHWSW_W-C2	W-C2: Frequency of service level restrictions (hosepipe bans)	nr	1	Yes				
7	PR14ANHWSW_W-D1	W-D1: Security of Supply Index (SoSI) - dry year annual average	score	99	No				
8	PR14ANHWSW_W-D2	W-D2: Security of Supply Index (SoSI) - critical period (peak) demand	score	100	Yes				
9	PR14ANHWSW_W-D3	W-D3: Per property consumption (PPC) (litres/household/day reduction)	nr	-4	No	-		Underperformance payment	-7.7700
10	PR14ANHWSW_W-D4	W-D4: Leakage - three-year average	nr	185	Yes	Outperformance payment	3.6050	-	
11	PR14ANHWSW_W-E1	W-E1: Percentage of SSSIs (by area) with favourable status	%	99	Yes				
12	PR14ANHWSW_W-E2	W-E2: Environmental compliance (water)	nr	16	Yes	-		-	
13	PR14ANHWSW_W-F1	W-F1: Operational carbon (% reduction from 2015 baseline)	%	34	Yes				
14	PR14ANHWSW_W-F2	W-F2: Embodied carbon (% reduction from 2010 baseline)	%	61	Yes				
15	PR14ANHWSW_W-G1	W-G1: Survey of community perception	%	56	No				
16	PR14ANHWSW_W-H1	W-H1: Water infrastructure	category	Amber	No	-		Underperformance payment	-0.3260
17	PR14ANHWSW_W-H2	W-H2: Water non-infrastructure	category	Green	Yes	-		-	

Row	Unique ID	Performance commitment	Unit	2019-20 performance level - actual	2019-20 CPL met?	2019-20 outperformance payment or underperformance payment - in-period ODIs (indicator)	2019-20 outperformance payment or underperformance payment - in-period ODIs (£m, to 4 dp)	2019-20 outperformance payment or underperformance payment - ODIs payable at the end of AMP6 (indicator)	2019-20 outperformance payment or underperformance payment - ODIs payable at the end of AMP6 (£m, to 4 dp)
18	PR14ANHWSW_W-I1	W-I1: Mean zonal compliance (MZC)	%	99.96	Yes	-		-	
19	PR14ANHWSWW_S-A2	S-A2: Properties flooded internally from sewers - three-year average (reduction)	nr	179	Yes	-		Outperformance payment	8.6400
20	PR14ANHWSWW_S-A3	S-A3: Properties flooded externally from sewers - three-year average (reduction)	nr	2550	Yes	-		-	
21	PR14ANHWSWW_S-A4	S-A4: Percentage of sewerage capacity schemes incorporating sustainable solutions	%	39	Yes				
22	PR14ANHWSWW_S-B1	S-B1: Value for money perception variation from baseline against WaSCs (wastewater)	%	-1	No	-		Underperformance payment	-0.0250
23	PR14ANHWSWW_S-C1	S-C1: Percentage of bathing waters attaining excellent status	%	61.0	No	-		Underperformance payment	-11.1900
24	PR14ANHWSWW_S-C2	S-C2: Percentage of SSSIs (by area) with favourable status	%	99	Yes				
25	PR14ANHWSWW_S-C3	S-C3: Pollution incidents (category 3)	nr	254	Yes	-		Outperformance payment	1.2540
26	PR14ANHWSWW_S-C4	S-C4: Environmental compliance (wastewater)	nr	81	Yes	-		-	
27	PR14ANHWSWW_S-D1	S-D1: Operational carbon (% reduction from 2015 baseline)	%	34	Yes				
28	PR14ANHWSWW_S-D2	S-D2: Embodied carbon (% reduction from 2010 baseline)	%	61	Yes				
29	PR14ANHWSWW_S-E1	S-E1: Survey of community perception	%	56	No				
30	PR14ANHWSWW_S-F1	S-F1: Sewerage infrastructure	category	Green	Yes	-		-	
31	PR14ANHWSWW_S-F2	S-F2: Sewerage non-infrastructure	category	Green	Yes	-		-	
32	PR14ANHHHR_R-A1	R-A1: Qualitative service incentive mechanism (SIM) score	text	4th among the 10 WaSCs	No				
33	PR14ANHHHR_R-A2	R-A2: Service incentive mechanism (SIM)	score	82	-				
34	PR14ANHHHR_R-A3	R-A3: Customer Satisfaction Index prepared by UK Institute of Customer Service	rank	9th	No				

Row	Unique ID	Performance commitment	Unit	2019-20 performance level - actual	2019-20 CPL met?	2019-20 outperformance payment or underperformance payment - in-period ODIs (indicator)	2019-20 outperformance payment or underperformance payment - in-period ODIs (£m, to 4 dp)	2019-20 outperformance payment or underperformance payment - ODIs payable at the end of AMP6 (indicator)	2019-20 outperformance payment or underperformance payment - ODIs payable at the end of AMP6 (£m, to 4 dp)
35	PR14ANHHHR_R-B1	R-B1: Fairness of bills perception - variation from baseline against WaSCs	%	2	Yes	-		Outperformance payment	0.0500
36	PR14ANHHHR_R-B2	R-B2: Affordability perception - variation from baseline against WaSCs	%	1	Yes	-		Outperformance payment	0.0250
37	PR14ANHHHR_R-C1	R-C1: Operational carbon (% reduction from 2015 baseline)	%	34	Yes				
38	PR14ANHHHR_R-C2	R-C2: Embodied carbon (% reduction from 2010 baseline)	%	61	Yes				
39	PR14ANHHHR_R-D1	R-D1: Survey of community perception	%	56	No				

1 Table 3A shows how we have performed against our Outcome Delivery Incentive (ODIs) in 2019/20 and, where applicable, how this compares with the agreed Performance Commitment Levels (PCL).

2 We update our Customer Engagement Forum (CEF) on current performance at every meeting. The information reported in Table 3A is consistent with the reports on ODI performance we made to our CEF during the year and after year end.

3 Table 3A shows that we have earned rewards for performance in eight ODIs: leakage, low pressure, water quality contacts, pollution incidents, internal sewer flooding, Service Incentive Mechanism (SIM) and the two of the customer perception ODIs. We incurred penalties for performance against six ODIs: supply interruptions, bathing waters, per property consumption, water infrastructure serviceability and two of the customer perception ODIs. In Table 3A (and in the commentary below) these rewards are stated in 2012/13 prices, to be consistent with our PR14 Final Determination and comply with Ofwat's guidance. In the table below we have also inflated these figures at year average RPI to 2019/20 figures to make them more relevant to stakeholders.

4 The reward for all ODIs will be claimed during the next regulatory period (i.e. 2020-25).

	Rewards/penalties from 2019/20 ODI performance (£m)	
	2012/13 Prices	2019/20 prices
Service incentive mechanism (SIM)	16.2	19.3
Internal sewer flooding	8.6	10.3
Low pressure	6.0	7.1
Leakage	3.6	4.3
Pollution incidents	1.3	1.5
Water quality contacts	0.1	0.1
Fairness of bills perception	0.1	0.1
Affordability perception	0.0	0.0
Bathing waters	-11.2	-13.3
Interruptions to supply	-8.6	-10.2
Per property consumption	-7.8	-9.2
Water infrastructure serviceability	-0.3	-0.4
Value for money perception - water	0.0	0.0
Value for money perception - water recycling	0.0	0.0
TOTAL	**8.0**	**9.5**

5 Further commentary on progress against our ODIs is included in our Annual Integrated Report. Detail about all our ODIs is also available on our website at http://ourperformance.anglianwater.co.uk/

Water supply interruptions (3A.1)

6 The total time lost due to interruptions per property is 18 minutes 39 seconds (2018/19: 8 minutes 44 seconds).

7 December 2019 saw one event in Leighton, Buckinghamshire, affect 17,997 properties for > 24hours duration, contributing 12 minutes 40 seconds to the 2019/20 score. This interruption proved very complex to manage and verify, largely due to the number (11) of District Metered Areas (DMAs) and population size affected.

8 The score without the 'one off' Leighton event would have been 5 minutes and 59 seconds for 2019/20.

Properties at risk of persistent low pressure (3A.2)

9 The number of reportable properties on the register at year end is 148, compared with 287 at the end of 2018/19. This is below the 2019/20 Committed Performance Level of 257 properties. During the year there were 55 additions and 194 removals. This performance has attracted an outperformance payment of £6m.

10 At the end of 2019/20, of the 148 properties below the reference level, seven were reportable due to common services and 27 are included under Section 65 of the 1991 Water Industry Act where a property receives pressure below the reference level due to its height in relation to the storage point.

11 During 2019/20, of the 194 removals, 98 were removed following a capital intervention and 96 following operational improvements such as service pipe replacement or rezoning.

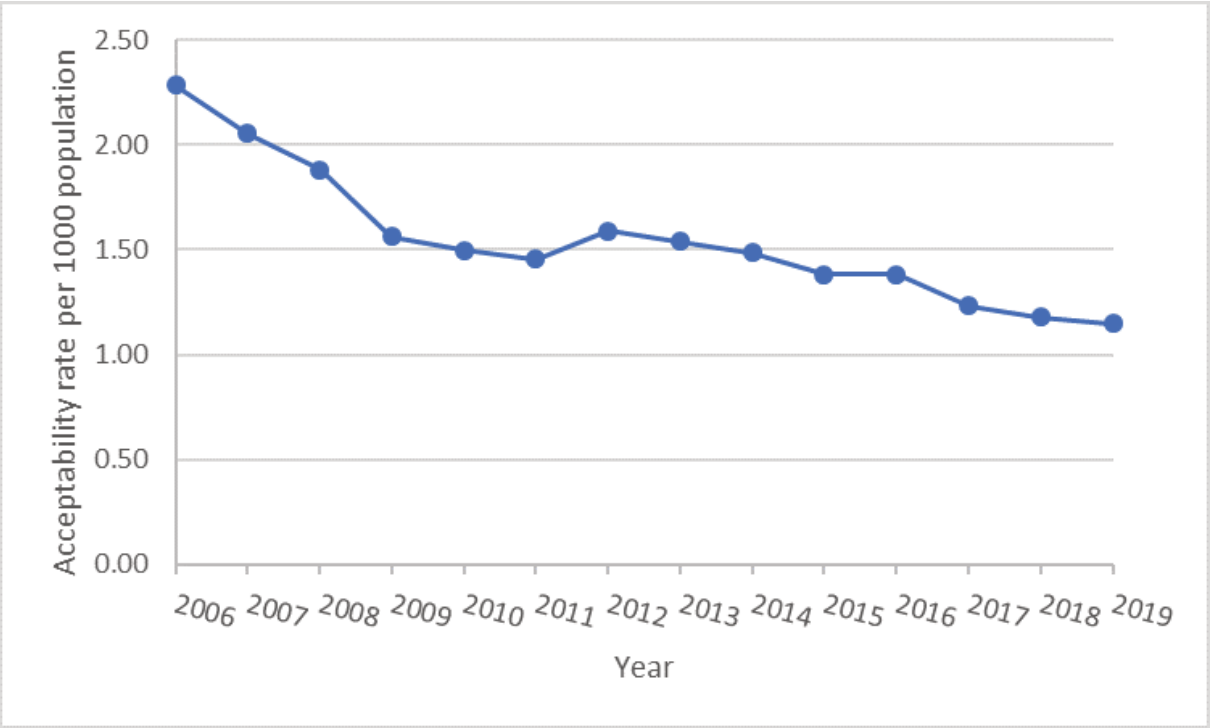
12 Six capital schemes to improve pressures have realised benefits in 2019/20:

- Single Property Boosters – 42 properties were removed from the register following the installation of boosters at various locations. The boosters increase pressure on the supply directly to the customers with only small lengths of dedicated pipework, providing previously difficult-to-resolve properties with improved pressures.
- Scole – 24 properties were removed from the register following the replacement of 2.92km of 5 inch cast iron water main with 180mm High Performance Polyethylene (HPPE) main.
- Haynes Northwood End Road – 10 properties were removed from the register following the replacement of 0.97km of 3 inch cast iron main with upsized 125mm HPPE.
- Horton – Nine properties were removed from the register following the installation and commissioning of a new booster station.
- Norwich Road, Scoulton - Eight properties were removed from the register following the installation of 0.1km of new 63mm main and new 32mm service.
- Scampton – Five properties were removed from the register following the Installation of a new cross-connection and Pressure Reducing Valve (PRV) on to a higher pressure system.

Water quality contacts (3A.3)

13 The number of acceptability contacts received in 2019 was 1.15 per 1,000 population served. This is our lowest rate ever recorded, with a further improvement on our 2018 figure of 1.18 per 1,000 population. This performance beats our PCL of 1.23.

Water Quality Contacts 2006-2019



14 Our approach to improving the acceptability rate continues through our 'Keep Water Healthy' initiative that has now been running for over five years. This campaign aims to provide customers with information and advice to help prevent water quality problems arising from their own internal plumbing. We have particularly increased our engagement with our customers in this final year of the AMP through multiple platforms, especially social media.

15 We continue to review and develop our strategy of identifying emerging issues at the very early stages by spotting clusters of customer contacts. This allows us to both minimise any further impacts and, where necessary, proactively notify other affected customers.

Value for money perception - variation from baseline against WaSCs (Water) (3A.4)

16 In the Consumer Council for Water (CCWater) 2019 survey, 74 per cent of our customers said that they thought their water bills were good value for money, which is an increase compared to 72 per cent in 2018. This is 2 percentage point below the average scored by other WASCs. Compared to the ODI baseline, which is 1 percentage point below average (based on 2011 and 2012 scores), we show a decrease of 1 percentage point.

Percentage of population supplied by a single supply system (3A.5)

17 The ODI for supply demand resilience is 'Percentage of Population on Single Water Supplies', defined as the proportion of household customers exposed to the risk of loss of supply due to a resilience type event. This includes works failures in multiple source systems which result in the loss of supply to some customers.

18 The approach taken to develop the water supply resilience ODI was to identify the resulting deficit if each water treatment works was taken out of service for a prolonged period. The deficit was converted to an equivalent number of household customers and the percentage of population at risk calculated. The risk to the whole region was summed to form the supply demand resilience ODI.

19 The baseline ODI figure derived for PR14, 27.5 per cent, was based on an early modelling set. It did not include the following:

- The Hartlepool Water system
- Treatment works where resilience schemes had been initiated in AMP5 for completion in AMP6 (e.g. the major Grafham WTW scheme)
- Resilience schemes which have previously been rejected by Ofwat (e.g. Newton WTW)
- Schemes with resilience benefits being delivered in other programmes (e.g. Great Wratting).

20 To show a more accurate representation of resilience for the whole company, we undertook additional modelling during 2014/15 to include all treatment works that could have a resilience impact. This produced a revised AMP6 baseline for the ODI of 46.9 per cent. Therefore it shows the 'pre-position' for treatment works such as Grafham where resilience schemes were still under construction.

21 The table below shows our progress during AMP6 against this revised baseline. During the year 2019/20 nine resilience schemes were completed providing a 20.08% reduction. The outturn ODI for the year 2019/20 becomes 24.1%.

ODI % Population on Single Water Supply

Year	Schemes Delivered	% Population on Single Water Supply reduction from delivered schemes	ODI % Population on Single Water Supply
2014/15	Baseline		46.9
2015/16	Caistor WTW	0.63	46.3
2016/17	No schemes delivered	0.00	46.3
2017/18	Driby WTW	0.21	46.1
2017/18	Twelve Acre Wood WTW	0.73	45.3
2018/19	Stanton (Ixworth) WTW	0.16	45.1
2018/19	Semer WTW	0.11	45.0
2018/19	Wighton WTW	0.07	45.0
2018/19	Foulsham WTW, Salle WTW	0.09	44.9
2019/20	Grafham WTW, Wing WTW	15.89	29.0
2019/20	East Dereham WTW	0.41	28.6
2019/20	Houghton St Giles WTW	0.50	28.1
2019/20	Ringstead WTW	0.20	27.9
2019/20	Metton WTW	0.19	27.7
2019/20	Aylsham, Coldham Hall, North Walsham, Royston Bridge, East Ruston	0.52	27.2
2019/20	Bourne WTW	0.98	26.2
2019/20	Ravensthorpe WTW	0.67	25.5
2019/20	Raithby WTW	1.44	24.1

22 We have exceeded the Committed Performance Level of 24.7% by 2020 through successful delivery of the single source resilience programme of schemes.

Frequency of service level restrictions (hosepipe bans) (3A.6)

23 There have been no restrictions on the use of sprinklers or unattended hosepipes in 2019/20. Our ODI measures the number of restrictions in a rolling ten year period. The figure for this line is 1, as there was a hosepipe ban in our region in 2012/13.

Security of Supply Index (SoSI) - dry year annual average (DYAA) (3A.7)

24 The inputs for this line are calculated as follows:

- Water Available For Use (WAFU): this is calculated based on updated Deployable Output (DO) figures minus outage. DO includes significant inter-Resource Zone transfers, which vary slightly from year to year. There are no changes to the core (pre-transfer) DO values this year.
- Outage has been updated to reflect the new methodology adopted in the 2019 Water Resources Management Plan (WRMP). It is calculated as a percentage of in-year DO, based on the percentage of DO in the first full forecast year of 2019 WRMP.
- Bulk imports and exports: these are fixed (at capacity) as per agreements with neighbouring companies.
- Dry year Distribution Input (DI): this is the reporting year DI uplifted by a dry year uplift factor. The dry year factor has been based upon 2018/19 being adopted as the reference dry year.
- Reporting year distribution input: this is post-MLE (the Maximum Likelihood Estimation adjustment) DI at the Resource Zone (RZ) level.
- Target headroom: this is calculated as a percentage of in-year DI, based on the percentage of "base year" DI in the (2015 WRMP).
- Zonal population: this has been aligned with Yearbook totals at the RZ level.

25 The zonal index is zero for all WRZs in 2019/20 except for Cheveley WRZ.

26 Cheveley is our smallest WRZ with a DI less than 2 Ml/d (1.76 Ml/d for 2019/20) and a total population of 4,930 for 2019/20 (0.1% of our total population). Based on Environment Agency guidance, this WRZ is marginal in terms of its size and was only separated out because of a future local deficit (caused by a sustainability reduction and additional drought resilience) which requires a permanent solution.

27 It is notable that despite an overall decrease in DI from 1,159.15 Ml/d to 1,136.35 Ml/d from the previous year a small number of WRZs saw increases in DI; namely Hartlepool (0.6%), Ely (1.5%), Hunstanton (3.0%) and Cheveley (7.5%).

WRZ	2019/20 Distribution Input (DI Ml/d)	2018/19 Distribution Input (DI Ml/d)	DI Difference 2019/20 - 2018/19 (Ml/d)	Percentage Difference in DI
Central Essex	11.633	12.027	-0.394	-3.3%
Central Lincolnshire	127.978	131.190	-3.212	-2.4%
Cheveley	1.756	1.633	0.123	7.5%
East Lincolnshire	147.789	150.020	-2.231	-1.5%
East Suffolk	70.397	71.304	-0.907	-1.3%
Ely	21.585	21.274	0.311	1.5%
Fenland	56.153	57.204	-1.051	-1.8%
Hartlepool	26.544	26.373	0.171	0.6%
Hunstanton	2.109	2.048	0.061	3.0%
Newmarket	11.535	11.589	-0.054	-0.5%
Norfolk Rural	37.331	38.607	-1.277	-3.3%
North Norfolk Coast	24.767	25.985	-1.219	-4.7%

WRZ	2019/20 Distribution Input (DI Ml/d)	2018/19 Distribution Input (DI Ml/d)	DI Difference 2019/20 - 2018/19 (Ml/d)	Percentage Difference in DI
Norwich & the Broads	67.476	68.045	-0.569	-0.8%
Ruthamford North	207.905	215.902	-7.997	-3.7%
Ruthamford South	199.953	201.568	-1.615	-0.8%
South Essex	53.699	54.195	-0.495	-0.9%
Sudbury	6.975	7.136	-0.161	-2.3%
West Lincolnshire	19.072	19.650	-0.578	-2.9%
West Suffolk	41.693	43.405	-1.712	-3.9%
	1136.349	1159.154	-22.804	

28 DI in Cheveley WRZ has been rising significantly (in proportion to a WRZ of this size) over the past four years, from 1.42 Ml/d to 1.76 Ml/d; an increase of 23.9% as illustrated in the table below.

	2019/20	2018/19
Cheveley DI	1.756 Ml/d	1.633 Ml/d
Year on year change DI	0.123 Ml/d	0.190 Ml/d
Year on year increase	7.5 %	11.6 %

29 It should be noted that this is our smallest WRZ, with a very small population. There are no significant supply issues and we are compliant with our abstraction licences.

30 Nonetheless, we are closely monitoring and investigating the demand changes in this area, with specific activities including logging and night flow monitoring. If required, we would tanker water into this area (e.g. to meet peaks), although we have a good level of potable water storage. Tankering is also an option to maintain licence compliance, prior to Cheveley being connected to the Newmarket WRZ and the strategic grid in AMP7.

31 The reported value SoSI for 2019/20 is 99 (rounded down as per the reporting requirements) and does not meet our 2019/20 PCL. However, it is of note that to 2dps the actual index would be 99.94, giving a very small margin of failure of 0.06 for the index. Furthermore, we have not included mitigation measures in our calculations which differs from the way other water companies have reported SoSI. With the inclusion of mitigation measures we would consider SoSI to be 100.

Security Of Supply Index (SoSI) - critical period (peak) demand (3A.8)

32 The inputs are calculated as follows:

- WAFU: critical period Deployable Output (DO) is based on updated DO figures minus outage. DO includes significant inter-RZ transfers, which vary slightly from year to year. There are no changes to the core (pre-transfer) DO values this year. Outage is as for DYAA, but with the peaking factor (PF) applied.
- Bulk imports and exports: these are fixed (at capacity) as per agreements with neighbouring companies.
- Dry year distribution input: as DYAA, but with PF applied.
- Reporting year distribution input: as DYAA, but with PF applied.
- Target headroom: as DYAA, but with PF applied.
- Zonal population: As for DYAA.

33 The peaking factor has been updated to the current year 2019/20. Note that the early July 2018 peak has been adopted as the reference peak period.

34 The zonal index is zero for all WRZs, including Cheveley, in 2019/20 and therefore the company SOSI is 100. This meets our PCL for 2019/20.

Per property consumption (3A.9)

35 Per household consumption (PHC) decreased in 2019/20 from 323.0 to 315.9 litres/property/day, a variance of 3.9 from our AMP6 baseline of 312.0 litres/property/day. Therefore we have not met our performance commitment for this ODI and will therefore incur an underperformance payment of £7.8m.

36 The decrease in PHC this year reflects a return to more normal summer demand compared to the exceptional summer of 2018. We continue to actively implement initiatives to reduce customer demand, including

- Encouraging customers to switch to metered billing
- Our water efficiency programme, and
- Pressure management.

Leakage - three year average (3A.10)

37 Three year rolling average leakage is assessed at 185 Ml/d which generates £3.6m reward for the year and total reward of £14.4m across the AMP.

38 We have maintained the existing strands of our Leakage Strategy this year and have now started to bring on line strands from our Smart Water Systems strategy:

- Detection resources - We have maintained an elevated number of detection technicians since 2015/16 in order to mitigate against the risk of summer/winter breakout of leaks. An average of 154 technicians were employed in 2019/20 to search for leaks, up from 131 in 2018/19, 125 in 2017/18, 122 in 2016/17 and 118 in 2015/16.

- Network/pump optimisation schemes - There have been 20 optimisation schemes implemented this year, delivering 3.03 Ml/d leakage reduction. Over AMP6 14.73 Ml/d leakage savings have been delivered.

- Intensive Leakage Programme (the "172 process") - This process has now reviewed 882 District Meter Areas in AMP6, resulting in leakage reduction of 3.00 Ml/d in 2019/20. Over AMP6 20.28 Ml/d leakage savings have been delivered over 135 schemes.

- Leakage Sensors - We now have 3,520 remote hydrophones installed across 183 DMAs. To date the sensors have delivered 3,908 leaks. Where 100% of the DMA is monitored we find leaks >82% of the time proactively (before customers report them), with some areas returning >97%. We continue to work collaboratively with manufacturers in the development of a new logger design and enhancements to the analytical platform as we strive to be able to determine the severity of a leak remotely which will allow us to effectively prioritise repairs

- Customer Leakage - 2019/20 was our busiest year for customer leakage with 8,817 cases managed, an increase of 1,479 when compared to 2018/19. This increase was driven by increased volumes across all workstreams (metering, networks, leakage), however the largest increase proportionately was seen from proactive detection.

Sites Of Specific Scientific Interest (SSSIs) (3A.11 and 3A.24)

39 Natural England (NE) assesses the condition of our Sites of Special Scientific Interest (SSSIs), which we have a legal duty to maintain and enhance. Currently 99.93 per cent of our SSSIs (by area) are in either 'favourable' (98.759 per cent) or 'unfavourable

recovering' (1.167 per cent) condition. There are some small sites where we own a small portion of the overall area that are in 'unfavourable no change' (0.038 per cent) or 'unfavourable declining' condition (0.036 per cent).

40 Natural England re-assessed a third party site from being 'unfavourable' to 'favourable'. We own 0.18ha of this 22.38ha SSSI.

41 We undertook a detailed mapping exercise to compare our land ownership boundaries with Natural England's SSSI boundaries. As a result we have adjusted down the total amount of SSSI land we are responsible for by 39.31ha.

42 No sites that we are responsible for are classified as 'part destroyed' or 'destroyed'.

Environmental compliance (water) (3A.12)

43 We had 16 obligations under this driver in AMP6. In the first four years of the AMP we delivered five of these, all Eels Regulation schemes: Tetney Weir Eel Pass and Cloves Bridge in 2015/16, Ardleigh and Cadney in 2017/18 and Heigham in 2018/19. The remaining 11 obligations were delivered in 2019/20:

- Three Restoring Sustainable Abstraction schemes; Norwich and the Broads (Heigham), Mattishall and Ringstead (Hunstanton)
- Eight Eels Regulations schemes: Cloves Bridge Eels Screen, Costessey, Covenham, Offord, Sproughton, Stoke Ferry, Trowse Newton and Wansford.

44 While only one obligation was in place, two schemes were delivered at Stoke Ferry, providing Eels Regulation compliance at both the River Wissey and Cut Off Channel abstraction points. This gives a total of 17 schemes completed.

45 The Environment Agency (EA) has confirmed a derogation for the Marham abstraction point, which means that the planned obligation at this location is no longer required.

46 The EA confirmed that the scheme for Tinwell was a duplicate which was moved into the Water Industry National Environment Programme (WINEP) for AMP7, which means that the planned obligation at this location is no longer required in AMP6.

Operational carbon (3A.13, 3A.27 and 3A.37)

47 For operational carbon we are certified to CEMARS GOLD (ISO-14064), with 11 years of continuous carbon reduction against this standard.

48 Operational carbon emissions for 2019/20 have been calculated using the UKWIR Carbon Accounting Methodology, which complies with Defra guidelines. For 2019/20 we have used version 13-2020 of the UKWIR greenhouse gas (GHG) workbook which includes the latest Defra guidelines on GHG conversion factors (2013).

49 Gross operational GHG emissions for the report year have reduced against the 2014/15 baseline by 34 per cent from 455,335 t/CO2e to 298,576 t/CO2e.

50 The main external factors impacting emissions in 2019/20 from the baseline year are a reduction in grid electricity emission factor of 48 per cent and a change in global warming potential for methane and nitrous oxide, which increases the process emissions by 8 per cent.

51 In 2019/20 our energy efficiency initiative delivered a positive contribution, with 7.71GWh (full year effect) of energy savings, mitigating 2,138 t/CO2e. The self-generation of renewable power has also continued to increase.

52 Our PCL for 2019/20 is a reduction of 7 per cent on the 2014/15 baseline, which we have surpassed.

Embodied carbon (3A.14, 3A.28 and 3A.38)

53 We achieved a 61 per cent reduction in capital carbon against our 2010 baseline.

54 Our PCL for 2019/20 is a reduction of 60 per cent on the 2010 baseline, which we have beaten.

Survey of community perception (3A.15, 3A.29 and 3A.39)

An independent survey of customers is used to provide data for the ODI, which is a reputational measure. In the first three years of AMP6 we commissioned Allto to carry out a quantitative survey to measure community perception. For years 4 and 5 we decided to include the relevant question in quantitative surveys that we were already carrying out for other purposes.

55 Performance is assessed on the percentage of customers who 'agree strongly' or 'agree slightly' in response to the question: 'to what extent do you agree that Anglian Water cares about the communities it serves?' The first year's results were used to set a baseline at 56%.

56 For 2019/20 we asked the question within three surveys:

- Accent carried out our acceptability research for PR19 and their research gained a result of 59%. This survey covered 987 household customers.
- Blue Babel carried out our brand tracker research and we asked this question within two waves in 2019/20. Their research gained a result of 55% and 53% in the two waves. This survey covered 512 household customers in each wave.

57 The weighted average of these results is 56.45%, which is not significantly different to the baseline of 56%.

Serviceability - water infrastructure (3A.16)

58 In 2019/20 three of our water infrastructure indicators are assessed as Green. The 'unplanned interruptions over 12 hours' indicator was above the upper control limit for a second year in a row and therefore is assessed as Red. Under the mechanism of our serviceability assessment this means that the overall assessment for the water infrastructure sub-service is Amber.

59 Further detail of our performance against the four water infrastructure sub-measures is set out in Table 3B.

Serviceability - water non-infrastructure (3A.17)

60 In 2019/20 all three of our water non-infrastructure indicators are assessed as Green because all are within their upper control limits. Under the mechanism of our serviceability assessment this means that the overall assessment for the water non-infrastructure sub-service remains Green.

61 Further detail of our performance against the three water non-infrastructure sub-measures is set out in Table 3B.

Mean zonal compliance (3A.18)

62 Overall Mean Zonal Compliance (MZC) for 2019 was 99.96 per cent, which was slightly higher than the figure for 2018. This index was impacted by 42 exceedances in the Anglian region, comprising 17 odour, seven iron, seven nickel, three lead, two manganese, two taste, two E. *coli*, one turbidity and one benzo(a)pyrene.

Properties flooded internally from sewers – three year average (reduction) (3A.19)

63 This ODI measures the change from our 2014/15 baseline. Both baseline and report year figures are shown as three year averages to smooth out the impact of exceptional years. We count flooding due to both overloaded sewers and other causes and include incidents attributable to severe weather. There was a three year average of 475 properties for 2014/15, compared to 296 reported in 2019/20, which is a reduction of 179 properties.

Properties flooded externally from sewers – three year average (reduction) (3A.20)

64 This ODI measures the change from our 2014/15 baseline. Both baseline and report year figures are shown as three year averages to smooth out the impact of exceptional years. We count flooding due to both overloaded sewers and other causes and include incidents attributable to severe weather. There was a three year average of 6,181 areas reported for 2014/15, compared to 3,631 reported in 2019/20 which is a reduction of 2,550 areas.

Percentage of sewerage capacity schemes incorporating sustainable solutions (3A.21)

65 During AMP6 we challenged ourselves to deliver 25% of sewerage capacity schemes using sustainable solutions, such as Sustainable Drainage Systems (SuDS). Instead of relying on traditional methods, such as underground concrete storage tanks, we incentivised ourselves to deliver more sustainable solutions that will help the business deliver its broader outcomes.

66 Such solutions included the delivery of rain gardens, water butts, sewer relining to reduce infiltration, watercourse daylighting and using above ground exceedance routes to channel water away from customers' properties to less vulnerable areas.

67 During AMP6, a total of 85 sewerage capacity schemes were completed, either solely by ourselves or in partnership with other flood risk management stakeholders. 45 of these schemes were completed solely by our @One or IOS alliances, leaving 40 delivered in partnership with third party organisations, such as the Environment Agency or Lead Local Flood Authorities.

68 A total of 33 schemes were considered to include a reasonable element of sustainability and therefore to meet the criteria set out as part of this ODI. 17 of these schemes were delivered in partnership with others, whilst 16 were delivered solely by ourselves.

69 Examples of the types of schemes include:

- 27 delivered source control, of which:
    - Five were relining projects, preventing infiltration of groundwater into the sewer network
    - Eight involved the installation of water butts and/or rain gardens in private property or alongside highways
    - Four involved work to restore or improve watercourses
    - 10 used disconnection or attenuation of surface water to prevent flooding.
- Six schemes used exceedance routes to channel excess flows away from property or vulnerable areas to reduce the impact of flooding on communities.

70 This results in a total of 39% of sewerage capacity schemes, delivered during AMP6, considered to include sustainable solutions.

Value for money perception - variation from baseline against WaSCs (Wastewater) (3A.22)

71 In CCWater's 2019 survey, 75 per cent of our customers said that they thought their sewerage bills were good value for money, which is an increase compared to 74 per cent in 2018. This is 3 percentage points below the average scored by the other WaSCs. Compared to the ODI baseline, which is 2 percentage points below average (based on 2011 and 2012 scores), we show a decrease of 1 percentage points.

Percentage of bathing waters attaining 'Excellent' status (3A.23)

72 The current number of bathing waters attaining 'Excellent' status following the 2019 bathing water season is 30 (61.22 per cent)

73 The number of 'Excellent' bathing waters has decreased from 32 in 2018 to 30 in 2019. Cleethorpes, Humberston Fitties and Ingoldmells declined to 'Good'. Walton improved to 'Excellent'.

74 The PCL for this ODI is assessed at the end of the AMP only and the 2019 bathing water season was the final year of the AMP. The PCL increased to 33 'Excellent' bathing waters from the original of 32 as an additional bathing water was designated in the region during the AMP (West Runton).

75 Our end of AMP position (30 'Excellent' or 61.22 per cent) was below the PCL and therefore resulted in a penalty.

76 Estimation for future years is very difficult given the unpredictable impact we can see from third party, natural point source and diffuse pollution events as well as weather conditions.

77 The 2020 bathing water season results will be published in November 2020.

Good status

- The number of bathing waters classified as 'Good' has increased from 12 to 13 (26.53 per cent).
- Southend Chalkwell and West Mersea have improved to 'Good' from 'Sufficient' the previous year.
- Cleethorpes, Humberston Fitties and Ingoldmells declined from 'Excellent' to 'Good' in 2019. Their decline in classification is a result of sampling undertaken back to back during exceptional rainfall in June. We are contesting this sampling approach with the Environment Agency through judicial review.

Sufficient status

- The number of 'Sufficient' bathing waters decreased from six to five in 2019 (10.20 per cent).

- Leigh Bell Wharf, which was 'Poor' in 2018, has improved to 'Sufficient' and Southend Chalkwell and West Mersea have improved to 'Good' from 'Sufficient' the previous year.

Poor status

- The number of 'Poor' bathing waters decreased to one in 2019 (Clacton Groyne 41, which will be de-designated after 2019) (2.04 per cent). Leigh Bell Wharf, which was 'Poor' in 2018, has improved to 'Sufficient'.
- Clacton Groyne 41 remains 'Poor' as it was in 2018. Anglian Water, Tendring District Council and The Environment Agency have been working for over 15 years to try and

locate the bacterial pollution sources. This has not been confirmed as yet, however it looks to be a combination of private sewerage and bird populations roosting on the pier.

78 The full results for all 49 bathing waters in our region is shown below.

Bathing Waters	**Classification**
Anderby	Excellent
Brightlingsea	Excellent
Caister Point	Excellent
Chapel St Leonards	Excellent
Clacton	Excellent
Clacton (Groyne 41)	Poor
Clacton Beach Martello Tower	Good
Cleethorpes	Good (decline in classification)
Cromer	Excellent
Dovercourt	Excellent
East Runton	Excellent
Felixstowe North	Excellent
Felixstowe South	Excellent
Frinton	Good
Gorleston Beach	Excellent
Great Yarmouth North	Excellent
Great Yarmouth Pier	Excellent
Great Yarmouth South	Excellent
Heacham	Sufficient
Hemsby	Excellent
Holland	Excellent
Humberston Fitties	Good (decline in classification)
Hunstanton (Old Hunstanton)	Good
Hunstanton Main Beach	Sufficient
Ingoldmells South	Good (decline in classification)
Jaywick	Good
Leigh Bell Wharf	Sufficient (improvement in classification)
Lowestoft (North of Claremont Pier)	Good
Lowestoft (South of Claremont Pier)	Good
Mablethorpe Town	Excellent
Moggs Eye	Excellent
Mundesley	Excellent
Sea Palling	Excellent
Sheringham	Excellent
Shoebury East	Excellent
Shoeburyness	Excellent
Skegness	Excellent

Bathing Waters	Classification
Southend Chalkwell	Good (improvement in classification)
Southend Jubilee	Good
Southend Thorpe Bay	Excellent
Southend Three Shells	Excellent
Southend Westcliff Bay	Excellent
Southwold The Denes	Sufficient
Southwold The Pier	Good
Sutton-on-Sea	Excellent
Walton	Excellent (improvement in classification)
Wells	Sufficient
West Mersea	Good (improvement in classification)
West Runton	Excellent

Pollution incidents (category 3) (3A.25)

79 The number of category 3 incidents increased in 2019 to 254 (2018: 185). We are disappointed in this one year increase but believe our pollution reduction strategies are working as is evidenced by the reduction from 390 incidents at the end of AMP5 (2014).

80 In 2019 our region suffered from extreme rainfall events affecting the performance of our assets. We continue to build on embedding root cause analysis to understand the reasons behind each and every pollution incident and to ensure we put in place appropriate and effective strategic solutions.

81 We will continue the development and delivery of our pollution prevention strategy into AMP7, including investing in our asset base, reducing blockages in our network and increasing public awareness of pollution incidents and the part everyone can play.

82 There were 254 Category 3 wastewater pollution incidents in 2019 - 253 from pre-transfer assets (2018 - 183) and one from transferred sewers (2018 - 2).

Category 3	Excluding Transferred	Transferred	Total
CSO, RM, FS	117	1	118
Other Assets	136	0	136
Total	**253**	**1**	**254**

Environmental compliance (wastewater) (3A.26)

83 In 2019/20 we completed schemes which have delivered 42 obligations counting against this performance commitment measure.

84 In the first four years of AMP6 we met 39 obligations, which brings our total number of obligations delivered now to 81. We have delivered all obligations under this measure, meeting our PCL and avoiding an underperformance penalty.

Serviceability - sewerage infrastructure (3A.30)

85 In 2019/20, all four of our sewerage infrastructure indicators were assessed as Green. This is because all four were within their upper control limits. Under the mechanism of our serviceability assessment this means that the overall assessment for the sewerage infrastructure sub-service remains Green.

86 Further detail of our performance against the four sewerage infrastructure sub-measures is set out in Table 3B.

Serviceability - sewerage non-infrastructure (3A.31)

87 In 2019/20 both of our sewerage non-infrastructure indicators were assessed as Green. The population equivalent in breach of consents indicator returned to below the upper control limit and therefore is assessed as Green (having been Amber in 2018/19). Under the mechanism of our serviceability assessment this means that the overall assessment for the sewerage non-infrastructure sub-service is Green.

88 Further detail of our performance against the two sewerage non-infrastructure sub-measures is set out in Table 3B.

Qualitative Service Incentive Mechanism (SIM) (3A.32)

89 In 2019/20 SIM was replaced by shadow year reporting for the new customer measure of experience (C-MeX). The shadow year for C-MeX adopted a new methodology for measuring the satisfaction of customers who contacted us, known as the Customer Service Survey (CSS).

90 Surveying of customers moved from quarterly to monthly and customers were asked to provide a satisfaction score from 0-10, previously 1-5. The CSS now includes inbound contact from all channels, digital and non-digital. Surveying methods attempt to match customer contact preference in that digital contactors are surveyed via email; non-digital contact is surveyed via phone.

91 For the purpose of calculating a SIM proxy score, digital surveys were excluded and the 11-point scale was calibrated to an equivalent 5-point scale. This adds a layer of complexity when trying to draw comparisons to our industry-leading performance achieved in previous years.

92 Based on the average of the surveys carried out in 2019/20 we achieved an annual satisfaction score of 4.42. Quarter 1, 2 and 3 saw us achieve 3rd place amongst Water and Sewerage companies (WASCs), with a year-end position of 4th.

93 We were ranked 1st across all water companies for the service we provide to customers who contact us in relation to the supply of clean water. As the largest geographical water company with low levels of rainfall we are hugely proud of this accomplishment.

- Quarter 1 - 4.40
- Quarter 2 - 4.46
- Quarter 3 - 4.40
- Quarter 4 - 4.41

Service Incentive Mechanism (SIM) (3A.33)

94 Ofwat has instructed companies to report using a proxy measure using a different methodology than in previous years. Scores between 2018/19 and 2019/20 are therefore not comparable. This measure is replaced by C-MeX from April 2020. In 2018/19, the final year of full SIM reporting, we finished top of the league table for all water companies.

95 With the introduction of C-MeX shadow year, changes were also made to the way in which we calculate the quantitative score for SIM for 2019/20. Unwanted telephone contacts stopped being recorded in 2019/20 and were replaced by telephone complaints.

96 Our written complaint receipts increased this year, impacted by the major Leighton unplanned supply interruption and low water pressure event during December 2019. External flooding incidents also adversely impacted receipts as we had a number of intense wet weather periods in Norfolk and South Lincolnshire during October. Again, this year no complaints were accepted by CCW for investigation.

97 Despite this, our quantitative score this year remained strong, bringing our total combined SIM proxy score for 2019/20 to 81.98

Customer Satisfaction Index score prepared by UK Institute Of Customer Service (3A.34)

98 The UK Customer Satisfaction Index (UK CSI) score is a national measure of customer satisfaction. It is based on a six-monthly online survey of consumers who are intended to be demographically representative of the UK population.

99 For 2019/20 we scored 74.6 on the UK CSI, which ranked us 9th out of the 25 utility companies included in the measure. This outperformed the average utility sector score of 72.1. The utility companies included in each survey varies. For this reason we are using the average of the July 2019 and January 2020 survey scores to determine our score. The position is based on the average score of those companies that featured in both July and January surveys.

Fairness of bills perception (3A.35)

100 In CCWater's 2019 survey, 65 per cent of our customers said that they thought their bills were fair, which is a 3 per cent increase compared to 62 per cent in 2018. This is 1 percentage point below average compared to the scores for other WaSCs, who scored an average of 66 per cent for the year. Compared to the ODI baseline, which is 3 percentage points below average (based on 2011 and 2012 scores), we have shown an improvement of 2 percentage points.

Affordability perception (3A.36)

101 In CCWater's 2019 survey, 76 per cent of our customers said that they thought their bills were affordable, which is a 2 percentage points decrease compared to 74 per cent in 2018. We are now 1 percentage point below average compared to the other WaSCs. We have shown an improvement of 1 percentage point compared to the ODI baseline, which was based on 2011 and 2012 scores.

C-MeX shadow year reporting

102 A new customer measure of experience (C-MeX) has been introduced for AMP7. In 2019/20 Ofwat ran a shadow version of this measure. While this shadow measure does not follow the same methodology as the C-MeX measure to be used in AMP7, Ofwat has asked companies to report these figures in their 2020 APRs.

103 The C-MeX shadow measure for 2019/20 is made up of four components. The components and our scores for each of them are listed below:

- Customer Service Survey Customer Satisfaction (CSS CSAT) = 84.21
- Customer Experience Survey Customer Satisfaction (CES CSAT) = 80.14
- Customer Service Survey Net Promoter Score (NPS CSS) = 72.37
- Customer Experience Survey Net Promoter Score (NPS CES) = 60.27

104 Total scores for the 2019/20 C-MeX shadow measure are calculated using the following formula:

- (CSS CSAT x 40 + CES CSAT x 40 + NPS CSS x 10 + NPS CES x 10) / 100

105 Our total score for the 2019/20 C-MeX shadow measure is 79.00.

106 Further guidance on reporting requirements for the shadow measure for C-MeX can be found on the Ofwat website.

D-MeX shadow year reporting

107 A new developer measure of experience (D-MeX) has been introduced for AMP7. In 2019/20 Ofwat ran a shadow version of this measure. While this shadow measure does not follow the same methodology as the D-MeX measure to be used in AMP7, Ofwat has asked companies to report these figures in their 2020 APRs.

108 The D-MeX shadow measure for 2019/20 is made up of two components and both are weighted equally. The components and our scores for both of them are listed below:

- A quantitative measure of compliance with WaterUK levels of service = 99.63
- A qualitative survey of developer customer satisfaction = 72.05

109 Our total score for the 2019/20 D-MeX shadow measure is 85.84.

110 Further guidance on reporting requirements for the shadow measure for D-MeX can be found on the Ofwat website.

Table 3B - Sub-measure Performance

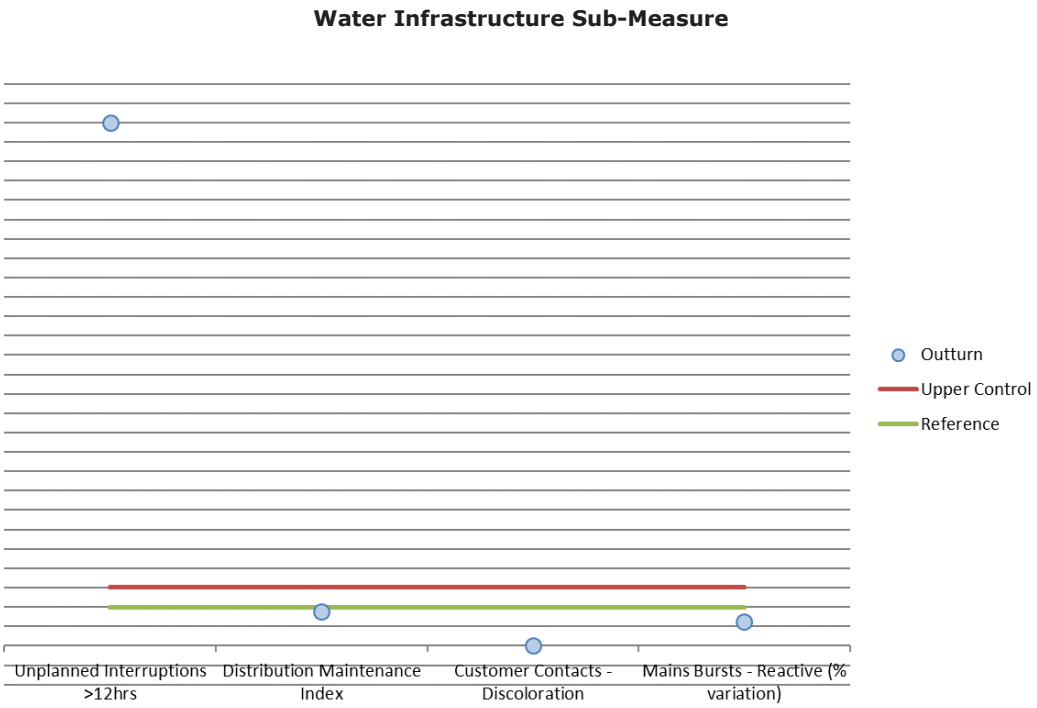
	Unique ID	PC / sub-measure ID	PC / sub-measure	Unit	2018-19 performance level - actual	2019-20 performance level - actual	2019-20 CPL met?
1	PR14ANHWSW_W-H1	00	W-H1: Water infrastructure	category	Green	Amber	No
2	PR14ANHWSW_W-H1	01	Unplanned interruptions >12 hours	nr	2267	19,509	No
3	PR14ANHWSW_W-H1	02	Reactive mains bursts	0	0.0	-11	Yes
4	PR14ANHWSW_W-H1	03	Customer contacts - discolouration	0	0.37	0.37	Yes
5	PR14ANHWSW_W-H1	04	Distribution maintenance index	0	0.07	0.05	Yes
6	PR14ANHWSW_W-H2	00	W-H2: Water non-infrastructure	category	Green	Green	Yes
7	PR14ANHWSW_W-H2	01	WTW with coliforms detected	0	5	4	Yes
8	PR14ANHWSW_W-H2	02	Percentage (%) service reservoirs with >5% coliforms	%	0.00	0.00	Yes
9	PR14ANHWSW_W-H2	03	WTW turbidity	0	0	0	Yes
10	PR14ANHWSWW_S-F1	00	S-F1: Sewerage infrastructure	category	Green	Green	Yes
11	PR14ANHWSWW_S-F1	01	Pollution incidents	nr	82	123	Yes
12	PR14ANHWSWW_S-F1	02	Sewer collapses	nr	214	201	Yes
13	PR14ANHWSWW_S-F1	03	Internal flooding (overloaded + other causes)	nr	112	158	Yes
14	PR14ANHWSWW_S-F1	04	Sewer blockages	nr	11,908	12,240	Yes
15	PR14ANHWSWW_S-F2	00	S-F2: Sewerage non-infrastructure	category	Green	Green	Yes
16	PR14ANHWSWW_S-F2	01	Population equivalent (PE) WwTW in breach of consent	%	5	0.01	Yes
17	PR14ANHWSWW_S-F2	02	WwTW failing numeric consent	0	1.3	1.06	Yes

1 To continue to provide the services that our customers expect now and over the long term, we need to look after our assets (e.g. equipment, pipes and buildings). We use the term serviceability to mean the ability of our assets to continue delivering a reference level of service to customers.

2 Serviceability is assessed by 13 sub-measures. The measures are split over four types of asset. For each measure we agree a 'normal' level, called the reference level, which is typically close to the best historical performance. We must also make sure that we do not exceed the worst level of performance that can be accounted for by reasonable natural variation – this is called the upper control limit. If our performance is worse than this upper control limit a penalty may be incurred. Table 3B shows our performance in 2019/20 against each of the sub-measures.

Water infrastructure (3B.1)

3 In 2019/20 three of our four water infrastructure sub-measures were assessed as Green. The unplanned interruptions over 12 hours sub-measure was above the upper control limit for the second year in a row and therefore is assessed as Red. Under the mechanism of our serviceability assessment this means that the overall assessment for the water infrastructure sub-service is Amber. This means that we will need to pay an underperformance payment of £0.3m. The performance of each sub-measure against its reference level and upper control limit is shown on the chart below.



Unplanned interruptions >12 hours (3B.2)

4 The total number of properties affected by unplanned interruptions of greater than 12 hours was 19,509 (2,267 in 2018/19).

5 There has been a significant increase in the number of properties affected by unplanned supply interruptions greater than 12 hours this year when compared with 2,267 reported in 2018/19.

6 One major event in Leighton, Buckinghamshire, in December 2019 accounted for 17,997 properties. Without the properties associated to this 'one off' event the > 12hour figure would show as 1,512 properties. This figure would have shown as a significant reduction on the 2,267 properties reported last year, and would have been 12 properties above the upper control limit of 1,500.

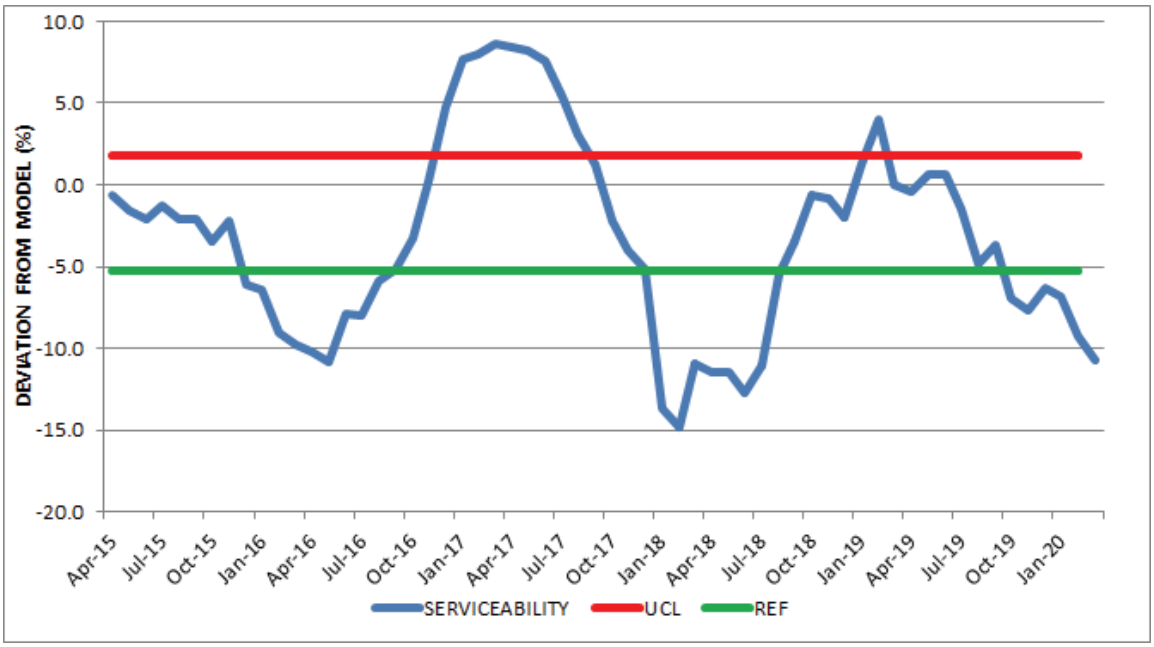
Reactive mains bursts (3B.3)

7 Since the start of AMP6 (April 2015), we have changed our serviceability measure for burst mains to report the number of reactive burst mains as a variance from the forecast number predicted by the Cranfield model. To maintain consistency with our PR14 submissions we have used the same model that was used for those submissions throughout AMP6. In line with previous years and consistent with the definition outlined in our PR14 final business plan, we exclude burst mains where there has been no impact to the customer/service.

8 The Cranfield University model, WISPA (Water Infrastructure Serviceability Performance Assessment), is used to normalise our reactive burst main numbers. The model applies the local weather, soils, mains material, diameter, age and district metered area (DMA) characteristics to predict the expected number of reactive bursts. Adjusting for these exogenous variables enables our performance to be determined without the impact of seasonal effects.

9 The differences between the number of burst mains forecast by the Cranfield University WISPA predictive model and the actual number of reactive burst mains (on a 12-month rolling basis) is shown in the graph below.

Burst Mains deviation from model



10 Performance has remained under the reference level in 2019/20. The weather has been relatively benign over the course of this reporting year and this has translated into the lowest number of bursts recorded since 2016.

11 There were 2,954 reactive bursts in 2019/20, compared to 3,748 in 2018/19. Our model reflected the impact of the weather conditions, as it predicted we should experience significantly fewer bursts this year compared to the previous reporting period: 3,309 in 2019/20 vs. 3,748 in 2018/19.

12 Historically the Anglian and Hartlepool regions have used separate reporting systems but from August 2019 Hartlepool region jobs have been recorded and uploaded to our corporate system (SAP) using all the same job codes to determine the work types.

13 In 2019/20 we identified and repaired 1,243 bursts using proactive leak detection. This is lower than last year, but still relates to about 25% of all our bursts being proactively detected.

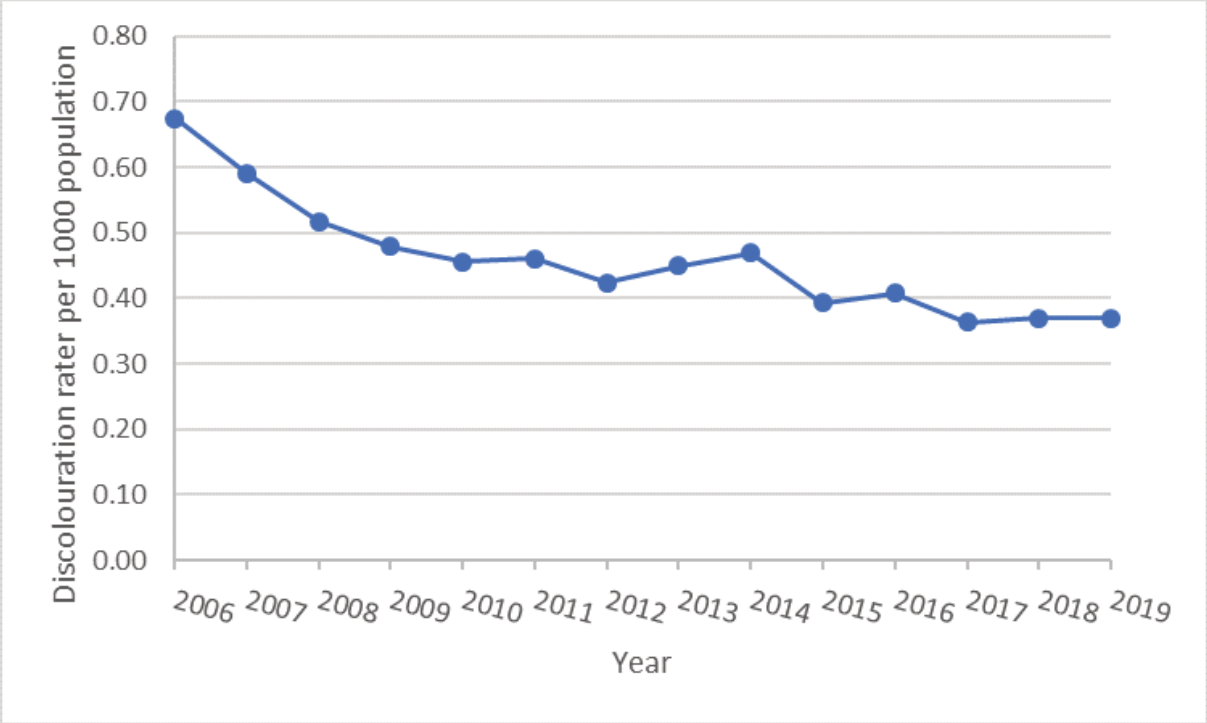
14 For AMP7, the need to report bursts in this way has been removed, but we have determined there is a lot of value in the model. We are therefore refining the WISPA model and using it as an internal monitoring and deployment tool to support mains rehabilitation and leakage reduction programmes.

Customer contacts - discolouration (3B.4)

15 Discolouration (brown/black or orange water) is a subset of the acceptability of water to consumers measure reported by DWI annually in the Chief Inspector's Report.

16 The number of discolouration contacts received per 1,000 population served in 2019 was 0.37.

17 The graph below shows the historic trend in combined number of discolouration contacts received.

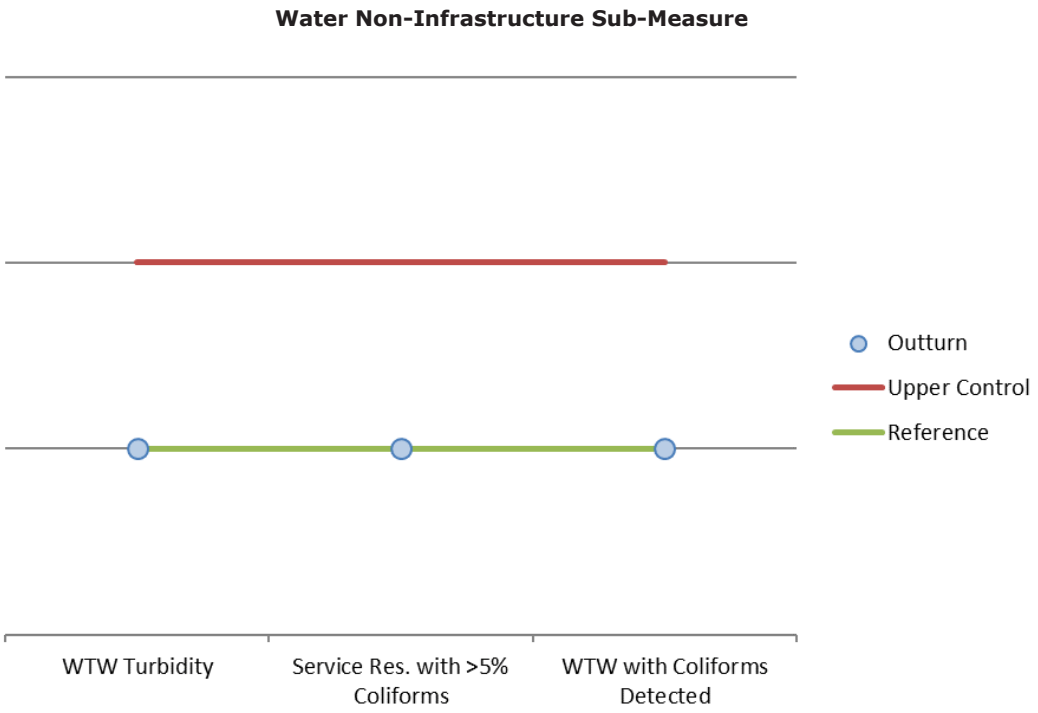


Distribution Maintenance Index (3B.5)

18 The Distribution Maintenance Index (DMI) is a measure of the condition of drinking water infrastructure. It can be impacted by water quality exceedances for iron, manganese or turbidity. The DMI for 2019 was 0.05 per cent (measured as non-compliance). This represents a slight increase in compliance when compared with the 2018 figure of 0.07 per cent. There were seven iron exceedances, two manganese and one turbidity exceedance from customer taps in 2018 compared with the eleven iron exceedances in 2017.

W-H2: Water non-infrastructure (3B.6)

19 In 2019/20 all three of our water non-infrastructure indicators were assessed as Green. This is because all three were within their upper control limits. Under the mechanism of our serviceability assessment this means that the overall assessment for the water non-infrastructure sub-service remains Green. The performance of each sub-measure against its reference level and upper control limit is shown on the chart below.



WTW with coliforms detected (3B.7)

20 Coliforms were detected at four WTWs in 2019, a reduction on the 2018 total of five. Coliforms were detected on a single occasion at Barrow, Bramford Tye, Isleham and East Hills WTWs, all in the Anglian region. In all cases, our investigations were deemed satisfactory and no enforcement action was initiated by the DWI.

Percentage (%) service reservoirs with >5% coliforms (3B.8)

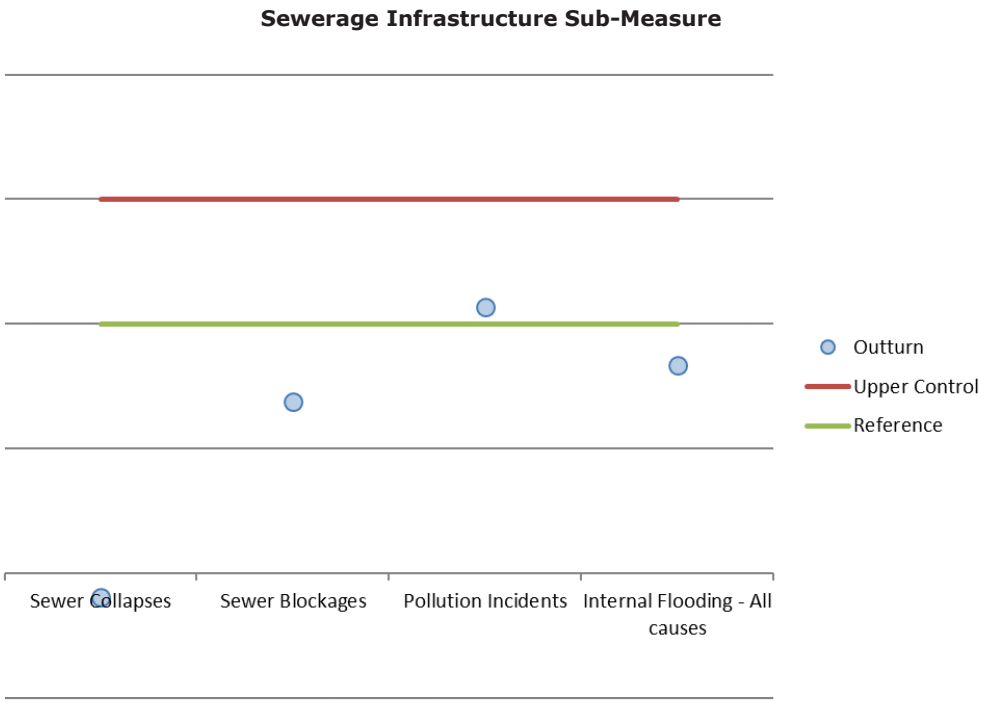
21 The percentage of service reservoirs with coliforms detected in more than 5 per cent of samples has remained at zero per cent for 2019.

WTW turbidity (3B.9)

22 There were no WTWs with a turbidity 95-percentile greater than or equal to 0.5 NTU (nephelometric turbidity units) for 2019.

S-F1: Sewerage infrastructure (3B.10)

23 In 2019/20, all four of our sewerage infrastructure indicators were assessed as Green. This is because all four were within their upper control limits. Under the mechanism of our serviceability assessment this means that the overall assessment for the sewerage infrastructure sub-service remains Green. The performance of each sub-measure against its reference level and upper control limit is shown on the chart below.



Pollution incidents (3B.11)

24 The data for this line is based on the 2019 calendar year.

25 There were 123 category 1-3 pollution incidents which were attributed to serviceability assets, namely combined sewer overflows (CSOs), rising mains and foul sewers (2018: 82)

26 The bulk of the incidents were on foul sewers (96, 2018: 65) with CSOs accounting for seven incidents (2018: 8) and rising mains accounting for 20 incidents (2018: 9).

27 There was one incident from a transferred foul sewer but these are not included for the purposes of the serviceability measure (2018: 2).

Pollution Incidents on Serviceability Assets

	Cat 1	Cat 2	Cat 3	Total
Pre-transfer assets	1	5	117	123
Transferred assets (not included for serviceability)	0	0	1	1
Total	1	5	118	124

Sewer collapses (3B.12)

28 We do not count collapses and bursts on transferred sewers and rising mains for this measure.

29 There were 122 reportable public burst rising mains and 79 reportable public sewer collapses, totalling 201 for 2019/20. This is a slight decrease from 2018/19, which saw 214.

Internal flooding (overloaded and other causes) (3B.13)

30 This was a new measure for AMP6 and this is the fifth year we have reported. It is the sum of properties flooded from public sewers due to sewer overloading (including those attributable to severe weather) and other causes.

31 We reported 112 properties for 2018/19 and, following a wetter year, we are reporting 158 for 2019/20. This comprises 36 overloaded properties (2018/19: 16) and 122 properties due to other causes (2018/19: 96).

32 Of the 36 properties flooded internally due to overloaded sewers, 13 were caused by severe weather events.

33 The table below shows the last five years data and the breakdown of cause.

Flooding Causes - Public Sewers

Causes	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Overloaded sewers (excl. severe weather)	54	27	61	20	9	23
Severe Weather	30	17	14	8	7	13
Pumping Station Failure	41	9	10	17	3	10
Equipment Failure	2	5	9	0	5	3
Jetting	10	8	7	10	8	3
Blockage	118	148	152	100	77	95
Collapse	8	6	11	6	3	11
Total	**263**	**220**	**264**	**161**	**112**	**158**

34 The data shows we have had a wetter year compared to previous years, showing a higher number of overloaded and severe weather events.

35 The number of properties internally flooded due to blockages has increased by 18 since last year. This is being targeted by the 'Keep It Clear' campaign.

36 There have been three internal floodings caused by equipment failures on public sewers reported for 2019/20. There were five fewer jetting incidents compared to 2018/19. We continue to seek to eliminate these through increased vigilance and better organisation of our planned preventative maintenance programme on public sewers.

Sewer blockages (3B.14)

37 We do not count blockages on transferred sewers for this measure.

38 Public sewer blockage numbers have increased marginally this report year from 11,908 in 2018/19 to 12,240 in 2019/20. This is still within the upper control limit and below the reference level.

39 We continue to closely monitor blockage jobs and have implemented several initiatives aimed at reducing blockages, whilst at the same time improving customer service and satisfaction.

40 We continue our programme of inspections and interventions to help identify and resolve any physical issues. Planned preventative maintenance (sewer cleansing) is carried out in areas considered to be at a high risk of blockages that may cause service failures, such as flooding or pollution incidents.

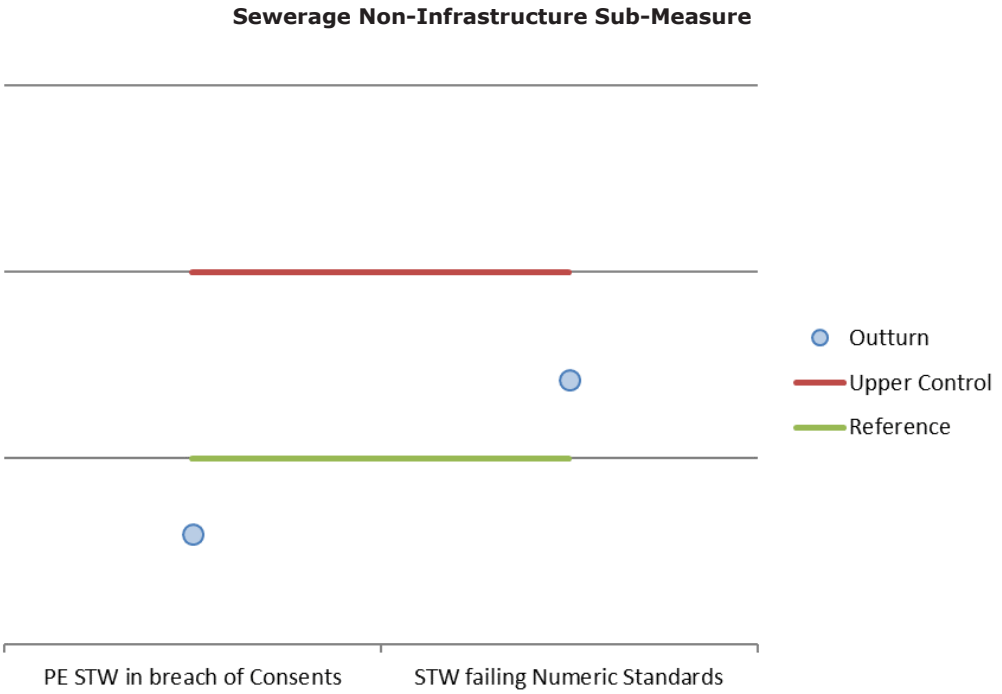
41 We remove interceptors and repair sewer defects on both ex-Section 24 as well as traditional public sewers. This practice has been updated to apply to individual premises where we recognise these customers are contacting us more than once in 12 months for a water recycling enquiry. We also include these customers in our 'Keep It Clear' campaign where relevant.

42 We engage directly with our customers in districts where sewer blockages occur more often than usual. As part of our 'Keep It Clear' campaign we work with local organisations to reduce the numbers of avoidable blockages (caused by incorrect disposal of fats, oils,

greases and wet wipes, for example). The campaign extends to 24 different locations around the Anglian Water region. In almost every location our campaign has seen a sustained reduction in blockages, with many areas recording a significant, sustained reduction.

S-F2: Sewerage non-infrastructure (3B.15)

43 In 2019/20 both of our sewerage non-infrastructure indicators were assessed as Green. The population equivalent in breach of consents indicator returned to below the upper control limit and therefore is assessed as Green (having been Amber in 2018/19). Under the mechanism of our serviceability assessment this means that the overall assessment for the sewerage non-infrastructure sub-service is Green. The performance of each sub-measure against its reference level and upper control limit is shown on the chart below.



Population equivalent (PE) WwTW in breach of consent (3B.16)

44 One Water Recycling Centre (WRC), Litchborough, failed in 2019 against the relevant criteria. The load served by this very small WRC represents only 0.01 per cent of our total resident population served by works with numeric consents. The total resident population served by works with numeric consents was 7,003,943 in 2019/20.

Failing WRCs

Water Recycling Centre	Failing Category
Litchborough WRC	OSM Sanitary LUT

WwTW failing numeric consents (3B.17)

45 This is a measure of the percentage of our WRCs which were compliant during 2019, according to the Environment Agency End of Year (EoY) Performance report. Out of 756 discharges with numeric consents, eight were non-compliant for 2019. At 98.94 per cent compliance for 2019, this is an improvement compared to 2018 (ten works out of 756, 98.68 per cent).

46 To improve discharge permit compliance, the following improvements have been or will be implemented:

- Under the Water and Water Recycling Joint Compliance Investigation plan, we carried out targeted initiatives and projects to reduce identified compliance risk and improve performance.
- Process reports are produced on a daily and monthly basis and monitored for all Water Recycling Centres, with more in-depth daily process and performance reports carried out for high risk sites.
- Targeted investment is made as part of a Compliance Parcel on higher risk sites.
- 20 additional staff members attended Root Cause Analysis Facilitator training course to support more in-depth root cause analysis investigations for compliance risks.

The eight non-compliant WRCs were Canvey Island, Isleham, Leighton Linslade, Litchborough, North Ferry, Steeple Claydon, Tetney-Newton Marsh and West Walton.

47 The difference in the way serviceability is calculated compared to EoY Performance is:

- Look up table failures (BOD, SS, NH3) are dependent on sampling frequency, as to be compliant a WRC must pass 95 per cent of samples. The EoY performance report includes failing works throughout the year whereas serviceability is based on the samples taken at year end. Therefore where the number of samples taken at a WRC during the year has increased (by returning from reduced to normal frequency) the WRC has the potential to become compliant for serviceability by year end, but would remain non-compliant for the EoY Performance report.
- Failing samples attributed to a specific mechanical breakdown are now counted in the EoY Performance report. The rationale was that such samples were not taken under normal operating conditions and so were rescheduled. Historically they did not appear.

48 Ipswich-Cliff Quay WRC is included in the Environment Agency End of Year (EoY) Performance (reported in table K) but not in the serviceability failing WRCs in 2019 (reported as part of the serviceability APR). Ipswich-Cliff Quay WRC was scheduled to be sampled 12 times during 2019. However, three of its samples in the first six months of the year (January, April and May) failed the ammonia consent for the site. Consequently, the sampling frequency was increased. All of these were compliant. Under Environment Agency End of Year (EoY) Performance Ipswich-Cliff Quay WRC failed because of its non-compliance at mid-year (three failures out of five samples) whereas under serviceability rules it passed because of its compliance by year-end (three failures out of 21).

Table 3C - Abstraction Incentive Mechanism

	Abstraction site	2019-20 AIM performance [Ml]	2019-20 normalised AIM performance [nr]	Cumulative AIM performance 2016-17 onwards [Ml]	Cumulative normalised AIM performance 2016-17 onwards [nr]	Contextual information relating to AIM performance
1	MARHAM-RIVER NAR WA	0.0	0.00	-4.8	-0.01	0
2	COSTESSEY-PITS RIVER INTAKE	-652.8	-0.32	-76.6	-0.02	New Heigham wtw came on line in 2019, allowing us to reduce the abstraction at Costessey.
	Total	-652.7	-0.32	-81.4	-0.03	

Since privatisation, and as a result of the outcome of extensive environmental assessments, we have made significant investment to help understand and minimise the impacts of our abstractions. As a result, we have reduced output from, relocated or closed a number of our abstraction sources. We have also completed a wide range of environmental mitigation measures, the most notable of which was the creation of the 30 hectare wildlife lagoons at Rutland Water. We have completed a number of river restoration schemes in AMP6 to mitigate any potential abstraction impacts and have identified a further programme of river habitat improvements in AMP7. The Anglian Water supply area is geographically large with a significant rural population and experiences some of the lowest rainfall in the country. The Environment Agency has assessed the region as being in 'serious water stress' and, in addition, it is recognised as being particularly vulnerable to the impacts of climate change. The region is characterised by a high number of water–dependent designated conservation sites and we work closely with the Environment Agency to manage the associated environmental pressures. Our region's slow moving rivers are often ecologically diverse and, whilst they can support abstraction, this may cause environmental stress during periods of low rainfall.

During AMP5, two Anglian Water surface water sources were identified for sustainability changes to address the impacts on the respective rivers immediately downstream from our abstraction points. At both, we have agreed to upfront licence changes with the Environment Agency which will reduce the permitted hands-off flow/minimum residual flow requirements within specified time periods. These licence changes were not made immediately due to the need to first complete significant capital investment in order to maintain public water supplies. In the meantime we are seeking to manage current abstraction rates from the sites in order to minimise any ongoing environmental impact.

1 We are reporting on both these sites for the Abstraction Incentive Mechanism (Table 3C): Marham (River Nar) and Costessey (River Wensum).

Marham (River Nar) (3C.1)

2 The hands-off flow requirement in the Marham abstraction licence for the River Nar is due to increase from April 2025. This will result in a large sustainability change for the Marham source and any alterations to our current abstraction regime in this resource zone will require significant investment. We have assessed the impacts in our Water Resources Management Plan 2019 and have included a new transfer option for delivery by 2025. We also agreed with the Environment Agency and Natural England to implement interim river restoration and enhancement measures for the River Nar during AMP6.

3 The option to meet the demand from alternative abstraction sources is limited primarily to the Wellington Wellfield groundwater source. Use of the Wellington Wellfield is the identified drought contingency measure for the Marham source and is constrained by the annual abstraction licence limit.

4 Although abstraction from the Marham surface water source has continued to decrease during 2019/20, there is a small increase in the quantity reported under AIM this year due to the prolonged low flows in the River Nar during summer 2019.

Costessey (River Wensum) (3C.2)

5 The minimum residual flow requirement in the Costessey abstraction licence for the River Wensum increased in April 2019. The licence changes result in a significant sustainability reduction of 46 Ml/d, which has been addressed through an AMP6 investment scheme to enhance the treatment at the downstream Heigham surface water source. The Heigham intake was returned to service in March 2019. We agreed with the Environment Agency and Natural England to progressively reduce abstraction from Costessey and to re-instate the Heigham intake which is located outside the River Wensum Special Area of Conservation. Since 2011 abstraction at Costessey has reduced by about a third as we have prioritised the use of Heigham intake when it was possible to do so without compromising public water supply as a result of poor water quality.

6 Following the commissioning of the new Heigham treatment works in 2019, abstractions from our Costessey source have reduced significantly. We are reporting a negative quantity under AIM this year as a direct result of the completion of these works.

Table 3D - Service Incentive Mechanism

Line description	Score nr

A	Qualitative performance	
1	1st survey score	4.40
2	2nd survey score	4.46
3	3rd survey score	4.40
4	4th survey score	4.41
5	Qualitative SIM score (out of 75)	64.08
6	Total contact score	21.29
7	Quantitative SIM score (out of 25)	17.90
8	Total annual SIM score (out of 100)	81.98

For commentary please see Table 3A lines 32 and 33.

Table 4A - Non-financial Information

	Line description	Units	Current year	
			Unmeasured	Measured
	Retail			
A	**Household**			
1	Number of void households	000s	18.314	75.091
2	Per capita consumption (excluding supply pipe leakage) l/h/d	l/h/d	185.80	124.32

	Wholesale			
B	**Volume (Ml/d)**		**Water**	**Wastewater**
3	Bulk supply export	Ml/d	64.800	2.026
4	Bulk supply import	Ml/d	2.751	8.451
5	Distribution input	Ml/d	1,136.349	

Number of void households (4A.1)

1 The number of measured and unmeasured household voids have both decreased in the year. One of the Performance Commitments we have for AMP7 is designed to incentivise the company to reduce the number of false household void properties. As a result we have increased our focus this year on reducing the number of voids. Their primary objective is to identify if a property is truly void and if it is occupied then to identify the correct party to be billed.

Per capita consumption (4A.2)

2 Per household consumption (PHC) for both unmeasured and measured properties has decreased this year as the impact of the hot summer of 2018 is removed. Per capita consumption (PCC) is calculated by taking PHC and dividing by occupancy multiplied by property numbers. Occupancy is calculated using methodology set out by the Environment Agency in the WRMP guidelines. This year we have improved how we determine the split between measured and unmeasured occupancy with a property level data asset purchased from a private company. This has reduced unmeasured occupancy, which has led to an increase in unmeasured PCC even though measured PHC has decreased.

Bulk supply exports (4A.3)

3 Water exports relate mainly to bulk supplies to Affinity Water (48 Ml/d) and Severn Trent Water (14 Ml/d) and are similar to 2018/19 levels.

4 Wastewater exports relate to discharges to nine Water Recycling Centres in the Thames Water and Severn Trent Water areas.

Bulk supply import (4A.4)

5 Water imports relate mainly to imports from Essex and Suffolk. Sewerage imports primarily relate to discharges to two of our Water Recycling Centres from Thames Water customers.

Table 4B - Wholesale Totex Analysis

	Line description	Current year		Cumulative 2015-20	
		Water £m	Wastewater £m	Water £m	Wastewater £m
A	**Actual totex**				
1	Actual totex	456.219	526.431	1,939.633	2,454.864
B	**Items excluded from the menu**				
2	Third party costs	18.779	8.341	55.773	27.540
3	Pension deficit recovery payments	5.313	8.251	20.935	31.757
4	Other 'Rule book' adjustments	-	0.191	0.201	1.122
5	Total items excluded from the menu	24.092	16.783	76.909	60.419
C	**Transition expenditure**				
6	Transition expenditure	(15.292)	(3.271)	11.545	25.320
D	**Adjusted Actual totex**				
7	Adjusted Actual totex	416.835	506.377	1,874.269	2,419.765
8	Adjusted Actual totex base year prices	350.910	426.290	1,667.179	2,153.992
E	**Allowed totex**				
9	Allowed totex based on final menu choice – base year prices	291.519	500.724	1,668.301	2,491.982

Actual totex (4B.1)

1 Actual totex in the year was £982.7 million.

Items excluded from the menu (4B.2- 4B.5)

2 Costs excluded from the menu are third party costs of £27.1 million and pension deficit payments of £13.6 million (lines 2 and 3), other rule book adjustments of £0.2 million (line 4), making total items excluded £40.9 million (line 5).

Transition expenditure (4B.6)

3 In our September 2018 business plan submission we explained our intention to invest in a transition programme to achieve a number of key business requirements including early delivery of AMP7 obligations as well as the need to balance resources in our supply chain. Despite requesting clarity on transition spend allowances to be issued as part of the IAP which was published on the 31st January 2019, it was not until 18th July 2019 when we received confirmation from Ofwat that our proposed expenditure would be partially allowed.

4 As the transition year started in April 2019 this late confirmation of the level of allowed spend, and the removal of certain drivers of spend within it, had an impact on our ability to deliver the transition programme. Whilst, at £18.6 million, we have spent less in 2019/20 on transition than Ofwat allowed in our Final Determination, we have been able to use the programme to ensure we meet some early obligations such as the sustainability reduction

at Ludham by March 2021, as well as to make progress with design and planning work for our strategic interconnectors and WINEP programmes. Any transition allowance that has not been spent in 2019/20 has now been carried forward into our 2020/21 forecasts.

5 In accordance with the guidance provided in Information Note 20/03 published by Ofwat in April 2020, this transition expenditure in relation to early delivery of AMP7 obligations has been included here as a negative actual such that it is excluded from line 4B.7, adjusted actual totex.

Adjusted actual totex base year prices (4B.8)

6 At base year prices (2012/13), adjusted actual totex in the year is £777.2 million.

Allowed totex (4B.9)

7 Allowed menu totex is £792.2 million in base year prices (line 9), giving an adjusted out-performance of £15.0 million in the year.

Totex outperformance

8 The difference in base year prices between total allowed totex and adjusted actual totex on a cumulative basis is £339.1, which is now entirely comprised of totex outperformance.

9 This totex outperformance is as a result of numerous totex efficiency measures and initiatives. Totex and capital programme efficiencies have been driven through our Alliance delivery model, delivering efficient, innovative and lower carbon solutions. Our operating cost efficiency has been achieved through initiatives including supply chain efficiencies, lean process improvements, energy efficiency projects and general tight cost control. These continue to be key areas of focus as we move into a new AMP.

10 By maximising the benefits of our alliances and innovation, and delivering strong efficiencies across our programme, we have been able to deliver further benefits for customers by reinvesting efficiencies. This commenced in 2017/18 and in total we reinvested £165.0 million over AMP6 to improve resilience and enhance our service to customers.

Table 4C - Forecast Impact of Performance on RCV

	Line description	Water £m	Wastewater £m
1	Cumulative totex over/underspend so far in the price control period	(1.334)	(401.489)
2	Customer share of cumulative totex over/underspend	(0.675)	(199.498)
3	RCV element of customer share of cumulative totex over/underspend	(5.792)	(191.002)
4	Adjustment for ODI rewards or penalties	-	-
5	RCV determined at FD at 31 March	3,129.211	5,112.884
6	Projected 'shadow' RCV	3,123.419	4,921.882

Cumulative totex over/underspend so far in the price control period (4C.1)

1 This is the difference between the actual cumulative totex for all five years of the price control period and the allowed totex in the full five years of the price control period. It is derived from "Totex under / over performance" as set out in section 3.5 "Totex adjustment" of the PR14 'Wholesale total expenditure (totex) sharing' model which was published alongside the "Ofwat PR14 reconciliation rulebook" and then inflated to report year prices (2019/20 year average) using RPI inflators published by Ofwat alongside RCV values. A negative number indicates that actual totex spend has been less than the allowed totex.

Customer share of cumulative totex over/underspend (4C.2)

2 This is the customer share of the difference in line 4C.1. It is calculated using the formula: ('menu baseline totex' – 'actual menu totex') * (1 – 'cost sharing rate'). The cost sharing percentage is sourced from the PR14 Final Determination Wholesale Menu Models for water and wastewater. The cost sharing percentage from the menu models is the Anglian Water share (water 49.4 per cent, wastewater 50.3 per cent), therefore the customer share is one minus this rate. This figure is in report year prices (2019/20 year average).

RCV element of customer share of cumulative totex over/underspend (4C.3)

3 This is the RCV impact of the difference between the actual cumulative totex for the AMP and the allowed totex, as shown in line 4C.1. This is equivalent to "Water: RCV adjustment" and "Wastewater: RCV adjustment" as set out in section 4.3 "RCV adjustments" of the PR14 'Wholesale total expenditure (totex) sharing' model which was published alongside the "Ofwat PR14 reconciliation rulebook". It is presented in the same price base as 4C.5 (i.e. March RPI as published by Ofwat) so that 4C.6 is also in that price base.

Adjustment for ODI rewards or penalties (4C.4)

4 Anglian Water has no ODI rewards / penalties which affect RCV (all ODI financial rewards / penalties are revenue items).

RCV determined at FD at 31 March (4C.5)

5 Obtained from RCVs published on the Ofwat website (address below):

6 https://www.ofwat.gov.uk/publication/regulatory-capital-values-2020

Projected 'shadow' RCV (4C.6)

7 Calculated field, the sum of lines 4C.3 to 4C.5.

Table 4D - Wholesale Totex Analysis - Water

	Line description	Units	Water resources		Network+				Total
			Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution	
A	**Operating expenditure**								
1	Power	£m	-	7.877	4.045	0.238	7.806	15.665	**35.631**
2	Income treated as negative expenditure	£m	-	(0.068)	(0.036)	(0.008)	(0.124)	(0.272)	**(0.508)**
3	Abstraction charges/ discharge consents	£m	10.042	-	-	-	0.535	-	**10.577**
4	Bulk supply	£m	-	-	-	-	1.859	0.181	**2.040**
5	Other operating expenditure - renewals expensed in year (Infrastructure)	£m	-	-	-	-	-	36.628	**36.628**
6	Other operating expenditure - renewals expensed in year (Non-Infrastructure)	£m	-	-	-	-	-	-	**-**
7	Other operating expenditure - excluding renewals	£m	-	14.191	3.224	0.077	30.796	76.223	**124.511**
8	Local authority and Cumulo rates	£m	-	3.065	0.448	-	5.834	30.962	**40.309**
9	**Total operating expenditure excluding third party services**	£m	10.042	25.065	7.681	0.307	46.706	159.387	**249.188**
10	Third party services	£m	0.591	1.633	1.605	-	3.549	3.432	**10.810**
11	**Total operating expenditure**	£m	10.633	26.698	9.286	0.307	50.255	162.819	**259.998**
B	**Capital Expenditure**								
12	Maintaining the long term capability of the assets - infra	£m	-	0.190	0.951	-	-	24.713	**25.854**
13	Maintaining the long term capability of the assets - non-infra	£m	-	13.385	-	0.010	25.311	29.700	**68.406**
14	Other capital expenditure - infra	£m	-	0.515	1.764	-	-	40.963	**43.242**
15	Other capital expenditure - non-infra	£m	-	10.900	0.443	-	32.308	6.527	**50.178**
16	Infrastructure network reinforcement	£m	-	-	-	-	-	26.907	**26.907**
17	Total gross capital expenditure (excluding third party)	£m	-	24.990	3.158	0.010	57.619	128.810	**214.587**
18	Third party services	£m	-	-	-	-	1.507	6.462	**7.969**
19	**Total gross capital expenditure**	£m	-	24.990	3.158	0.010	59.126	135.272	**222.556**
C	**Grants and contributions**								
20	Grants and contributions	£m	-	-	-	-	-	31.648	**31.648**
21	**Totex**	£m	10.633	51.688	12.444	0.317	109.381	266.443	**450.906**
D	**Cash Expenditure**								
22	Pension deficit recovery payments	£m	-	0.575	0.143	-	1.724	2.871	**5.313**
23	Other cash items	£m	-	-	-	-	-	-	**-**
24	**Totex including cash items**	£m	10.633	52.263	12.587	0.317	111.105	269.314	**456.219**

Line description	Units	Water resources		Network+			
		Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution

E Unit cost information (operating expenditure)

25	Licenced volume available	Ml	605,391.000					
25	Volume abstracted	Ml		491,751.170				
25	Volume transported	Ml			115,511.935			
25	Average volume stored	Ml				334.850		
25	Distribution input volume	Ml					415,903.734	
25	Distribution input volume	Ml						415,903.734
26	Unit cost	£/Ml	17.564	54.292	80.390	916.828	120.833	391.482
27	Population	000s	4,771.324	4,771.324	4,771.324	4,771.324	4,771.324	4,771.324
28	Unit cost	£/pop	2.229	5.596	1.946	0.064	10.533	34.124

1 Line numbers shown within the table are as per the Ofwat APR spreadsheet.

Change in operating expenditure compared to 2018/19 - Regulatory Accounts

2 Underlying water services operating expenditure decreased by £1.3 million (0.5 per cent) in real terms.

Movement in costs 2018/19 to 2019/20

	Water resources £m	Raw water transport and storage £m	Water treatment £m	Treated water distribution £m	Water Total £m
2018/19 reported operating costs	**38.1**	**9.6**	**47.2**	**158.4**	**253.3**
Inflation @ 2.6%	1.0	0.2	1.2	4.1	6.5
2018/19 underlying costs indexed to 2019/20 prices	**39.1**	**9.8**	**48.4**	**162.5**	**259.8**
2019/20 reported operating costs	**37.3**	**9.6**	**50.3**	**162.8**	**260.0**
Atypical costs - re-structuring provision	(0.2)	(0.1)	(0.4)	(0.8)	(1.5)
2019/20 costs re-stated to underlying position	**37.1**	**9.5**	**49.9**	**162.0**	**258.5**
(Increase)/decrease in underlying costs from 2018/19	**2.0**	**0.3**	**(1.5)**	**0.5**	**1.3**

Operating expenditure key changes (4D.1-4D.11)

Water resources

3 Operating expenditure reduced by by £2.0 million in real terms; of this variance, £1.4 million is due to a reduction in power costs in relation to river abstraction.

Water treatment

4 Operating expenditure increased by £1.5 million in real terms; of this increase, £1.2 million was in relation to additional people and material costs for maintenance.

Treated water distribution

5 Operating expenditure in real terms reduced by £0.5 million compared to the prior year; this consisted of an increase in renewals expenditure of £1.0 million and increased other expenditure of £1.3 million, being mostly offset by a reduction in abstraction costs of £1.3 million plus other smaller decreases in rates, power and people costs.

Capital Expenditure (4D.12-4D.19)

6 All of our capital expenditure is delivered through projects where master data is used to identify whether the expenditure is for maintaining the long term capability of assets or other capital assets for both infrastructure and non infrastructure.

7 It is expected that capital expenditure profiles vary year on year significantly due to the strategic priortisation of the investment programme. Large projects and stakeholder required investments can lead to variances in year on year comparisons of the same data point.

8 This master data is also used for the classifying expenditure within the relevant price control. The majority of capital expenditure is directly attributable to the price control. Where this is not possible, capital expenditure is assigned to the business unit of principal use with an appropriate recharge of depreciation charges for these shared assets made between price control segments in table 2A.

9 Total water capital expenditure includes £7.9 million of spend on assets used to fulfil third-party agreements. Of this £6.4 million was expenditure incurred in relation to water main diversions.

Cash Expenditure (4D.22)

10 Cash expenditure reflects the share of pension deficit payments allocated to water services.

Unit Cost Information (4D.25-4D.28)

Licensed volume available (abstraction licences)

11 The volume given is the annual quantity we have licensed for public water supply. This does not include licences for the transfer of water between sources, such as river abstraction for the purpose of filling reservoirs.

Volume abstracted (raw water abstraction)

12 The volume given is for water abstracted for the purpose of public water supply, as reported to the Environment Agency as part of the statutory return. This figure does not include volumes transferred between sources, such as river abstraction for the purpose of filling reservoirs.

13 We also share a resource with Affinity Water (Ardleigh Reservoir). As this resource is managed under the Ardleigh Reservoir Committee, the licensed and abstracted volumes have not been included in these figures.

Volume transported (raw water transport)

14 This figure includes the volume abstracted from satellite sources – sources which are wholly located at sites distant from where treatment takes place. This also includes the volume of water transferred from our reservoir at Rutland Water for treatment at Saltersford WTW. This figure does not include the non-potable supply from Elsham WTW to the Humber Bank industries.

Average volume stored (raw water storage)

15 Using the Ofwat definition of raw water storage, this includes reservoirs with no natural catchment, no abstraction licence and with storage of less than 15 days. For these sites the percentage fill, as recorded on telemetry, was averaged for the year and then multiplied by the bathymetric volume to give an average fill in megalitres. We only have four reservoirs that meet these criteria: Heigham, Hall, Bedford and Saltersford. During 2019/20 Bedford reservoir was returned to service, having been unused for a number of years, which resulted in an increase to the figure reported in this line.

Population (4D.27)

16 This line is the same as table 4Q.15. Please refer to that section for relevant commentary.

Table 4E - Wholesale Totex Analysis - Wastewater

	Line description	Units	Network+ Sewage collection			Network + Sewage treatment		Sludge			Total
			Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Imported sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal	
A	**Operating expenditure**										
1	Power	£m	7.558	3.357	1.260	26.907	1.707	0.022	(0.530)	-	**40.281**
2	Income treated as negative expenditure	£m	(0.079)	(0.035)	(0.013)	(0.522)	-	-	(7.916)	(2.321)	**(10.886)**
3	Discharge consents	£m	1.492	0.663	0.249	5.951	0.147	-	(0.011)	-	**8.491**
4	Bulk discharge	£m	-	-	-	-	-	-	-	-	**-**
5	Other operating expenditure - renewals expensed in year (Infrastructure)	£m	13.515	6.002	2.252	-	-	-	-	-	**21.769**
6	Other operating expenditure - renewals expensed in year (Non-Infrastructure)	£m	-	-	-	-	-	-	-	-	**-**
7	Other operating expenditure - excluding renewals	£m	38.278	15.646	6.599	77.184	4.865	22.934	33.768	10.361	**209.635**
8	Local authority rates and Cumulo rates	£m	0.102	0.031	0.015	20.176	1.144	0.061	3.214	0.026	**24.769**
9	**Total operating expenditure excluding third party services**	£m	60.866	25.664	10.362	129.696	7.863	23.017	28.525	8.066	**294.059**
10	Third party services	£m	-	-	-	0.929	-	0.011	0.363	0.026	**1.329**
11	Total operating expenditure	£m	60.866	25.664	10.362	130.625	7.863	23.028	28.888	8.092	**295.388**
B	**Capital Expenditure**										
12	Maintaining the long term capability of the assets - infra	£m	12.337	3.949	1.830	-	-	-	-	-	**18.116**
13	Maintaining the long term capability of the assets - non-infra	£m	9.192	2.943	1.363	86.707	4.570	2.069	11.573	1.929	**120.346**
14	Other capital expenditure - infra	£m	13.105	4.195	1.944	-	-	-	-	-	**19.244**
15	Other capital expenditure - non-infra	£m	13.333	4.268	1.977	35.767	2.045	-	5.959	-	**63.349**
16	Infrastructure network reinforcement	£m	10.410	3.332	1.544	-	-	-	-	-	**15.286**
17	Total gross capital expenditure (excluding third party services)	£m	58.377	18.687	8.658	122.474	6.615	2.069	17.532	1.929	**236.341**
18	Third party services	£m	2.586	0.828	0.384	3.214	-	-	-	-	**7.012**
19	**Total gross capital expenditure**	£m	60.963	19.515	9.042	125.688	6.615	2.069	17.532	1.929	**243.353**
C	**Grants and contributions**										
20	Grants and contributions	£m	14.003	4.483	2.076	-	-	-	-	-	**20.562**
21	Totex	£m	107.826	40.696	17.328	256.313	14.478	25.097	46.420	10.021	**518.179**
C	**Cash Expenditure**										
22	Pension deficit recovery payments	£m	1.713	0.467	0.155	3.425	0.155	1.090	0.779	0.467	**8.251**
23	Other cash items	£m	-	-	-	-	-	-	-	-	**-**
24	Totex including cash items	£m	109.539	41.163	17.483	259.738	14.633	26.187	47.199	10.488	526.430

Line description	Units	Network+ Sewage collection			Network + Sewage treatment		Sludge		
		Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Imported sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal

D Unit cost information (operating expenditure)

25	Volume collected	Ml	463,786.000							
25	Volume collected	Ml		251,557.000						
25	Volume collected	Ml			109,094.000					
25	Biochemical Oxygen Demand (BOD)	Tonnes				159,411.022				
25	Biochemical Oxygen Demand (BOD)	Tonnes					15,941.102			
25	Volume transported	m3						2,250,339.000		
25	Dried solid mass treated	ttds							149.108	
25	Dried solid mass disposed	ttds								84.078
26	Unit cost	£/unit	131.237	102.021	94.982	819.423	493.253	10.233	193,738.767	96,243.964
27	Population	000s	6,204.156	6,204.156	6,204.156	6,204.156	6,204.156	6,204.156	6,204.156	6,204.156
28	Unit cost	£/pop	9.811	4.137	1.670	21.054	1.267	3.712	4.656	1.304

1 Line numbers shown within the table are as per the Ofwat APR spreadsheet.

Change in operating expenditure compared to 2018/19 - regulatory accounts

2 Underlying wastewater operating expenditure increased by £6.0 million (2.1 per cent) in real terms.

Movement in costs 2018/19 to 2019/20

	Sewage Collection £m	Sewage Treatment £m	Sludge £m	Sewerage Total £m
2018/19 reported operating costs	**87.6**	**132.5**	**59.5**	**279.6**
Inflation @ 2.6%	2.3	3.4	1.5	7.2
2018/19 underlying costs indexed to 2019/20 prices	**89.9**	**135.9**	**61.0**	**286.8**
2019/20 reported operating costs	**96.9**	**138.5**	**60.0**	**295.4**
Atypical costs - re-structuring provision	(0.9)	(1.3)	(0.7)	(2.9)
2019/20 costs re-stated to underlying position	**96.0**	**137.2**	**59.3**	**292.5**
(Increase)/decrease in underlying costs from 2018/19	**(6.1)**	**(1.3)**	**1.7**	**(5.7)**

Operating expenditure key changes (4E.1-4E.11)

Sewage Collection

3 Total collection costs increased by £6.1 million in real terms, all in relation to wet weather costs particularly in the early part of 2020. Of this, power costs increased by £1.3 million due to the additional pumping required, infrastructure repairs increased by £1.5 million and we incurred additional bought in costs of approximately £3 million.

Sewage treatment.

4 The increase of £1.3 million was due to the increase in chemical costs during the year, generally as a result of worsening exchange rates and demand.

Sludge

5 The decrease of £1.7 million is due to improved CHP output and renewable obligation certificate (ROCs) credits totaling £0.4 million, a reduction in EA charges of £0.3 million plus a number of other smaller savings.

Capital Expenditure (4E.12-4E.19)

6 All of our capital expenditure is delivered through projects where master data is used to identify whether the expenditure is for maintaining the long term capability of assets or other capital assets for both infrastructure and non infrastructure.

7 This master data is also used for the classifying expenditure within the relevant price control. The majority of capital expenditure is directly attributable to price control. Where this is not possible, capital expenditure is assigned to the business unit of principal use with an appropriate recharge of depreciation charges for these shared assets made between price control segments in table 2A.

8 It is expected that capital expenditure profiles vary year on year significantly due to the strategic priortisation of the investment programme. Large projects and stakeholder required investments can lead to variances in year on year comparisons of the same data point.

9 An allocation was required for the foul, surface water drainage and highway drainage split. The allocation was based on flow estimate models provided by Anglian Water's modelling team.

10 An allocation was also required for the sewage treatment and disposal and the imported sludge liquor treatment. This allocation is based on a population equivalent calculation.

11 Total wastewater capital expenditure includes £7.0 million of spend on assets used to fulfil third-party agreements, the majority of which being expenditure incurred in relation to sewer diversions.

Cash Expenditure (4E.22)

12 Cash expenditure reflects the share of pension deficit payments allocated to wastewater services.

Unit Cost Information (Operating Expenditure) (4E.25a-4E.25c)

Volume collected - foul, surface water and highways

13 We use hydraulic models covering 100 per cent of our region to assess the relative volumes used in the unit cost analysis. Foul flows are based on population data, including non-residential population. Surface water and highways volumes consider the annual rainfall experienced in our region and use an assessment of surface types such as highways and roofed area to derive volumes.

14 Reported volume changes from 2019/20 reporting year. This is mainly due to higher rainfall in 2019/20 that increased on average by 43% across the region. We continued our short-term flow survey programme in 2019/2020, which has added confidence to our understanding of the connectivity of impermeable surfaces to the network.

Biochemical Oxygen Demand (BOD) - sewage treatment and sludge liquor treatment

15 Sewage treatment is total pollution load in tonnes per year discharged into the sewerage system. Based on modelled volumes, we assume BOD on sludge liquor treatment is 10 per cent of reported sewage treatment BOD.

Dried mass solid treated and dried mass solid disposed

16 These figures are the same as those for table 4R.25 and 4R.30.

Population (4E.27)

17 This line is the same as table 4U.11. Please refer to that section for relevant commentary.

Table 4F - Operating Cost Analysis - Household Retail

	Line description	Household unmeasured				Household measured				Total
		Water only	Waste-water only	Water and waste-water	Total	Water only	Waste-water only	Water and waste-water	Total	
		£m	£m	£m	**£m**	£m	£m	£m	**£m**	**£m**
A	**Operating expenditure**									
1	Customer services	0.549	1.332	1.572	3.453	0.939	2.704	9.834	13.477	**16.930**
2	Debt management	0.197	1.015	2.209	3.421	0.215	0.841	6.138	7.194	**10.615**
3	Doubtful debts	0.991	2.676	4.889	8.556	2.201	6.848	22.443	31.492	**40.048**
4	Meter reading					0.222	1.018	2.405	3.645	**3.645**
5	Other operating expenditure	0.436	1.114	1.682	3.232	0.974	2.571	10.607	14.152	**17.384**
6	**Total operating expenditure excluding third party services**	2.173	6.137	10.352	18.662	4.551	13.982	51.427	69.960	**88.622**
7	Third party services operating expenditure	-	-	-	-	-	-	-	-	**-**
8	Total operating expenditure	2.173	6.137	10.352	18.662	4.551	13.982	51.427	69.960	**88.622**
9	Depreciation - tangible fixed assets (on assets existing at 31 March 2015)	0.017	0.044	0.057	0.118	0.026	0.108	0.368	0.502	**0.620**
10	Depreciation - tangible fixed assets (on assets acquired since 1 April 2015)	0.004	0.012	0.015	0.031	0.008	0.028	0.097	0.133	**0.164**
11	Amortisation - intangible fixed assets (on assets existing at 31 March 2015)	-	0.001	0.001	0.002	-	0.001	0.005	0.006	**0.008**
12	Amortisation - intangible fixed assets (on assets acquired since 1 April 2015)	0.043	0.112	0.147	0.302	0.069	0.277	0.945	1.291	**1.593**
13	**Total operating costs**	2.237	6.306	10.572	19.115	4.654	14.396	52.842	71.892	**91.007**
14	Capital expenditure	0.136	0.351	0.462	0.949	0.215	0.868	2.964	4.047	**4.996**

B	**Demand-side efficiency and customer-side leaks analysis - Household**	
15	Demand-side water efficiency - gross expenditure	**0.949**
16	Demand-side water efficiency - expenditure funded by wholesale	**-**
17	Demand-side water efficiency - net retail expenditure	**0.949**
18	Customer-side leak repairs - gross expenditure	**1.898**
19	Customer-side leak repairs - expenditure funded by wholesale	**-**
20	Customer-side leak repairs - net retail expenditure	**1.898**

Operating expenditure (4F.1-4F.8)

1 Total household retail costs decreased by £1.0 million (1.3 per cent) in real terms before atypical costs.

2 The underlying bad debt charge has increased by £1.3 million in real terms to £28.0 million, but due to the unprecedented current circumstances and under the requirements of IFRS9 (financial instruments), we have taken an exceptional further bad debt charge of £12.0 million to reflect the risk of bad debt against our unprovided customer debt balances at the end of March.

Movement in costs 2018/19 to 2019/20

	Total £m
2018/19 reported operating costs	75.0
Inflation @ 2.6%	2.0
2018/19 underlying costs indexed to 2019/20 prices	**77.0**
2019/20 reported operating costs	**88.6**
Atypical costs - re-structuring provision	(0.6)
Atypical cost - IFRS9 bad debt provision recogniszing potential impact of Covid 19	(12.0)
2019/20 costs re-stated to underlying position	76.0
(Increase) / decrease in underlying costs from 2018/19	**1.0**

3 Excluding changes to the bad debt charge, measured costs reduced by £1.0 million in real terms (2.6%) with reduction in customer service costs of £1.1 million driven by reduced non-network enquiries of £0.8 million, and reduced general and support costs of £0.5 million, both being partially offset by increased debt management costs of £0.5 million. The measured bad debt charge increased by £9.9 million, of which £8.9 million was the exceptional IFRS9 charge.

4 Excluding changes to the bad debt charge, unmeasured operating costs fell by £0.6 million in real terms (5.6%) of which £0.3 million was a reduction in customer service costs and £0.3 million was reduced general and support costs, reflecting in part the ongoing reduction in the overall number of unmeasured customers served. The unmeasured bad debt charge increased by £6.1 million, of which £5.5 million was the exceptional IFRS9 charge.

Capital expenditure (4F.14)

5 Household retail capital expenditure was £5.0 million, primarily for further spend on new and enhanced information services software used within the retail business. This spend on software is primarily responsible for the increase in amortisation of intangible retail assets from the prior year.

Table 4G - Wholesale Current Cost Financial Performance

	Line description	Water £m	Wastewater £m	Total £m
1	Revenue	494.828	729.622	**1,224.450**
2	Operating expenditure	(259.998)	(295.388)	**(555.386)**
3	Capital maintenance charges	(156.569)	(320.270)	**(476.839)**
4	Other operating income	0.514	1.741	**2.255**
5	Current cost operating profit	78.775	115.705	**194.480**
6	Other income	34.231	55.935	**90.166**
7	Interest income	1.777	2.904	**4.681**
8	Interest expense	(132.128)	(215.906)	**(348.034)**
9	Other interest expense	0.103	0.168	**0.271**
10	Current cost profit before tax and fair value movements	(17.242)	(41.194)	**(58.436)**
11	Fair value gains/(losses) on financial instruments	(11.522)	(18.828)	**(30.350)**
12	Current cost profit before tax	(28.764)	(60.022)	**(88.786)**

1 All commentary relates to the appointed business unless otherwise stated.

Capital maintenance charges (4G.3)

2 The capital maintenance charges comprise 2018/19 current cost depreciation (CCD) indexed by RPI to 2019/20, plus the change in historical cost depreciation for wholesale non infrastructure assets in the year, plus a notional Infrastructure Renewals Charge (IRC). The IRC is based on the average level of capitalised infrastructure renewals expenditure over the AMP period. A detailed breakdown is shown below:

Line Description	Water £m	Wastewater £m	Total £m	Notes
Prior year current cost depreciation	124.7	279.6	404.3	Brought forward from 2019/20
Retail Price index inflation at 2.631 per cent	3.3	7.4	10.6	Per Office of National Statistics published financial year 2019/20 RPI figure
Change in historical cost depreciation 2019/20	5.1	11.4	16.4	Wholesale non-infra depreciation movement 2018/19 to 2019/20
	133.1	**298.3**	**431.4**	
Notional infrastructure renewals charge on non-expensed infrastructure renewals expenditure	23.5	21.9	45.4	Average capital maintenance infrastructure spend for AMP 6. Figures are actuals for years 1-5
	156.6	**320.3**	**476.8**	

Other income, interest and fair value movements (4G.6-4G.9 and 4G.11)

3 Other income, interest and fair value movements are allocated between water and wastewater on the basis of closing RCV. Refer to the commentary for table 1A for year on year variance.

Table 4H - Financial Metrics

	Line description	Units	Current year	AMP to date
A	**Financial indicators**			
1	Net debt	£m	6,489.837	
2	Regulated equity	£m	1,752.258	
3	Regulated gearing	%	78.74%	
4	Post tax return on regulated equity	%	4.34%	
5	RORE (return on regulated equity)	%	5.25%	6.87%
6	Dividend yield	%	3.44%	
7	Retail profit margin - Household	%	-0.67%	
8	Retail profit margin - Non household	%	0.00%	
9	Credit rating	Text	Baa1	
10	Return on RCV	%	4.73%	
11	Dividend cover	dec	-1.36	
12	Funds from operations (FFO)	£m	440.710	
13	Interest cover (cash)	dec	2.96	
14	Adjusted interest cover (cash)	dec	1.49	
15	FFO/Debt	dec	0.07	
16	Effective tax rate	%	-22.34%	
17	RCF	£m	380.472	
18	RCF/capex	dec	0.84	
B	**Revenue and earnings**			
19	Revenue (actual)	£m	1,291.905	
20	EBITDA (actual)	£m	647.897	
C	**Movement in RORE**			
21	Base return	%	5.53%	5.56%
22	Totex out / (under) performance	%	-0.01%	0.84%
23	Retail cost out / (under) performance	%	-0.33%	-0.03%
24	ODI out / (under) performance	%	-0.26%	0.32%
25	Financing out / (under) performance	%	0.32%	0.18%
26	Other factors	%	0.00%	0.00%
27	Regulatory return for the year	%	5.25%	6.87%

D Borrowings

28	Proportion of borrowings which are fixed rate	%	34.30%
29	Proportion of borrowings which are floating rate	%	13.83%
30	Proportion of borrowings which are index linked	%	51.87%
31	Proportion of borrowings due within 1 year or less	%	5.28%
32	Proportion of borrowings due in more than 1 year but no more than 2 years	%	5.75%
33	Proportion of borrowings due in more than 2 years but but no more than 5 years	%	25.10%
34	Proportion of borrowings due in more than 5 years but no more than 20 years	%	47.88%
35	Proportion of borrowings due in more than 20 years	%	15.99%

Net debt (4H.1)

1 The principal difference between statutory and regulatory net debt is that Ofwat's definition of regulatory net debt excludes accrued interest, fair value adjustments and issue costs. A full reconciliation between statutory and regulatory borrowings can be found in table 1E.

Regulated equity (4H.2)

2 Compared with prior year regulated equity has increased by £40.5 million to £1,752.3 million. This principally reflects the increase in RCV over the year.

Regulated gearing (4H.3)

3 Regulated gearing represents net debt per table 1E divided by year-end RCV. It has changed only marginally from the previous year.

Post tax return on regulated equity (4H.4)

4 In the previous year the return was (0.7) per cent. A break down of the calculation for both years is shown below for information.

Line description	2019/20	2018/19
Profit before tax and fair value movements	**£58.963m**	£42.614m
UK corporation tax	£16.274m	(£54,.83m)
Profit/(loss) after current tax (excluding fair value movements)	£75.237m	(£11.769m)
Regulated equity (average for year)	£1,732.048m	£1,684.592m
Post tax return on regulated equity %	4.34%	(0.7%)

RORE (4H.5)

5 RORE calculates the returns on a regulatory basis by reference to the notional gearing level of 62.5 per cent and average RCV for the year. The base RORE of 5.6 per cent set at the Final Determination is adjusted for the following factors net of any tax impact:

1. the company share of totex out or underperformance.

2. the company share of any out or underperformance on retail costs.

3. the impact of any ODI or SIM penalties or rewards earned in the year, even if they are not payable/receivable until the following AMP.

4. the difference between the actual interest charge (in real terms) and the allowed interest (real) on notional debt.

6 We have calculated RORE for the five years to March 2020 as 6.87 per cent (2019/20: 5.25 per cent), compared with base RORE of 5.56 per cent.

7 The table below outlines the main components of RORE:

	2019/20	AMP6 Cumulative
	%	%
Base RORE	5.53	5.56
Company share of totex out/underperformance	-0.01	0.84
Company share of any out/underperformance on retail costs	-0.33	-0.03
The impact of any ODI or SIM penalties	-0.26	0.32
The difference between the actual interest charge (in real terms) and the allowed interest (real) on notional debt	0.32	0.18
Calculated Annual RORE	5.25	6.87

Note- figures may not add due to rounding

8 The main contributor to the RORE in 2019/20 was the financing outperformance of 0.32 per cent (2018/19: 0.50 per cent).

9 Outcome delivery incentive penalties and underperformance on retail led to reduction in the RORE of 0.26 per cent and 0.33 per cent respectively.

10 A totex efficiency of £15.0 million (pre-tax) was achieved in the year ending March 2020. This is set out in the following table. After the application of tax this leads to a 0.01 per cent (post tax) fall to the RORE.

Base year prices	2019/20	Cumulative
	£m	£m
Allowed totex	792.2	4,160.3
Actual totex	777.2	3,821.2
Difference	15.0	339.1
Difference due to timing	0.0	0.0
Difference due to efficiency	15.0	339.1

Dividend yield (4H.6)

11 The reduction in dividend yield over the year is consistent with the increased regulated equity referred to above and the lower dividend paid in the year.

Retail profit margin - household and non-household (4H.7 and 4H.8)

12 Both lines 7 and 8 are Ofwat calculated cells.

13 The retail profit margins are calculated as earnings before interest and tax (after deducting wholesale charges) divided by total revenue charged to household or non-household customers respectively. Household has decreased from 0.8 per cent in the prior year to -0.7 per cent in 2019/20, reflecting increased revenue in the year more than offset by increased costs. Details of movements are discussed in the commentary to table 2I and 2C.

14 Non-household retail margin is 0.0 per cent as a result of the transfer of the non-household retail business in 2017/18 and our exit from the non-household retail market.

Return on RCV (4H.10)

15 Return on RCV for the year was 4.7 per cent compared with 4.3 per cent for the prior year. The increase is consistent with the increase in profit before interest, after current tax, compared with the prior year, partially offset by the increase in average RCV.

Dividend cover (4H.11)

16 Dividend cover has decreased from (0.77) last year to (1.36) this year. The primary reason for the decrease is the deferred tax charge of £134.5 million (2019: 62.6 million tax credit) which results in a larger loss being reported for the appointed business in line 1A.14, compared with a profit last year. This is mainly due to the reversal of a corporation tax reduction and the claiming of maximum capital allowances in the year.

Funds from operations (4H.12)

17 FFO is net cash generated from operating activities adjusted to remove the changes in working capital. Ofwat acknowledge that their approach to calculating this differs from some of the methodologies applied by the credit rating agencies.

18 FFO for the year was £440.7 million compared with £447.8 million for the prior year. The decrease is due principally due to the slight reduction cash generated from operations discussed in the commentary for table 1D.

Interest cover (cash) (4H.13)

19 Interest cover (cash) equals to FFO as calculated above plus interest paid on borrowings, divided by interest paid on borrowings. Interest paid on borrowings excludes any accretion of interest-linked debt which is a non cash item.

20 The interest cover ratio for the year was 3.0 compared with 3.1 for the prior year. This metric has worsened marginally due to the lower FFO.

Adjusted interest cover (cash) (4H.14)

21 Adjusted interest cover (cash) adjusts for regulatory depreciation of £330.2 million (2019: 317.3 million) as published by Ofwat.

22 The cover ratio for the year was 1.5 compared with 1.6 for the prior year. This decrease is a result of the cessation of the increase interest payment in the year, more than offset by the increase in the regulatory depreciation.

FFO/debt (4H.15)

23 The ratio for 2019/20 is 0.07 which is equal to that disclosed in the prior year. This reflects the reduction in FFO, offset by the increased net debt in the current year.

24 As noted above, Ofwat acknowledges that its approach to calculating FFO/debt differs from some of the methodologies applied by the credit rating agencies.

Effective tax rate (4H.16)

25 Effective tax rate is the current tax charge for the appointed business as a percentage of the profit before tax and fair value movements for the appointed business, as set out in the table to follow.

26 The rate for 2019/20 was (22.3) per cent compared with 122.9 per cent in the prior year. This decrease arises because the tax charge for the prior year included a transitional adjustment arising on the adoption of IFRS 15 which did not recur this year, and because last year we disclaimed capital allowances in order to utilise the surplus ACT asset held on the balance sheet. The ACT asset was fully recovered last year and therefore we claimed the maximum available capital allowances this year.

	2019/20 £m	2018/19 £m
(Loss) / Profit before tax per the Annual Performance Report	28.6	(55.8)
Fair value (loss)/profit on derivatives included in Profit before tax	(30.4)	(98.4)
Profit excluding Fair value (loss)/profit on derivatives (A)	59.0	42.6
Corporation tax charged at 19% (2018-19: 19%)	11.2	8.1
Depreciation and amortisation	50.1	49.5
Capital allowances	(64.2)	(34.5)
Items not taxable	(0.4)	(0.2)
Items not deductible for tax purposes	2.0	2.3
Short-term timing differences	(11.9)	(10.4)
Transitional adjustment of adoption of IFRS 15	-	37.6
Current tax charge for the year before adjustments in respect of previous years (B)	(13.2)	52.4
Adjustments in respect of previous years	(3.1)	2.0
Current tax charge for the year after adjustments in respect of previous years	(16.3)	54.4
Effective tax rate (B/A)	(22.3%)	122.9%

Regulated free cash flow (4H.17)

27 Free cash flow for the year was £380.5 million compared with £386.3 million for the prior year. The decrease results from the lower FFO as discussed above, offset slightly by a reduction in the dividends paid up to Group.

RCF/capex (4H.18)

28 The ratio for the year was 0.84 compared with the prior year of 0.82. The increase is due to the reduction in capital expenditure in the year, offset by the reduction in regulated free cash flow discussed above.

Revenue and EBITDA (4H.19 and 4H.20)

29 EBITDA (earnings before interest, tax, depreciation and amortisation) is calculated using the price control revenue as set out in table 4H and the associated costs. It includes only amounts which are relevant to the price control.

30 Revenue is higher than prior year due to regulatory price increases offsetting reduced demand for both household and non-household customers. EBITDA is lower than last year due to revenue increases being more than offset by increased opex as explained in the commentaries for tables 1A and 2A.

Borrowings (4H.28-4H.35)

31 The Group's policy for the management of interest rate risk is to achieve a balanced mix of funding at index-linked, fixed and floating rates of interest. To guard against the adverse movements in interest rates having a detrimental impact on the business and to enable covenanted obligations and credit ratings to be met, the overall underlying debt portfolio is maintained at circa 50 per cent of RCV for index-linked debt and between 5 per cent and 15 per cent for floating rate debt, with the remaining being fixed rate. Within these

hedging levels, the Group endeavours to obtain the finest rates (lowest borrowing and finest depositing rates) consistent with ensuring that the relevant treasury objectives are met in full, i.e. the provision of adequate finance for Anglian Water Services Group at all times and maintaining security of principal.

32 The proportion of borrowings split between fixed, floating and index-linked changed from the prior year. Floating rate debt saw a proportional increase due to our response to managing liquidity through the global pandemic environment which saw the drawdown of our revolving credit facilities at floating rates of interest. Whilst we have also raised index-linked debt (CPI) in the year, the maturity of other index-linked debt (RPI) in the year and the increased debt balance, as a consequence of growth in RCV, compared to prior year means this is not reflected in an increase in the proportionality.

33 The maturity profile of our debt remains consistent with the average life of our assets and is structured to ensure to avoid significant concentrations of refinancing. The weighted average years to maturity is 11.24 years, and the weighted exposure to tenor of issue is 22.44 years

34 The increase in proportion due in one year or less is due to the natural timing of debt maturities and amortisation schedules.

Table 4I - Financial Derivatives

	Line description	Nominal value by maturity (net)			Total value at 31 March 2020		Total accretion at 31 March 2020	Interest rate (weighted average for 12 months to 31 March 2020)	
		1 to 2 years	2 to 5 years	Over 5 years	Nominal value (net)	Mark to Market		Payable	Receivable
		£m	£m	£m	£m	£m	£m	%	%
	Derivative type								
A	**Interest rate swap (sterling)**								
1	Floating to fixed rate	255.451	200.500	299.013	754.964	(218.315)	-	4.38%	1.37%
2	Floating from fixed rate	50.000	275.500	729.532	1,055.032	75.521	-	0.86%	2.15%
3	Floating to index linked	25.000	150.000	490.931	665.931	(720.658)	**(86.053)**	2.63%	0.95%
4	Floating from index linked	-	-	-	-	-	-	0.00%	0.00%
5	Fixed to index-linked	-	-	665.857	665.857	(16.028)	**(17.611)**	0.84%	3.59%
6	Fixed from index-linked	-	-	-	-	-	-	0.00%	0.00%
7	**Total**	330.451	626.000	2,185.333	3,141.784	(879.480)	**(103.664)**		
B	**Foreign Exchange**								
8	Cross currency swap USD	-	-	-	-	-	-	0.00%	0.00%
9	Cross currency swap EUR	-	-	-	-	-	-	0.00%	0.00%
10	Cross currency swap YEN	-	-	-	-	-	-	0.00%	0.00%
11	Cross currency swap Other	-	-	-	-	-	-	0.00%	0.00%
12	**Total**	-	-	-	-	-	-		
C	**Currency interest rate**								
13	Currency interest rate swaps USD	359.850	240.743	144.319	744.912	233.169	-	3.18%	4.57%
14	Currency interest rate swaps EUR	-	-	-	-	-	-	0.00%	0.00%
15	Currency interest rate swaps YEN	-	-	50.857	50.857	(4.526)	-	2.68%	0.86%
16	Currency interest rate swaps Other	-	-	-	-	-	-	0.00%	0.00%
17	**Total**	359.850	240.743	195.176	795.769	228.643	-		
D	**Forward currency contracts**								
18	Forward currency contracts USD	-	-	-	-	-	-	0.00%	0.00%
19	Forward currency contracts EUR	-	-	-	-	-	-	0.00%	0.00%
20	Forward currency contracts YEN	-	-	-	-	-	-	0.00%	0.00%
21	Forward currency contracts CAD	-	-	-	-	-	-	0.00%	0.00%
22	Forward currency contracts AUD	-	-	-	-	-	-	0.00%	0.00%
23	Forward currency contracts HKD	-	-	-	-	-	-	0.00%	0.00%
24	Forward currency contracts Other	-	-	-	-	-	-	0.00%	0.00%
25	**Total**	-	-	-	-	-	-		
E	**Other financial derivatives**								
26	Other financial derivatives	38.212	122.727	581.300	742.239	(91.968)	-	3.72%	2.35%
F	**Total**								
27	Total financial derivatives	728.513	989.470	2,961.809	4,679.792	(742.805)	**(103.664)**		

Floating to fixed rate (4I.1)

1 The nominal value is the face value of the financial instruments; these instruments are marked to market at the end of each reporting period and reported in the balance sheet at their fair value. The total of financial instruments in Table 1C of £742.8 million agrees to the table due to the inclusion of energy hedges which relate to the risk management of the businesses operating costs. Whilst this does not strictly relate to financing obligations, the positions have been included based on the RAG guidance document which stipulates power as an example of other financial derivatives.

2 Anglian Water has a number of interest rate derivatives. During the year there has been little activity in the floating to fixed rate category. Changes in profiling relate to the natural passage of time and the £5.1 million reduction overall relates to the step down of an existing amortising swap in respect of an amortising leasing transaction.

3 Receivable weighted average interest rates have remained consistent year on year as a result of the offsetting impact of LIBOR rates falling year on year by circa 30 basis points and the impact of transactions in the prior year being present for the full period

4 Payable weighted average interest rates have fallen year on year due to the full year effect of transactions undertaken in the prior year.

Floating from fixed rate (4I.2)

There were no notable movements in this category as no activity in the year. Changes in profiling relate to the natural passage of time.

Floating to index linked (4I.3)

5 An additional £100 million pay CPI receive LIBOR transaction has driven the increased notional in this category. This was re-structured in the prior year but became effective in the current year and relates to a pay 4.75 per cent receive LIBOR swap (legacy transaction at the time of the 2008/09 financial crisis) which was effectively converted into CPI.

6 Weighted average interest rates payable for index linked debt remained broadly unchanged as the high pay CPI coupon on the restructured swaption noted above offsets the fall in underlying inflation year on year. Rates receivable have fallen marginally by 30bps to reflect the downward movement in 3 and 6 month LIBORS.

Fixed to index linked (4I.5)

7 A new £50.8 million CPI swap has been entered into in the year. This is an overlay of the 20 year 7 billion JPY issuance issued in June 2019 which is identified below, and which is swapped from JPY fixed to fixed sterling and then from fixed sterling to CPI using this overlay.

8 Weighted average pay interest rates payable for index linked debt have fallen reflecting lower year on year inflation with fixed rates remaining consistent.

Currency interest rate swaps USD / YEN (4I.13-4I.16)

9 The movement in the JPY cross currency swaps relates to the new issuance of a 20 year 7 billion JPY bond which has been swapped to a sterling notional of £50.8 million and the maturity of the existing 5 billion JPY bond which was swapped to a sterling notional of £25.1 million.

Other financial derivatives (4I.23)

10 Other financial derivatives include electricity hedges and fixed to fixed interest rate swaps. The rates quoted are the fixed rates on the swaps. There has been no change to this population in the year.

Assumptions:

11 For floating rate derivatives the LIBOR rate as at 31 March 2020 has been used for calculations.

12 All derivative transactions are undertaken by Anglian Water's financing subsidiary Anglian Water Services Financing plc. Some of the derivative financial instruments contain multiple pay and receive components but in legal terms these form a single contract. Where the interest flows can be consolidated this has been done to best reflect the net impact of the instruments.

13 The mark to market position is the full fair value of the positions with the total accretion column representing the accretion component of this full amount.

Table 4J - Atypical Expenditure - Wholesale Water

Line description	Water resources		Network+				Total
	Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution	
	£m	£m	£m	£m	£m	£m	£m
A Operating expenditure (excl. atypicals)							
1 Power	-	7.877	4.045	0.238	7.806	15.665	**35.631**
2 Income treated as negative expenditure	-	(0.068)	(0.036)	(0.008)	(0.124)	(0.272)	**(0.508)**
3 Abstraction charges/ discharge consents	10.042	-	-	-	0.535	-	**10.577**
4 Bulk supply	-	-	-	-	1.859	0.181	**2.040**
5 Other operating expenditure							
6 - Renewals expensed in year (Infrastructure)	-	-	-	-	-	36.628	**36.628**
7 - Renewals expensed in year (Non-Infrastructure)	-	-	-	-	-	-	**-**
8 - Other operating expenditure excluding renewals	-	14.121	3.224	0.027	30.414	75.375	**123.161**
9 Local authority and Cumulo rates	-	3.065	0.448	-	5.834	30.962	**40.309**
10 Total operating expenditure (excluding third party services)	10.042	24.995	7.681	0.257	46.324	158.539	**247.838**
10 Third party services	0.591	1.633	1.605	-	3.549	3.432	**10.810**
11 Total operating expenditure	10.633	26.628	9.286	0.257	49.873	161.971	**258.648**
B Capital expenditure (excl. atypicals)							
12 Maintaining the long term capability of the assets - infra	-	0.190	0.951	-	-	24.713	**25.854**
13 Maintaining the long term capability of the assets - non-infra	-	13.385	-	0.010	25.311	29.700	**68.406**
14 Other capital expenditure - infra	-	0.515	1.764	-	-	40.963	**43.242**
15 Other capital expenditure - non-infra	-	10.900	0.443	-	32.308	6.527	**50.178**
16 Infrastructure network reinforcement	-	-	-	-	-	26.907	**26.907**
17 Total gross capital expenditure excluding third party services	-	24.990	3.158	0.010	57.619	128.810	**214.587**
18 Third party services	-	-	-	-	1.507	6.462	**7.969**
19 Total gross capital expenditure	-	24.990	3.158	0.010	59.126	135.272	**222.556**
20 Grants and contributions	-	-	-	-	-	31.648	**31.648**
21 Totex	10.633	51.618	12.444	0.267	108.999	265.595	**449.556**
C Cash expenditure (excl. atypicals)							
22 Pension deficit recovery payments	-	0.575	0.143	-	1.724	2.871	**5.313**
23 Other cash items	-	-	-	-	-	-	**-**
24 Totex including cash items	10.633	52.193	12.587	0.267	110.723	268.466	**454.869**

Line description	Water resources		Network+				Total
	Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution	
	£m	£m	£m	£m	£m	£m	£m
D Atypical expenditure							
25 Re-structuring provision	-	0.070	-	0.050	0.382	0.848	**1.350**
35 Total atypical expenditure	-	0.070	-	0.050	0.382	0.848	**1.350**
E Total expenditure							
36 Total expenditure	10.633	52.263	12.587	0.317	111.105	269.314	**456.219**

1 Lines 26 to 34 were additional lines available for companies to use if required. As we have not used these lines they have not been included in the above table.

Operating expenditure (4J.1-4J.11)

2 Please refer to our commentary covering table 4D for an explanation of operating expenditure.

Capital expenditure (4J.12-4J.21)

3 Anglian Water has no atypical capital expenditure in 2019/20.

Cash expenditure (4J.22-4J.24)

4 Please refer to our commentary covering table 4D for an explanation of cash expenditure.

Atypical expenditure (4J.25-4J.35)

5 We interpret atypical expenditure items (defined in RAG4.08 as unusual items outside ordinary activities) such as major one-off business reorganisations.

6 Atypical costs incurred during the year were in relation to business re-structuring and whilst a relatively small cost, due to the infrequent and non-recurring nature of the activity and associated costs, they have been treated as atypical.

Table 4K - Atypical Expenditure - Wholesale Wastewater

	Line description	Network+ Sewage Collection			Network+ Sewage Treatment		Sludge			Total
		Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal	
		£m	£m	£m	£m	£m	£m	£m	£m	£m
A	**Operating expenditure (excl. atypicals)**									
1	Power	7.558	3.357	1.260	26.907	1.707	0.022	(0.530)	-	40.281
2	Income treated as negative expenditure	(0.079)	(0.035)	(0.013)	(0.522)	-	-	(7.916)	(2.321)	(10.886)
3	Discharge Consents	1.492	0.663	0.249	5.951	0.147	-	(0.011)	-	8.491
4	Bulk discharge	-	-	-	-	-	-	-	-	-
	Other operating expenditure									
5	- Renewals expensed in year (Infrastructure)	13.515	6.002	2.252	-	-	-	-	-	21.769
6	- Renewals expensed in year (Non-Infrastructure)	-	-	-	-	-	-	-	-	-
7	- Other operating expenditure excluding renewals	37.680	15.462	6.514	75.912	4.792	22.635	33.454	10.257	206.706
8	Local authority and Cumulo rates	0.102	0.031	0.015	20.176	1.144	0.061	3.214	0.026	24.769
9	Total operating expenditure (excluding third party services)	60.268	25.480	10.277	128.424	7.790	22.718	28.211	7.962	291.130
10	Third party services	-	-	-	0.929	-	0.011	0.363	0.026	1.329
11	Total operating expenditure	60.268	25.480	10.277	129.353	7.790	22.729	28.574	7.988	292.459
B	**Capital expenditure (excl. atypicals)**									
12	Maintaining the long term capability of the assets - infra	12.337	3.949	1.830	-	-	-	-	-	18.116
13	Maintaining the long term capability of the assets - non-infra	9.192	2.943	1.363	86.707	4.570	2.069	11.573	1.929	120.346
14	Other capital expenditure - infra	13.105	4.195	1.944	-	-	-	-	-	19.244
15	Other capital expenditure - non-infra	13.333	4.268	1.977	35.767	2.045	-	5.959	-	63.349
16	Infrastructure network reinforcement	10.410	3.332	1.544	-	-	-	-	-	15.286
17	Total gross capital expenditure excluding third party services	58.377	18.687	8.658	122.474	6.615	2.069	17.532	1.929	236.341
18	Third party services	2.586	0.828	0.384	3.214	-	-	-	-	7.012
19	Total gross capital expenditure	60.963	19.515	9.042	125.688	6.615	2.069	17.532	1.929	243.353
20	Grants and contributions	14.003	4.483	2.076	-	-	-	-	-	20.562
21	Totex	107.228	40.512	17.243	255.041	14.405	24.798	46.106	9.917	515.250
C	**Cash expenditure (excl. atypicals)**									
22	Pension deficit recovery payments	1.713	0.467	0.155	3.425	0.155	1.090	0.779	0.467	8.251
23	Other cash items	-	-	-	-	-	-	-	-	-
24	Totex including cash items	108.941	40.979	17.398	258.466	14.560	25.888	46.885	10.384	523.501

Line description	Network+ Sewage Collection			Network+ Sewage Treatment		Sludge			Total
	Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal	
	£m	£m	£m	£m	£m	£m	£m	£m	£m
D Atypical expenditure									
25 Re-structuring provision	0.598	0.184	0.085	1.272	0.073	0.299	0.314	0.104	2.929
35 Total atypical expenditure	0.598	0.184	0.085	1.272	0.073	0.299	0.314	0.104	2.929
E Total expenditure									
36 Total expenditure	109.539	41.163	17.483	259.738	14.633	26.187	47.199	10.488	526.430

1 Lines 26 to 34 were additional lines available for companies to use if required. As we have not used these lines they have not been included in the above table.

Operating expenditure (4K.1-4K.11)

2 Please refer to our commentary covering table 4E for an explanation of operating expenditure.

Capital expenditure (4K.12-4K.21)

3 Anglian Water has no atypical capital expenditure in 2019/20.

Cash expenditure (4K.22-4K.24)

4 Please refer to our commentary covering table 4E for an explanation of cash expenditure.

Atypical expenditure (4K.25-4K.35)

5 We interpret atypical expenditure items (defined in RAG4.08 as unusual items outside ordinary activities) such as major one-off business reorganisations.

6 Atypical costs incurred during the year were in relation to business re-structuring and whilst a relatively small cost, due to the infrequent and non-recurring nature of the activity and associated costs, they have been treated as atypical.

Table 4L - Enhancement Capital Expenditure - Wholesale Water

Line description	Expenditure in report year							Cumulative expenditure on schemes completed in the report year						
	Water resources		Network+				Total	Water resources		Network+				Total
	Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution		Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution	
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
A	**Enhancement expenditure by purpose**													
1	NEP - Making ecological improvements at abstractions (Habitats Directive, SSSI, NERC, BAPs)	-	0.490	-	-	-	-	**0.490**	-	-	-	-	-	-	**-**
2	NEP - Eels Regulations (measures at intakes)	-	9.343	-	-	-	-	**9.343**	-	12.794	-	-	-	-	**12.794**
3	NEP - Invasive Non Native Species	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**-**
4	Addressing low pressure	-	-	-	-	-	2.558	**2.558**	-	-	-	-	-	0.876	**0.876**
5	Improving taste / odour / colour	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**-**
6	Meeting lead standards	-	-	-	-	(0.029)	0.580	**0.551**	-	-	-	-	-	-	**-**
7	Supply side enhancements to the supply/demand balance (dry year critical / peak conditions)	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**-**
8	Supply side enhancements to the supply/demand balance (dry year annual average conditions)	-	0.332	(0.003)	-	2.894	11.410	**14.633**	-	0.570	-	-	30.208	9.744	**40.522**
9	Demand side enhancements to the supply/demand balance (dry year critical / peak conditions)	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**-**
10	Demand side enhancements to the supply/demand balance (dry year annual average conditions)	-	-	-	-	-	3.035	**3.035**	-	-	-	-	-	-	**-**
11	New developments	-	-	-	-	-	35.303	**35.303**	-	-	-	-	-	8.628	**8.628**
12	New connections element of new development (CPs, meters)	-	-	-	-	-	14.197	**14.197**	-	-	-	-	-	-	**-**
13	Investment to address raw water deterioration (THM, nitrates, Crypto, pesticides, others)	-	(0.026)	-	-	8.673	-	**8.647**	-	-	-	-	10.164	-	**10.164**
14	Resilience	-	0.080	2.210	-	19.101	4.102	**25.493**	-	-	-	-	4.834	3.190	**8.024**
15	SEMD	-	0.005	-	-	0.672	0.162	**0.839**	-	-	-	-	-	-	**-**
16	NEP - Drinking Water Protected Areas (schemes)	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**-**
17	NEP - Water Framework Directive measure	-	-	-	-	-	-	**-**	-	-	-	-	-	-	**-**
18	NEP - Investigations	-	0.184	-	-	1.534	-	**1.718**	-	-	-	-	0.228	-	**0.228**

	Line description	Expenditure in report year							Cumulative expenditure on schemes completed in the report year						
		Water resources		Network+				Total	Water resources		Network+				Total
		Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution		Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution	
		£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
A	**Enhancement expenditure by purpose**														
19	Improvements to river flows	-	1.197	-	-	-	-	**1.197**	-	-	-	-	-	-	**-**
20	Metering (excluding cost of providing metering to new service connections) - meters requested by optants	-	-	-	-	-	1.962	**1.962**	-	-	-	-	-	-	**-**
21	Metering (excluding cost of providing metering to new service connections)- meters introduced by companies	-	-	-	-	-	0.799	**0.799**	-	-	-	-	-	-	**-**
22	Metering (excluding cost of providing metering to new service connections) - other	-	-	-	-	-	0.097	**0.097**	-	-	-	-	-	-	**-**
38	**Total enhancement capital expenditure**	-	11.605	2.207	-	32.845	74.205	**120.862**	-	13.364	-	-	45.434	22.438	**81.236**

1 Lines 23 to 37 were additional lines available for companies to use if required. As we have not used these lines they have not been included in the above table.

Enhancement expenditure by purpose (4L.1-4L.38)

2 Figures in this table are at price of the day.

3 The above table includes £0.5 million of enhancement capital expenditure in relation to third-party agreements at the Wing and Grafham water treatment works. This spend is included within the third party services capex of £7.9 million in table 4D and 4J.

4 The source of the data is the project systems module of our SAP business management system. Each project holds as part of its master data Business Investment Category (BIC) codes which indicate the Ofwat categories of enhancement and maintenance, infrastructure and non infrastructure, and also align with accounting separation categories. The codes are mapped to their relevant lines in the table.

5 It is expected that capital expenditure profiles vary year on year significantly due to the strategic priortisation of the investment programme. Large projects and stakeholder required investments can lead to variances in year on year comparisons of the same data point.

6 Some credits have occurred due to movements and payments to contractors for pain and gain share which are only confirmed when a project is final accounted.

7 Supply- and demand-side schemes that deliver enhancements to the supply/demand balance dry year average conditions may also contribute to critical/peak conditions enhancements. As the primary driver of the spend, we have allocated all expenditure to the dry year average lines (lines 7 and 9).

8 We record expenditure in the year in which it is incurred, which means that for many schemes expenditure is spread over a number of years. In contrast, we record outputs in the year that schemes are commissioned. This means that in some years we may show expenditure without any apparent output.

9 On certain schemes we will incur additional expenditure on schemes where the output has been claimed in a prior year. Such spend includes additional landscaping, ancillary asset, telemetry and compensation costs and has been excluded from table 4L. The below table outlines the expenditure incurred in 2019/20 on schemes for which outputs have previously been claimed.

Table 4L Row	BON Code	Total
Investment to address raw water deterioration (THM nitrates Crypto pesticides others)	W3010RWA	-0.014
Investment to address raw water deterioration (THM nitrates Crypto pesticides others)	W3010WT	-0.393
Meeting lead standards	W3006WT	-0.028
NEP - Eels Regulations (measures at intakes)	WS2002RWA	-0.092
Resilience	W3011RWA	0.016
Resilience	W3011TWD	0.359
Resilience	W3011WT	0.518
SEMD	W3012TWD	0.967
Supply side enhancements to the supply/demand balance (dry year annual average conditions)	W3008STWD	1.831
NEP - Investigations	WS2008WT	1.351

Table 4M - Enhancement Capital Expenditure - Wholesale Wastewater

Line description	Expenditure in report year									Cumulative expenditure on schemes completed in the report year								
	Network+Sewage Collection			Network+Sewage Treatment		Sludge			Total	Network+Sewage Collection			Network+Sewage Treatment		Sludge			Total
	Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal		Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal	
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
A	**Enhancement capital expenditure by purpose**																	
1	First time sewerage (s101A)	9.476	3.034	1.405	0.409	0.022	-	-	-	**14.346**	13.188	4.222	1.956	-	-	-	-	-	**19.366**
2	Sludge enhancement (quality)	-	-	-	-	-	-	4.822	-	**4.822**	-	-	-	-	-	-	-	-	**-**
3	Sludge enhancement (growth)	-	-	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-	-	**-**
4	NEP - Conservation drivers	-	-	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-	-	**-**
5	NEP - Eels Regulations (measures at outfalls)	-	-	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-	-	**-**
6	NEP - Event Duration Monitoring at intermittent discharges	1.995	0.639	0.296	-	-	-	-	-	**2.930**	-	-	-	-	-	-	-	-	**-**
7	NEP - Flow monitoring at sewage treatment works	-	-	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-	-	**-**
8	NEP - Monitoring of pass forward flows at CSOs	-	-	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-	-	**-**
9	NEP - Schemes to increase flow to full treatment	-	-	-	0.114	0.006	-	-	-	**0.120**	-	-	-	-	-	-	-	-	**-**
10	NEP - Schemes to increase storm tank capacity	-	-	-	0.451	0.024	-	-	-	**0.475**	-	-	-	0.278	0.015	-	-	-	**0.293**
11	NEP - Storage schemes to reduce spill frequency at CSOs, storm tanks, etc	-	-	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-	-	**-**
12	NEP - Chemicals monitoring/ investigations/ options appraisals	-	-	-	1.417	0.075	-	-	-	**1.492**	-	-	-	-	-	-	-	-	**-**
13	NEP - National phosphorus removal technology investigations	-	-	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-	-	**-**
14	NEP - Groundwater schemes	-	-	-	(0.117)	(0.006)	-	-	-	**(0.123)**	-	-	-	-	-	-	-	-	**-**
15	NEP - Investigations	0.229	0.073	0.034	0.230	0.012	-	-	-	**0.578**	-	-	-	-	-	-	-	-	**-**

	Line description	Expenditure in report year									Cumulative expenditure on schemes completed in the report year								
		Network+Sewage Collection			Network+Sewage Treatment		Sludge			Total	Network+Sewage Collection			Network+Sewage Treatment		Sludge			Total
		Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal		Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal	
		£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
A	**Enhancement capital expenditure by purpose**																		
16	NEP - Nutrients (N removal)	-	-	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-	-	**-**
17	NEP - Nutrients (P removal at activated sludge STWs)	-	-	-	1.829	0.096	-	-	-	**1.925**	-	-	-	4.474	0.235	-	-	-	**4.709**
18	NEP - Nutrients (P removal at filter bed STWs)	-	-	-	6.093	0.321	-	-	-	**6.414**	-	-	-	20.644	1.087	-	-	-	**21.731**
19	NEP - Reduction of sanitary parameters	-	-	-	6.590	0.347	-	-	-	**6.937**	-	-	-	10.170	0.535	-	-	-	**10.705**
20	NEP - UV disinfection (or similar)	0.118	0.038	0.018	0.516	0.027	-	-	-	**0.717**	-	-	-	-	-	-	-	-	**-**
21	NEP - Discharge relocation	-	-	-	3.153	0.166	-	-	-	**3.319**	-	-	-	3.832	0.202	-	-	-	**4.034**
22	NEP - Flow 1 schemes	-	-	-	-	-	-	-	-	**-**	-	-	-	-	-	-	-	-	**-**
23	Odour	0.077	0.025	0.011	0.085	0.004	-	1.137	-	**1.339**	0.020	0.006	0.003	1.201	0.063	-	-	-	**1.293**
24	New development and growth	11.542	3.695	1.712	-	-	-	-	-	**16.949**	9.553	3.058	1.417	-	-	-	-	-	**14.028**
25	Growth at sewage treatment works (excluding sludge treatment)	-	-	-	18.108	0.953	-	-	-	**19.061**	-	-	-	27.462	1.445	-	-	-	**28.907**
26	Resilience	-	-	-	(0.001)	-	-	-	-	**(0.001)**	-	-	-	-	-	-	-	-	**-**
27	SEMD	-	-	-	(0.016)	(0.001)	-	-	-	**(0.017)**	-	-	-	-	-	-	-	-	**-**
28	Reduce flooding risk for properties	1.839	0.589	0.273	-	-	-	-	-	**2.701**	0.794	0.254	0.118	-	-	-	-	-	**1.166**
29	Transferred private sewers and pumping stations	11.570	3.704	1.716	-	-	-	-	-	**16.990**	-	-	-	-	-	-	-	-	**-**
45	**Total enhancement capital expenditure**	36.846	11.797	5.465	38.861	2.046	-	5.959	-	**100.974**	23.555	7.540	3.494	68.061	3.582	-	-	-	**106.232**

1 Lines 30 to 44 were additional lines available for companies to use if required. As we have not used these lines they have not been included in the above table.

Enhancement capital expenditure by purpose (4M.1-4M.45)

2 This is Enhancement expenditure for wholesale Wastewater services, and is stated at price of the day.

3 The above table includes £3.1 million of enhancement capital expenditure in relation to third-party agreements at Chalton and Doddinghurst water recycling centres. This spend is included within the third party services capex of £7.0 million in table 4E and 4K.

4 The source of the data is the project systems module of our SAP business management system. Each project holds as part of its master data Business Investment Category (BIC) codes which indicate the Ofwat categories of enhancement and maintenance, infrastructure and non infrastructure, and also align with accounting separation categories. The codes are mapped to their relevant lines in the table.

5 It is expected that capital expenditure profiles vary year on year significantly due to the strategic priortisation of the investment programme. Large projects and stakeholder required investments can lead to variances in year on year comparisons of the same data point.

6 We record expenditure in the year in which it is incurred, which means that for many schemes expenditure is spread over a number of years. In contrast, we record outputs in the year that schemes are commissioned. This means that in some years we may show expenditure without any apparent output.

7 Some credits have occurred due to movements and payments to contractors for pain and gain share which are only confirmed when a project is final accounted.

8 An allocation was required for the foul, surface water drainage and highway drainage split. The allocation was based on flow estimate models provided by Anglian Water's modelling team.

9 An allocation was also required for the sewage treatment and disposal and the imported sludge liquor treatment. This allocation is based on a population equivalent calculation.

10 On certain schemes we will incur additional expenditure on schemes where the output has been claimed in a prior year. Such spend includes additional landscaping, ancillary asset, telemetry and compensation costs and has been excluded from table 4M. The table below outlines the expenditure incurred in 2019/20 on schemes for which outputs have previously been claimed.

Table 4M Row	BON Code	Total
First time sewerage (s101A)	BC31379FL	1.240
Growth at sewage treatment works (excluding sludge treatment)	S3021STD	-1.241
NEP - Chemicals monitoring/ investigations/ options appraisals	S3009STD	0.013
NEP - Discharge relocation	S3017STD	0.026
NEP - Event Duration Monitoring at intermittent discharges	S3005FL	0.937
NEP - Groundwater schemes	S3010STD	0.080
NEP - Nutrients (P removal at activated sludge STWs)	S3013STD	0.018
NEP - Nutrients (P removal at filter bed STWs)	S3014STD	0.052
NEP - Reduction of sanitary parameters	S3015STD	5.756

Table 4M Row	BON Code	Total
NEP - UV disinfection (or similar)	S3016FL	0.589
NEP - UV disinfection (or similar)	S3016STD	0.012
New development and growth	S3020FL	1.409
New developments	W3009TWD	0.515
Reduce flooding risk for properties	S3023FL	-0.357
Resilience	S3022STD	0.330
Sludge enhancement (quality)	S3035QSDT	-0.006

Table 4N - Operating Expenditure - Sewage Treatment

	Line description	Network+ £000
A	**Costs of STWs in size bands 1 to 5**	
1	Direct costs of STWs in size band 1	3,936
2	Direct costs of STWs in size band 2	3,118
3	Direct costs of STWs in size band 3	9,581
4	Direct costs of STWs in size band 4	19,233
5	Direct costs of STWs in size band 5	13,144
6	General & support costs of STWs in size bands 1 to 5	12,765
7	Functional expenditure of STWs in size bands 1 to 5	61,777
B	**Costs of STWs in size band 6**	
8	Service charges for STWs in size band 6	1,250
9	Estimated terminal pumping costs size band 6 works	3,435
10	Other direct costs of STWs in size band 6	38,054
11	Direct costs of STWs in size band 6	42,739
12	General & support costs of STWs in size band 6	11,723
13	Functional expenditure of STWs in size band 6	54,462
14	**Total Functional expenditure for Sewage treatment**	116,239

Network +

1 This column includes total sewage treatment operating expenditure excluding 3rd Party costs and business rates. Total sewage treatment operating expenditure includes both Sewage treatment and Sludge liquor treatment (Table 4E Network + sewage treatment).

Direct costs of STWs in size bands 1 to 5 (4N.1- 4N.5)

2 Direct sewage treatment costs are captured by individual cost centres for Water Recycling Centres where possible using our general ledger costing system (SAP). Allocations are used to split power costs between sludge and sewage treatment activities with further allocations employed for service charges, shared costs and non specific site costs including direct management. Water Recycling Centres are grouped into their respective site bands (1 to 6) and the direct operating costs summed by band sizes.

3 The direct costs exclude all off-site terminal pumping costs and business rates but for size bands 1 to 5 include Service charges within the direct cost lines.

General & support costs of STW's in bands size 1 to 5 & 6 (4N.6)

4 General & support costs are allocated to Water Recycling Centres based on the direct costs. General & support costs include all support function costs (Finance, Human Resources, Regulation, Legal and IT) as well as the Director and senior management team costs. Water Recycling Centres are grouped into their respective site bands (1 to 5) with the general & support costs summed by band sizes 1 to 5 and recorded under line 4N.6.

Service charges for STWs in size band 6 (4N.8)

5 Service charges all relate to payments to the Environment Agency for discharge consents relating to Water Recycling Centres. Service charges are allocated back to Water Recycling Centres and summed for all band 6 sites.

6 Line 4N.8 agrees to table 4O (large sewage treatment works) line 4O.11 total band 6 service charges.

Estimated terminal pumping costs size band 6 works (4N.9)

7 Estimated direct (onsite) terminal pumping costs are recorded on line 4N.9. These are captured at site level using our general ledger system with allocations employed for power costs and non specific site costs.

8 Line 4N.9 agrees to table 4O (large sewage treatment works) line 4O.12 estimated terminal pumping expenditure.

Other direct costs of STWs in bands 6 (4N.10)

9 Other direct sewage treatment costs are captured by individual cost centres for Water Recycling Centres where possible using our general ledger costing system (SAP). Allocations are used to split power costs between sludge and sewage treatment activities with further allocations employed for shared costs and non specific site costs including direct management. Water Recycling Centres are grouped into their respective site bands and the direct costs for site bands 6 are shown under line 4N.10.

10 The costs for size band 6 other direct sites (4N.10) agrees to the corresponding line on table 4O (lines 4O.13) for large sewage treatment works.

General & support costs of STWs in band size 6 (4N.12)

11 General & support costs are allocated to Water Recycling Centres based on the direct costs. General & support costs include all support function costs (Finance, Human Resources, Regulation, Legal and IT) as well as the Director and senior management team costs. Water Recycling Centres are grouped into their respective site bands with the costs associated to size band 6 sites shown under line 4N.12.

12 Line 4N.12 agrees to table 4O (large sewage treatment works) line 4O.15 for the size band 6 general and support expenditure.

Total Functional expenditure for sewage treatment (4N.15)

13 Numbers in this line reconcile to Table 4E line 4E.9 (total operating expenditure excluding 3rd party costs) excluding business rates shown in Table 4E ilne 4E.8 for columns Network + sewage treatment.

Table 4O - Large Sewage Treatment Works

	Line description	Units	STWNAMED01	STWNAMED02	STWNAMED03	STWNAMED04	STWNAMED05	STWNAMED06	STWNAMED07	STWNAMED08	STWNAMED09	STWNAMED10
A	**Sewage treatment works - Explanatory variables**											
1	Works name	text	ANWICK STW	BASILDON STW	BEDFORD STW	BENFLEET STW	BOSTON STW	BOURNE STW	BRACKLEY STW (NEW)	BRAINTREE STW	BROADHOLME STW	CAISTER - PUMP LANE STW
2	Classification of treatment works	text	TA2	SAS	TA2	SB	SB	TA2	TA2	TA2	TA2	SAS
3	Population equivalent of total load received	000	32.54	126.36	189.47	27.97	49.28	29.75	41.05	29.74	232.79	113.50
4	Suspended solids consent	mg/l	26	45	30	80	70	22	25	16	30	0
5	BOD5 consent	mg/l	13	25	20	25	25	11	11	8	17	25
6	Ammonia consent	mg/l	6	10	7	20	0	3	3	3	3	0
7	Phosphorus consent	mg/l	2	0	1	0	0	2	2	2	1	0
8	UV consent	mW/s/cm2	0	0	0	0	0	0	0	0	0	0
9	Load received by STW	kgBOD5/d	1952	7582	11368	1678	2957	1785	2463	1784	13967	6810
10	Flow passed to full treatment	m3/d	5,493	29,022	47,932	6,074	13,047	8,858	8,197	6,769	66,424	28,871
B	**Sewage treatment works - Operating expenditure**											
11	Service charges	£000	17	32	32	19	17	19	19	19	32	32
12	Estimated terminal pumping expenditure	£000	2	118	187	0	0	0	0	0	29	0
13	Other direct expenditure	£000	397	568	1081	181	156	394	409	534	1315	708
14	Total direct expenditure	£000	416	718	1300	200	173	413	428	553	1376	740
15	General and support expenditure	£000	112	199	352	54	48	111	116	149	374	202
16	Functional expenditure	£000	528	917	1652	254	221	524	544	702	1750	942

	Line description	Units	STWNAMED11	STWNAMED12	STWNAMED13	STWNAMED14	STWNAMED15	STWNAMED16	STWNAMED17	STWNAMED18	STWNAMED19	STWNAMED20
A	**Sewage treatment works - Explanatory variables**											
1	Works name	text	CAMBRIDGE STW	CANVEY ISLAND STW	CANWICK STW	CHELMSFORD STW	CLACTON-ON-SEA HAVEN STW	COLCHESTER STW	CORBY STW	COTTON VALLEY STW	DUNSTABLE STW	FELIXSTOWE STW
2	Classification of treatment works	text	SAS	SAS	TB2	SAS	SAS	SAS	TA2	TA2	TA2	SAS
3	Population equivalent of total load received	000	205.65	38.86	123.80	149.33	49.54	138.78	118.84	305.48	55.96	34.37
4	Suspended solids consent	mg/l	20	0	30	40	0	60	20	25	20	120
5	BOD5 consent	mg/l	15	25	10	20	25	25	10	12	12	25
6	Ammonia consent	mg/l	5	0	3	10	0	15	1	5	3	50
7	Phosphorus consent	mg/l	1	0	1	0	0	0	1	1	2	0
8	UV consent	mW/s/cm2	0	0	0	0	0	30	0	0	0	0
9	Load received by STW	kgBOD5/d	12339	2332	7428	8960	2972	8327	7130	18329	3358	2062
10	Flow passed to full treatment	m3/d	51,066	8,098	39,057	37,340	14,491	29,840	21,171	78,746	11,176	7,574
B	**Sewage treatment works - Operating expenditure**											
11	Service charges	£000	35	17	32	33	17	32	19	57	19	17
12	Estimated terminal pumping expenditure	£000	261	0	252	54	13	384	4	226	0	0
13	Other direct expenditure	£000	721	348	542	1205	506	1224	1471	2096	420	456
14	Total direct expenditure	£000	1017	365	826	1292	536	1640	1494	2379	439	473
15	General and support expenditure	£000	283	98	224	350	145	453	403	652	119	127
16	Functional expenditure	£000	1300	463	1050	1642	681	2093	1897	3031	558	600

	Line description	Units	STWNAMED21	STWNAMED22	STWNAMED23	STWNAMED24	STWNAMED25	STWNAMED26	STWNAMED27	STWNAMED28	STWNAMED29	STWNAMED30
A	**Sewage treatment works - Explanatory variables**											
1	Works name	text	FLITWICK STW	FORNHAM ALL SAINTS STW	GREAT BILLING STW	GRIMSBY-PYEWIPE STW	HAVERHILL STW	HITCHIN STW	HUNTINGDON (GODMANCHESTER) STW	INGOLDMELLS STW	IPSWICH-CLIFF QUAY RAEBURN ST	KINGS LYNN STW
2	Classification of treatment works	text	TA2	TB2	TA2	SAS	TB2	TA2	TA2	SAS	SAS	TA2
3	Population equivalent of total load received	000	30.53	93.10	332.69	141.81	28.82	36.32	43.87	57.29	144.66	67.34
4	Suspended solids consent	mg/l	25	16	25	0	20	30	30	0	200	100
5	BOD5 consent	mg/l	15	8	13	25	10	15	20	25	25	25
6	Ammonia consent	mg/l	5	2	5	0	4	4	7	0	50	0
7	Phosphorus consent	mg/l	2	2	1	0	2	1	1	0	0	0
8	UV consent	mW/s/cm2	0	0	0	0	0	0	0	0	0	0
9	Load received by STW	kgBOD5/d	1832	5586	19961	8509	1729	2179	2632	3437	8680	4040
10	Flow passed to full treatment	m3/d	6,625	10,527	84,780	48,462	5,937	8,219	12,711	16,734	34,584	23,119
B	**Sewage treatment works - Operating expenditure**											
11	Service charges	£000	19	19	56	32	19	19	19	17	33	32
12	Estimated terminal pumping expenditure	£000	0	12	412	223	65	49	2	57	201	2
13	Other direct expenditure	£000	301	710	2216	1056	187	361	428	320	1935	1179
14	Total direct expenditure	£000	320	741	2684	1311	271	429	449	394	2169	1213
15	General and support expenditure	£000	86	200	727	366	73	117	121	107	608	337
16	Functional expenditure	£000	406	941	3411	1677	344	546	570	501	2777	1550

	Line description	Units	STWNAMED31	STWNAMED32	STWNAMED33	STWNAMED34	STWNAMED35	STWNAMED36	STWNAMED37	STWNAMED38	STWNAMED39	STWNAMED40
A	**Sewage treatment works - Explanatory variables**											
1	Works name	text	LEIGHTON LINSLADE STW	LETCHWORTH STW	LOWESTOFT STW	MARSTON STW (LINCS)	NEWMARKET STW	PETERBOROUGH (FLAG FEN) STW	ROCHFORD STW	SHENFIELD AND HUTTON STW	SOUTHEND STW	SPALDING STW
2	Classification of treatment works	text	TB2	TA2	SAS	TB2	TA2	TA1	TA1	TA2	SAS	SB
3	Population equivalent of total load received	000	43.26	47.09	83.52	68.57	27.41	230.17	34.03	42.91	197.11	79.01
4	Suspended solids consent	mg/l	35	25	0	15	20	24	60	20	150	120
5	BOD5 consent	mg/l	25	13	25	10	12	9	25	10	25	25
6	Ammonia consent	mg/l	8	3	0	3	4	3	0	3	0	0
7	Phosphorus consent	mg/l	2	1	0	2	2	0	0	2	0	0
8	UV consent	mW/s/cm2	0	0	0	0	0	0	0	0	0	0
9	Load received by STW	kgBOD5/d	2596	2825	5011	4114	1645	13810	2042	2575	11827	4741
10	Flow passed to full treatment	m3/d	6,985	7,691	17,955	19,546	4,632	70,494	9,772	12,851	59,595	11,205
B	**Sewage treatment works - Operating expenditure**											
11	Service charges	£000	19	19	32	19	19	32	17	19	32	19
12	Estimated terminal pumping expenditure	£000	15	25	15	5	0	162	0	0	425	23
13	Other direct expenditure	£000	566	470	1121	292	246	1955	347	521	1543	320
14	Total direct expenditure	£000	600	514	1168	316	265	2149	364	540	2000	362
15	General and support expenditure	£000	162	140	317	85	72	584	99	202	553	98
16	Functional expenditure	£000	762	654	1485	401	337	2733	463	742	2553	460

	Line description	Units	STWNAMED41	STWNAMED42	STWNAMED43	STWNAMED44	STWNAMED45	STWNAMED46	STWNAMED47	STWNAMED48	STWNAMED49
A	**Sewage treatment works - Explanatory variables**										
1	Works name	text	ST NEOTS STW	TETNEY-NEWTON MARSH STW	THETFORD STW	TILBURY STW	WEST WALTON STW	WHILTON STW	WHITLINGHAM TROWSE STW	WICKFORD STW	WITHAM STW
2	Classification of treatment works	text	TB2	TA2	TA2	SAS	SAS	TB2	TA2	TA1	SAS
3	Population equivalent of total load received	000	37.66	57.29	33.05	154.10	124.04	32.95	300.79	41.90	34.85
4	Suspended solids consent	mg/l	90	45	50	0	80	24	40	45	40
5	BOD5 consent	mg/l	25	25	25	25	25	12	20	22	20
6	Ammonia consent	mg/l	0	0	16	65	20	3	7	10	10
7	Phosphorus consent	mg/l	1	0	2	0	0	2	1	0	0
8	UV consent	mW/s/cm2	0	30	0	0	0	0	0	30	0
9	Load received by STW	kgBOD5/d	2260	3437	1983	9246	7442	1977	18047	2514	2091
10	Flow passed to full treatment	m3/d	12,696	20,123	6,927	36,073	15,474	6,642	74,401	11,062	10,514
B	**Sewage treatment works - Operating expenditure**										
11	Service charges	£000	19	32	19	32	19	27	56	19	19
12	Estimated terminal pumping expenditure	£000	0	3	13	145	0	0	19	0	32
13	Other direct expenditure	£000	223	479	494	1577	1242	229	2017	583	404
14	Total direct expenditure	£000	242	514	526	1754	1261	256	2092	602	455
15	General and support expenditure	£000	65	138	143	481	341	69	575	163	123
16	Functional expenditure	£000	307	652	669	2235	1602	325	2667	765	578

Works name, classification of treatment works and population equivalent of total load received (4O.1- 4O.3)

1 We have calculated the population equivalent and the loads on a basis consistent with how we used to report table 17b in the June Return. The numbers exclude imported effluents (tankering) and include non-resident population. The number of works has remained the same as 2018/19, but there are two works, Harwich and Dovercourt Water Recycling Centre (WRC) and Market Harborough WRC, which are only marginally under this threshold.

BOD5 Consent (4O.5)

2 For a number of water recycling centres the UWWTD BOD limit of 25mg/l is tighter than the normal BOD limit specified in the Environmental Permit. In these situations we have therefore reported the UWWTD BOD limit as we believe this is more appropriate to use for comparative efficiency purposes. This approach is consistent with that taken when the data used to be provided as part of the June Return.

Flow passed to full treatment (4O.10)

3 The flow meter at Canvey Island WRC was found to be under-reading and was therefore replaced during the reporting period. The number reported for line 4O.10 is therefore significantly higher than in 2018/19. The number reported for Witham WRC is also significantly higher than in 2018/19. There was period during the winter of 2019 when the flow meter appeared to be over-reading. This was investigated but no faults were found. The flow meter readings for the WRC have now returned to normal.

4 The numbers reported for other WRCs are typically higher than in 2018/19. This is due to a combination of a particularly dry summer in 2018, which resulted in lower flows being received at our WRCs, and a particularly wet winter in 2019.

Service charges (4O.11)

5 Service charges in total for large works agrees to table 4N sewage treatment (line 4N.8).

Estimated terminal pumping expenditure (4O.12)

6 This line records the estimated onsite direct terminal pumping costs by WRC. These are captured at site level for our band 6 WRCs, with allocations employed for power costs and non site-specific direct costs.

7 Total estimated terminal pumping costs line 4O.12 agree to table 4N sewage treatment (line 4N.9).

Other direct expenditure (4O.13)

8 Other direct expenditure cost lines are captured by individual cost centres for WRCs where possible using our general ledger costing system (SAP) for the band 6 treatment sites. Allocations are employed to split power costs between sludge and sewage treatment activities and to allocate service charges and direct non site-specific costs to water recycling centres. The direct costs exclude business rates in accordance with the reporting requirements for functional expenditure in table 4N, with which this line aligns. It also excludes service charges and onsite terminal pumping expenditure which are shown separately.

9 The total other direct costs agrees to table 4N (line 4N.10).

General and support expenditure (4O.15)

10 General and support expenditure is allocated to individual WRCs based on the direct expenditure. General and support expenditure includes all support function costs (Finance, Human Resources, Regulation, Legal and IT etc.) as well as the Director and senior management team costs.

11 The total general and support costs agrees to table 4N (line 4N.12).

Table 4P - Non-Financial Data for Water Resources, Water Treatment and Water Distribution

	Line description	Units	Current year
A	**Water resources**		
1	Proportion of distribution input derived from impounding reservoirs	Propn 0 to 1	0.020
2	Proportion of distribution input derived from pumped storage reservoirs	Propn 0 to 1	0.423
3	Proportion of distribution input derived from river abstractions	Propn 0 to 1	0.071
4	Proportion of distribution input derived from groundwater works,excluding managed aquifer recharge (MAR) water supply schemes	Propn 0 to 1	0.486
5	Proportion of distribution input derived from artificial recharge (AR) water supply schemes	Propn 0 to 1	0.000
6	Proportion of distribution input derived from aquifer storage and recovery (ASR) water supply schemes	Propn 0 to 1	0.000
7	Proportion of distribution input derived from saline abstractions	Propn 0 to 1	0.000
8	Proportion of distribution input derived from water reuse schemes	Propn 0 to 1	0.000
9	Number of impounding reservoirs	nr	2
10	Number of pumped storage reservoirs	nr	8
11	Number of river abstractions	nr	17
12	Number of groundwater works excluding managed aquifer recharge (MAR) water supply schemes	nr	203
13	Number of artificial recharge (AR) water supply schemes	nr	0
14	Number of aquifer storage and recovery (ASR) water supply schemes	nr	0
15	Number of saline abstraction schemes	nr	0
16	Total number of sources	nr	230
17	Number of reuse schemes	nr	0
18	Total number of water reservoirs	nr	1 3
19	Total capacity of water reservoirs	Ml	227,643
20	Total number of intake and source pumping stations	nr	223
21	Total number of raw water transport stations	nr	9
22	Total capacity of intake and source pumping stations	kW	42728
23	Total capacity of raw water transfer pumping stations	kW	13534
24	Total length of raw water abstraction mains and other conveyors	km	136.50
25	Average pumping head – raw water abstraction	m.hd	41.09
26	Average pumping head – raw water transport	m.hd	38.52
27	Total length of raw and pre-treated (non-potable) water transport mains	km	591.67
28	Water resources capacity (measured using water resources yield)	Ml/d	1643.78

	Line description	Units	Current year
B	**Water treatment**		
29	Total water treated at all SW simple disinfection works	Ml/d	0.00
30	Total water treated at all SW1 works	Ml/d	0.00
31	Total water treated at all SW2 works	Ml/d	0.00
32	Total water treated at all SW3 works	Ml/d	0.00
33	Total water treated at all SW4 works	Ml/d	4.57
34	Total water treated at all SW5 works	Ml/d	518.72
35	Total water treated at all SW6 works	Ml/d	5.82
36	Total water treated at all GW simple disinfection works	Ml/d	12.12
37	Total water treated at all GW1 works	Ml/d	1.41
38	Total water treated at all GW2 works	Ml/d	174.25
39	Total water treated at all GW3 works	Ml/d	144.60
40	Total water treated at all GW4 works	Ml/d	213.96
41	Total water treated at all GW5 works	Ml/d	60.13
42	Total water treated at all GW6 works	Ml/d	0.00
43	Total water treated at more than one type of works	Ml/d	0.00
44	Total number of SW simple disinfection works	nr	0
45	Total number of SW1 works	nr	0
46	Total number of SW2 works	nr	0
47	Total number of SW3 works	nr	0
48	Total number of SW4 works	nr	1
49	Total number of SW5 works	nr	13
50	Total number of SW6 works	nr	1
51	Total number of GW simple disinfection works	nr	4
52	Total number of GW1 works	nr	1
53	Total number of GW2 works	nr	43
54	Total number of GW3 works	nr	30
55	Total number of GW4 works	nr	33
56	Total number of GW5 works	nr	6
57	Total number of GW6 works	nr	0
58	Number of treatment works requiring remedial action because of raw water deterioration	nr	1
59	Zonal population receiving water treated with orthophosphate	0.000	4,705.562
60	Average pumping head – water treatment	m.hd	9.45

	Line description	Units	Current year
C	**Water distribution**		
61	Total length of potable mains as at 31 March	km	38,709.0
62	Total length of potable mains relined	km	0.0
63	Total length of potable mains renewed	km	29.8
64	Total length of new potable mains	km	205.5
65	Total length of potable water mains (<=320mm)	km	35,735.7
66	Total length of potable water mains >320mm - <=450mm	km	1,741.0
67	Total length of potable water mains >450mm - <=610mm	km	625.0
68	Total length of potable water mains > 610mm	km	607.4
69	Capacity of booster pumping stations	kW	77579
70	Capacity of service reservoirs	Ml	1812
71	Capacity of water towers	Ml	119
72	Distribution input	Ml/d	1,136.35
73	Water delivered (non-potable)	Ml/d	44.77
74	Water delivered (potable)	Ml/d	985.31
75	Water delivered (billed measured residential)	Ml/d	502.63
76	Water delivered (billed measured business)	Ml/d	284.96
77	Total leakage	Ml/d	182.39
78	Distribution losses	Ml/d	140.10
79	Water taken unbilled	Ml/d	26.08
80	Number of lead communication pipes	nr	515919
81	Number of galvanised iron communication pipes	nr	184562
82	Number of other communication pipes	nr	1,543,928
83	Number of booster pumping stations	nr	441
84	Total number of service reservoirs	nr	254
85	Number of water towers	nr	129
86	Total length of potable mains laid or structurally refurbished pre-1880	km	5
87	Total length of potable mains laid or structurally refurbished between 1881 and 1900	km	5920.4
88	Total length of potable mains laid or structurally refurbished between 1901 and 1920	km	3524.6
89	Total length of potable mains laid or structurally refurbished between 1921 and 1940	km	1,102.1
90	Total length of potable mains laid or structurally refurbished between 1941 and 1960	km	6,719.7
91	Total length of potable mains laid or structurally refurbished between 1961 and 1980	km	5,101.3
92	Total length of potable mains laid or structurally refurbished between 1981 and 2000	km	12,497.0
93	Total length of potable mains laid or structurally refurbished post 2001	km	3,838.6
94	Average pumping head – treated water distribution	m.hd	73.03

	Line description	Units	Current year
D	**Band Disclosure (nr)**		
95	WTWs in size band 1	Nr	34
96	WTWs in size band 2	Nr	38
97	WTWs in size band 3	Nr	30
98	WTWs in size band 4	Nr	14
99	WTWs in size band 5	Nr	11
100	WTWs in size band 6	Nr	2
101	WTWs in size band 7	Nr	2
102	WTWs in size band 8	Nr	1
E	**Band Disclosure (%)**		
103	Proportion of Total DI band 1	%	3.4%
104	Proportion of Total DI band 2	%	9.9%
105	Proportion of Total DI band 3	%	15.1%
106	Proportion of Total DI band 4	%	13.6%
107	Proportion of Total DI band 5	%	20.7%
108	Proportion of Total DI band 6	%	6.0%
109	Proportion of Total DI band 7	%	17.1%
110	Proportion of Total DI band 8	%	14.2%

Proportion of distribution input from different sources (4P.1- 4P.8)

1 These lines include imports and water for non-potable use but exclude exports.

Proportion of distribution input derived from impounding reservoirs (4P.1)

2 The reported estimate is based on distribution input (DI) from the following reservoir sources:

- Ravensthorpe WTW (Ruthamford North RZ): 100 per cent yield from natural inflow ("natural"). WTW supplied from both Ravensthorpe and Hollowell Reservoirs
- Alton WTW (East Suffolk RZ): 31 per cent natural yield from Alton Water Reservoir
- Pitsford WTW (Ruthamford North RZ): 44 per cent natural yield from Pitsford Reservoir.

Proportion of distribution input derived from pumped storage reservoirs (4P.2)

3 The reported estimate is based on distribution input (DI) from the following reservoir sources:

- Alton WTW (East Suffolk RZ): 69 per cent pumped yield from Alton Water Reservoir
- Ardleigh WTW (South Essex RZ): 82 per cent pumped yield from Ardleigh Reservoir
- Covenham WTW (East Lincolnshire RZ): 100 per cent pumped yield from Covenham Reservoir
- Grafham WTW (Ruthamford South RZ): 99 per cent pumped yield from Grafham Water Reservoir

- Pitsford WTW (Ruthamford North RZ): 56 per cent pumped yield from Pitsford Reservoir
- Wing WTW and Morcott WTW (Ruthamford North RZ): 88 per cent pumped yield from Rutland Water reservoir.

4 For Ardleigh WTW, Grafham WTW and Wing/Morcott WTW it is assumed that the reservoir yield is 100 per cent from pumped inflow sources. This is in accordance with the line definition.

Proportion of distribution input derived from river abstractions (4P.3)

5 The reported estimate is based on DI from the following river abstraction sources:

- Bedford WTW (River Ouse)
- Elsham WTW (River Ancholme)
- Hall WTW (River Trent)
- Heigham WTW (River Wensum)
- Marham WTW (River Nar)
- Saltersford WTW (River Witham)
- Stoke Ferry WTW (River Wissey).

6 Although there has been a decrease in DI this year (from 1,159.15 Ml/d in 2018/19 to 1,136.35 Ml/d in 2019/20) there has been a slight increase in the proportion of distribution input derived from river abstractions (from 6.3 per cent in 2018/19 to 7.1 per cent in 2019/20 (a 12.2 per cent increase)). This reflects an increase of 6.79 Ml/d from 73.19 Ml/d in 2018/19 to 79.98 Ml/d in 2019/20. This is a result of Bedford WTW increasing abstraction from 0.01Ml/d (2018/19) to 3.23 Ml/d (2019/20) and increased abstraction from Heigham WTW and Marham WTW.

Proportion of distribution input derived from groundwater works, excluding managed aquifer recharge (MAR) water supply schemes (4P.4)

7 The reported estimate is based on the borehole sources reported in line 4P.12.

Proportion of distribution input derived from artificial recharge (AR) and aquifer storage and recovery water supply schemes (4P.5 and 4P.6)

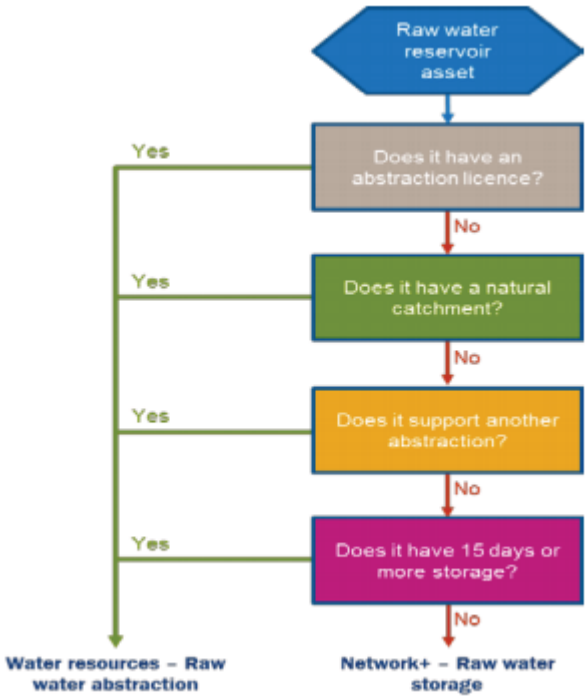
8 No such schemes are operated by the company.

Proportion of distribution input derived from saline abstractions and water reuse schemes (4P.7 and 4P.8)

9 No such schemes are operated by the company.

Number of impounding reservoirs and pumped storage reservoirs (4P.9 and 4P.10)

10 The reported numbers reflect the number of reservoirs classified as raw water abstraction based on the following RAG 4.08 flow chart:



Impounding reservoirs (2)

- Ravensthorpe (Ruthamford North RZ): 100 per cent inflow
- Hollowell (Ruthamford North RZ): 100 per cent inflow.

Pumped storage reservoirs (8)

- Alton Water (East Suffolk RZ): 69 per cent pumped
- Ardleigh (South Essex RZ): 82 per cent pumped
- Covenham (East Lincolnshire RZ): 100 per cent pumped
- Grafham Water (Ruthamford South RZ): 99 per cent pumped
- Pitsford (Ruthamford North RZ): 56 per cent pumped
- Rutland Water (Ruthamford North RZ): 88 per cent pumped
- Cadney Carrs (East Lincolnshire RZ): 100 per cent pumped
- Costessey Pits (Norwich & the Broads RZ): 100 per cent pumped.

11 The RAG 4.08 guidance means we now also class Cadney Carrs and Costessey Pits as raw water reservoirs. Cadney Carrs has storage >15 days, and Costessey Pits has an abstraction licence.

12 The definition for Line 9 specifies that the reservoirs should be classified as either pumped or impounding, on the basis of the majority of the type of flow that they receive.

Number of river abstractions (4P.11)

13 We are reporting seventeen river abstractions for 2019/20. This consists of seven direct river intakes and ten indirect supporting river abstractions. This reflects the full complement of our surface water intake assets.

Direct river intakes (7)

- Cadney (River Ancholme)
- Clapham (Bedford Ouse)
- Hall (River Trent)
- Heigham (River Wensum)
- Costessey (River Wensum)
- Marham (River Nar)
- Stoke Ferry (River Wissey).

Indirect supporting river abstractions (10)

- Tinwell (River Welland for Rutland Water)
- Wansford (River Nene for Rutland Water)
- Offord (River Great Ouse for Grafham Water)
- Duston Mill (River Nene for Pitsford reservoir)
- Sproughton (River Gipping for Alton Water)
- Bucklesham (Mill River for Alton Water)
- East Mills (River Colne for Ardleigh)
- Covenham intake (Louth Canal for Covenham reservoir)
- Cloves Bridge (River Great Eau for support to Covenham)
- Cut-off-Channel (for support to Stoke Ferry)

Number of groundwater works, excluding managed aquifer recharge (MAR) water supply schemes (4P.12)

14 We report 203 groundwater sources for 2019/20 which is 5 fewer GW sources compared to 2018/19. There was one addition of East Tuddenham source, which was commissioned into supply in 2019/20. Removals from the list were Barnoldby (river support only, not operated for supply in 19/20), Barton (not operated into supply in 19/20), East Ruston (not operated into supply in 2019/20 but likely to be operational in future), Habrough (not operational in 2019/20), Healing (not operational in 2019/20 but will be operational in future following capital work) and Sandhouse (not operational in 2019/20 due to operating issues at WTW).

Number of artificial recharge (AR) and aquifer storage and recovery schemes (ASR) water supply schemes (4P.13 and 4P.14)

15 No such schemes are operated by the company.

Number of saline abstraction schemes (4P.15)

16 No such schemes are operated by the company.

Total number sources (4P.16)

17 The reported number is summed from Lines 9-12.

Number of reuse schemes (4P.17)

18 No such schemes are operated by the company.

Total number of water reservoirs (4P.18)

19 The reported number (13) includes the impounding and pumped storage reservoirs reported in Lines 9 (2) and 10 (8) as well as three bank-side storage reservoirs at the following locations:

1. Heigham Large Deposit Reservoir – for Heigham WTW
2. Bedford – for Clapham WTW
3. South Clifton – for Hall WTW.

20 Although raw water is pumped into these reservoirs, RAG 4.08 guidance (Figure 1) classes them as Network Plus raw water storage rather than raw water abstraction, and therefore these have not been included in Lines 9 and 10. The purpose of these reservoirs is to provide resilience rather than storage and as such they do not have an abstraction licence or a natural catchment.

Total capacity of water reservoirs (4P.19)

21 The capacity of all water has been revised in line with guidance to reflect the design/construction capacity of the reservoir where possible. The value is now 227,643Ml due to the inclusion of Heigham.

Total number of intake and source pumping stations (4P.20)

22 Following guidance in the Regulatory Accounting Guidelines, we have identified raw water transport pumps within surface water systems and groundwater sources. Surface water transport has been split between abstraction to reservoir and abstraction from reservoir to treatment. Groundwater sources have been split based on the proportion of pumping head that that goes to treatment (considered to be raw water abstraction) and the proportion that goes to supply (considered to be water distribution). Line 22 reports the proportion of pumping capacity that is associated with the raw water abstraction from groundwater sources.

23 In line with the disaggregation of raw water transport pumps, for 2019/20 we are reporting:

- 20 intake and source pumping stations including 1 gravity intake system at Ravensthorpe Reservoir
- 203 groundwater sources.

24 This is a reduction of 5 sources from what was reported for the 2018/19 reporting year.

Total number of raw water transfer stations (4P.21)

25 In line with the guidance as described above, for 2019/20 we are reporting:

- 9 transfer pumping stations including 1 gravity intake system at Ravensthorpe Reservoir.

Total capacity of intake and source pumping stations (4P.22)

26 The river abstraction and reservoir intakes and capacities are referenced in a survey of the raw water abstraction assets (Atkins, 2012) and updated by the Energy Team. The number of boreholes and pumps are reported in a borehole database maintained by the Water Resources Management Team. This is cross referenced with data from the Groundwater Engineering Unit (GWEU) and Energy Team for the pump capacities. Both data sets have been reviewed for the 2019/20 APR with a small increase to the groundwater pumping capacity to reflect three new borehole pumps coming online.

27 For a small number of boreholes the rated power of individual borehole pumps could not be sourced from the SAP (corporate asset database) or the GWEU (Groundwater Engineering Unit) records. For these, Energy Team site audit data was used to populate the pump capacity.

Total capacity of raw water transfer pumping stations (4P.23)

28 As for line 22, the river abstraction and reservoir capacities are referenced in a survey of the raw water abstraction assets (Atkins, 2012) and periodically updated by the Energy Team. The most recent update was in 2017 and this data is still considered to be correct for the 2019/20 review.

Total length of raw water abstraction mains and other conveyors (4P.24)

29 This line has been calculated using the latest raw water mains data out of our corporate mapping system (G/water). The lengths have also been calculated using the guidance provided in RAG 4.08. There is a small decrease of 12km for 2019/20 compared to 2018/19 due to constant improvements to on-site pipe classifications.

Average pumping head (4P.25, 4P.26 and 4P.60)

30 For 2019/20 pumping head is based on telemetry pressure or level sensor data where possible and reported pump head or site data where not. However, there has been some difficulty separating resources and raw water transport for the majority of sites as there is not the resolution on the data required except on the larger treatment works.

31 The sources of data for flow in these calculations are primarily reported abstraction flows or telemetry. Where a site has multiple boreholes and only a single combined flow meter we have assumed an equal flow between the boreholes.

32 We are confident about the combined total average pumping head for water resources and raw water transport. However, for some sites we are unable to split the pumping head between the two categories. In these instances all the pumping head has been assigned to resources as we have been unable to obtain the necessary data to be able to proportionally split the pumping head.

Total length of raw and pre-treated (non-potable) water transport mains (4P.27)

33 This line has been calculated using the latest raw water mains data out of our corporate mapping system (G/water). The lengths have also been calculated using the guidance provided in RAG 4.08.

34 Constant improvement to on-site pipe classification has led to a 4km length decrease from the figure quoted in 2018/19.

Total water treated by SW-GW code (4P.29-4P.43)

35 Historical volumetric Distribution Input (DI) data from our Sourceworks Output Reporting System (SWORPS) has been used for each of the Water Treatment Works (WTW) in our region, including imports and excluding exports and sites which include combined sources (both boreholes and river abstractions).

36 Data have been analysed to split the proportion of DI between WTW codes.

37 An individual treatment can be assessed as SD, W1, W2, W4 and W6 (not W3 or W5). The complexity of an individual WTW is determined by the most complex treatment in operation at that WTW and may have a code of SD, W1, W2, W3, W4, W5, or W6. Note that W3 is applied where more than one W2 treatment is in operation and W5 is applied where more than one W4 treatment is in operation.

38 It is noted that we have previously conducted additional analysis and consideration has been given to the definitions of the WTW coding system and how sites should be consequently attributed. This has been used to attribute the volume of DI to respective WTW codes, based upon our interpretation of works complexity in accordance with Ofwat Guidance (including imports and exports and combined sources).

39 These lines include imports and exclude exports.

40 DI volumes include an allowance for MLE (Maximum Likelihood Estimation) in alignment with water balance reporting. The volume outputs are, therefore, aligned according to their category (borehole, impounding reservoir or river abstraction) to reconcile with reported figures for impounding reservoirs, river abstractions, boreholes and imports.

41 Note has been made of combined sources (Elsham, Heigham, Marham and Stoke Ferry), with DI being proportionally split in line with the base-year data between groundwater and surface water sources.

42 Note that there has been a general reduction in DI from 1,159.15 Ml/d in 2018/19 to 1,136.35 Ml/d 2019/20.

43 There have been no changes to works coding between 2018/19 and 2019/20. However there have been some high percentage changes in volumes treated at works with respect to codes with smaller volume attributions. This is due to local demand impacts and operation variations at the sites and the fact that some of these codes are only attributed to one site, but in effect reflects relatively small changes in overall DI for these codes.

Description	2019/20	2018/19	% Change
Total water treated at all SW4 works	4.57 Ml/d	6.04 Ml/d	-24%
Total water treated at all SW6 works	5.82 Ml/d	6.59 Ml/d	-11%
Total water treated at all GW simple disinfection works	12.12 Ml/d	13.06 Ml/d	-7%
Total water treated at all GW1 works	1.41 Ml/d	1.64 Ml/d	-14%

44 For example, Ravensthorpe WTW is the only site with a SW4 code and saw a 24% reduction in DI for 2019/20. Similarly, Barnham Cross WTW is the only site with a GW1 codes and saw a 14% reduction in DI for 2019/20.

Total number of sites by SW–GW code (4P.44-4P.57)

45 Water Treatment Works (WTW) numbers are aligned with the information submitted annually in the detailed tables to the Drinking Water Inspectorate (DWI) in accordance with the Information Direction. WTW numbers may vary year on year due to changes in the configuration of the supply system, and specifically, the location of the final water monitoring points.

Number of treatment works requiring remedial action because of raw water deterioration (4P.58)

46 One site has been recorded as requiring remediation. This is the following;

- Great Wratting WTW - regarding pesticides reduction.

Zonal population receiving water treated with orthophosphate (4P.59)

47 The zonal population receiving water treated with orthophosphate is calculated from the information reported to the DWI in the Details Tables provided annually in accordance with the Information Direction. All Public Water Supply Zones (PWSZ) receiving orthophosphate dosed water are identified in the Details Tables which also document the population of each PWSZ.

48 There has been a steady increase in the population receiving orthophosphate dosed water, which is partly due to the increase in the number of WTWs with orthophosphate dosing plant in operation, as well as the general increase in total population we serve.

Total length of potable mains as at 31 March (4P.61)

49 The data is consistent with the previous year's methodology. There is a fairly typical increase in length from the previous year's increase of approximately 124km to 38,709km for 2019/20.

Total length of potable mains relined and renewed (4P.62 and 4P.63)

50 We had 17.83km of renewed and relined mains in our standalone projects programme. Our parcels programme delivered 1.64km of diversions, 6.57km of proactive replacement (including 1.85km of which was already counted in the standalone data and is removed to avoid double counting), 3.71km of renewal as a result of reactive mains repair work and 1.89km from our developer-driven capital betterment programme.

51 This gives a total of 29.79km of renewal reported in line 63. This is significantly down on last year as our renewal programme was much reduced and the "Beast from the East" increased the 2018/19 reactive repair numbers.

52 We are unable to split out renewal from relining so report lines 62 and 63 together.

Total length of new potable mains (4P.64)

53 We have three new mains programmes: our standalone projects, the Housing Estate Mains (HEMs) parcel and the Infrastructure Planning Zone (IPZ) parcel. These three programmes delivered 47.033km, 139.690km and 18.740km respectively.

54 This gives a total of 205.463km reported in line 64. This is an increase on 2018/2019 due to increased growth activity in the region.

Potable mains by diameter band (4P.65- 4P.68)

55 These lines have been calculated using the latest in-service company-owned potable water mains data out of G/water (our corporate mapping system). The largest increase at 103kms is in the smallest diameter band – line 65. There was a minor decrease in line 67 of 2kms, which is due to constant improvement around the accuracy of the base data.

56 The sum of these lines does not equal line 61 due to rounding.

Number and capacity of booster pumping stations (4P.69 and 4P.83)

57 The number of water booster stations has been determined by reviewing GIS records and cross referencing these against SAP records (for creation & decommissioning dates) and additional operational data repositories (MISER, our strategic supply schematic, and IRIS, our regional telemetry system) to determine the categorisation of the station. These stations were then reviewed to understand if they resided on the same "site" and whether they should be considered as a single site or multiple sites as per recent clarifications. Where both Surface Water and Ground Water are supplied by the same site then the site is listed once against the more significant source. Where a relift water booster resides on the same site as another unconnected relift booster / surface water booster / ground water

booster, this has been counted as an independent site. Where a borehole pump boosts directly into distribution this has been included in the number of Ground Water sites. Single property boosters have not been included.

58 The number of pumps, rated power for each pump, location and asset status have been used where this information was held in corporate databases. This includes borehole pumps that both abstract and boost into the network and apportions a percentage split of the borehole rated power to distribution. The rated power of the remaining pumps, where data was not currently centrally held, have been given a nominal 4kW rated power and assumed to be in a duty / standby arrangement. The number of sites was calculated based on this more granular pump specific asset data. A recent assessment of co-located "sites" identified a number of duplicate sites and when paired with a more in-depth assessment of operational status also highlighted a number of decommissioned sites that had previously been believed to be operational, reducing the total number of sites by ten.

Number and capacity of service reservoirs (4P.70 and 4P.84)

59 For 2019/20 we have 254 Service reservoirs. There has been a slight drop in the number of service reservoirs as a result of sites being operationally abandoned. There has also been an addition of one site to this year's count from last year's.

60 The total capacity for 2019/20 is 1811.523Ml. The decrease in capacity from 2018/19 relates to the fact that some sites have been operationally abandoned. There have also been some changes to capacities due to on-going improvements to our data quality and data capture.

Numbers and capacity of water towers (4P.71 and 4P.85)

61 For 2019/20 we are reporting 129 towers which is a slight decrease from 2018/19 when there were 130. This is a result of one water tower that has been decommissioned.

62 2020 structure removed:

- Abberton Water Tower 0.118Ml

63 For 2019/20 we are reporting capacity as 118.869Ml. This is a slight decrease from 2018/19 which was reported as 119.987Ml. This is because of the tower that has been decomissioned.

Distribution Input (4P.72)

64 Distribution Input has reduced this year as we did not have a repeat of the hot summer weather that affected DI in 2018/19.

Water delivered non-potable (4P.73)

65 The amount of water delivered to our non-potable customers is similar to 2018/19.

Water delivered potable (4P.74-4P.76)

66 Water delivered to measured residential properties continues to rise as customers switch from unmeasured to measured billing and is countered by a drop in water delivered to unmeasured residential properties.

67 Water delivered to measured business customers has reduced this year due as the impacts of peak demand in the summer of 2018 are removed. We continue to find that data held in the CMOS system (Central Market Operating System) is not reliable enough to calculate consumption for the water balance due to lack of readings and delays in settlements being updated with the latest meter reading data. This year we have again taken approximately 20,000 meter readings, in addition to those taken by retailers, to ensure that summer demand is captured as consumption and that we allocate demand and leakage in the water balance correctly.

Leakage (4P.77 and 4P.78)

68 Leakage for 2019/20 is assessed at 182.39 Ml/d. This represents a 9 Ml/d decrease from 2018/19 and is the lowest recorded annual leakage on record.

69 We have maintained the existing strands of our Leakage Strategy and have now started to bring on line strands from our Smart Water Systems strategy:

- Detection resources - We have maintained an elevated level of detection technicians since 2015/16 in order to mitigate against the risk of summer/winter breakout of leaks. An average of 154 technicians were employed in 2019/20 to search for leaks, up from 131 in 2018/19, 125 in 2017/18, 122 in 2016/17 and 118 in 2015/16.

- Network/pump optimisation schemes - There have been 20 optimisation schemes implemented this year, delivering 3.03 Ml/d leakage reduction. Over AMP6 14.73 Ml/d leakage saving have been delivered through this peogramme.

- Intensive Leakage Programme (the "172 process") - This process reviewed 882 District Meter Areas in AMP6, resulting in leakage reduction of 3.00 Ml/d in 2019/20. Over AMP6 20.28 Ml/d leakage saving have been delivered over 135 schemes.

- Leakage Sensors - We now have 3,520 remote hydrophones installed across 183 DMA's. To date, the sensors have delivered 3,908 leaks. Where 100% of the DMA is monitored we find leaks more than 82% of the time proactively (before customers report them), with some areas returning more than 97%. We continue to work collaboratively with manufacturers in the development of a new logger design, and with enhancements to the analytical platform, as we strive to be able to determine the severity of a leak remotely which will allow us to effectively prioritise repairs.

- Customer Leakage - 2019/20 was our busiest year for customer leakage with 8,817 cases managed, an increase of 1,479 when compared to 2018/19. This increase is driven by increased volume across all workstreams (metering, networks, leakage), however the largest increase proportionately is seen from proactive detection.

Water taken unbilled (4P.79)

70 Water taken unbilled remains similar to 2018/19.

Number of communication pipes (4P.80-4P.82)

71 Our communication pipe stock was last modelled in 2012 for the Periodic Review in 2014. That report has been used as a starting point and the number of replaced lead and galvanized iron communication pipes has been subtracted from the 2012 modelled totals.

Total length of mains laid or structurally refurbished (4P.86-4P.93)

72 As expected, most diameter bands have either decreased in length or remained stable. The only diameter band that has seen a significant increase is line 93, for mains laid or structural refurbished post 2001. This age band has seen an additional 189km in 2019/20.

Average pumping head - distribution (4P.94)

73 We have kept a very similar method to previous years' submissions, splitting the company into 52 discrete systems covering 92 per cent of our Distribution Input (DI). These were investigated, updated, data cleansed and used to calculate the average pumping head.

WTWs by category (4P.95-4P.102)

74 The number of sites in each specified WTW category (based upon Ml/d DI) is defined, based upon our Source Works Output Reporting System (SWORPS) data.

75 Volumes per WTW have been calculated using 2019/20 year values. WTWs have then been grouped by size band, as described, giving total numbers of WTWs per band and the percentage of DI associated with each band calculated.

Proportion of distribution input by band (4P.103-4P.110)

76 The proportions of DI in each WTW category (based upon pre-MLE SWORPS - Ml/d DI) are derived from the same data system as Lines 4P.95-4P.102.

77 Note that although there has been an overall reduction in DI, there has been an overall increase in Band 2 categorised treatment works (>2Ml/d and <4Ml/d), with a slight reduction in Band 1, Band 3 and Band 4 numbers of works. This reflects the large number of works in these categories (86) and the small variances in DI, which can cause WTWs to change category.

Size band	No. WTWs per Band 2019/20	% per Band 2019/20	No. WTWs per Band 2018/19	% per Band 2018/19
Band 1	34	3.36%	39	3.69%
Band 2	38	9.88%	26	6.81%
Band 3	30	15.08%	33	15.33%
Band 4	14	13.63%	19	18.21%
Band 5	11	20.74%	11	21.42%
Band 6	2	6.02%	1	2.83%
Band 7	2	17.12%	2	15.91%
Band 8	1	14.17%	1	15.80%

78 Additionally, note that in 2019/20 both Newton WTW and Heigham WTW were allocated into Band 6, but in 2018/19 only Newton WTW had DI in Band 6 (> 32 and < 64).

Table 4Q - Non-Financial Data - Properties, Population and Other - Wholesale Water

	Line description	Units	Current year
A	**Properties and population**		
1	Residential properties billed for measured water (external meter)	000	1,442.172
2	Residential properties billed for measured water (not external meter)	000	221.079
3	Business properties billed measured water	000	108.322
4	Residential properties billed for unmeasured water	000	331.078
5	Business properties billed unmeasured water	000	1.467
6	Total business connected properties at year end	000s	128.462
7	Total residential connected properties at year end	000s	2,115.947
8	Total connected properties at year end	000	2,244.409
9	Number of residential meters renewed	000	88.037
10	Number of business meters renewed	000s	6.394
11	Number of meters installed at request of optants	000	6.582
12	Number of selective meters installed	000	3.581
13	Total number of new business connections	000	1.261
14	Total number of new residential connections	000	23.033
15	Total population served	000	4,771.324
16	Number of business meters (billed properties)	000	109.232
17	Number of residential meters (billed properties)	000	1,703.010
18	Company area	km2	22,651
B	**Other**		
19	Number of lead communication pipes replaced for water quality	nr	188
20	Total supply side enhancements to the supply demand balance (dry year critical / peak conditions)	Ml/d	0.00
21	Total supply side enhancements to the supply demand balance (dry year annual average conditions)	Ml/d	0.00
22	Total demand side enhancements to the supply demand balance (dry year critical / peak conditions)	Ml/d	11.19
23	Total demand side enhancements to the supply demand balance (dry year annual average conditions)	Ml/d	10.95
24	Energy consumption - network plus	MWh	284,149
25	Energy consumption - water resources	MWh	76,186
26	Energy consumption - wholesale	MWh	360,335
27	Mean Zonal Compliance	%	99.96%
28	Compliance Risk Index	nr	1.7
29	Event Risk Index	nr	8.3
30	Volume of Leakage above or below the sustainable economic Level	Ml/d	-28.609

Meter location (4Q.1 and 4Q.2)

1 We have used the same data source for these lines as we did in 2018/19, making use of the information recorded by meter readers. The proportion of external meters remains similar to 2018/19.

Business properties billed (4Q.3 and 4Q.5)

2 In these lines we report the number of business properties for which we have reported revenue. They were not billed by Anglian Water. We exited the non-household retail market at the start of 2017/18 so all our connected non-household properties are now billed by licensed retailers. Movements from prior years reflect continued re-classification of properties in the non-household retail market.

Total connected properties at year-end (4Q.6-4Q.8)

3 The report year 2019/20 saw an annual increase in total connected properties of 1.16 per cent.

4 The non-household connections have decreased after a period of continual growth. The period of growth was influenced by the opening of the non-household market, with properties being scrutinised to enter the marketplace. As this market is now embedded we have seen a return to previous trends, with annual movements reflecting economic trends in the region. Household connections have continued to increase. This is again reflective of the economic development of the region.

5 These figures do not include properties connected to Anglian Water sewerage systems which receive water services from other companies.

Number of meters (4Q.9-4Q.12)

6 For the number of renewed meters during the reported year, we have combined both proactive meter exchange and reactive meter exchange programme numbers to obtain a total figure. The split between residential meters and business meters was calculated by using all properties identified as business eligible since the NHH retail market opened in April 2017.

7 We have seen a plateauing of meters being renewed for business premises as, after increases in previous years, numbers for 2019/20 are comparable to 2018/19. This reflects the level of activity in the non-household retail market. Retailers engaging with their customers tend to raise queries on metering issues. The numbers of these have stabilised since the market opened after an initial increase of metering queries.

8 Meter penetration has increased to 91.4 per cent as the result of our enhancement programme, which fits meters on properties that do not have a meter already. The effect of high meter penetration means that we now get fewer customers proactively requesting meters to be fitted. This is reflected in meter options numbers declining year on year.

9 Selective meters include 432 compulsory meters, plus meters fitted under our enhanced metering programme, as both are carried out at our behest. Under our enhanced metering programme we fit a meter to a customer's house but they continue to pay by rateable value until they ask to switch or until the property changes hands.

10 There has been a marked reduction in the number of meters fitted at our behest this year. This was forecast to be lower due to the phasing of our enhancement programme over AMP6.

Total population served (4Q.15)

11 Population is calculated based upon Anglian Water SAP customer information and ONS, population and local authority household data. Population is derived using the estimation of households we serve, as a percentage of the Department for Communities and Local Government (DCLG) totals, applied to the ONS Local Authority and Unitary Authority (LAUA) population assessments. Additional account is taken of the communal population, which is derived using census data.

12 The estimate of household population is based on the 2012 (2018 update) sub-national population and local authority property totals from the ONS and DCLG. Additionally, the population figures have been amended to reflect the current mid year estimates revision.

13 We apportion the data for the districts we serve to derive an estimate of the wastewater population in the Anglian Water region.

14 The estimate of non-household population is based on the latest census data published by the ONS. This 'communal' population covers prisons, care homes and military bases. These projections have been revised in line with the paper *'Updating the Department for Communities and Local Government's Household Projections'*, specifically annex 2 *'Improving Institutional Population Estimates and Projections'*. In addition we have added an estimate of people resident in mixed properties.

15 Population has increased by 47,107, reflecting both the addition of approximately 23,000 new properties and the year on year changes to occupancy rates for all of the 59 LAUAs in the Anglian Water Region.

Numbers of meters (billed properties) (4Q.16 and 4Q.17)

16 These lines count meters at billed properties rather than billed properties that are metered. The values exceed the values of lines 1-3 because of properties with more than one meter.

17 The increase in residential meters is consistent with the number of switchers and new residential connections. We have excluded enhanced meters at properties where the customer has not switched and continues to be charged on an unmeasured basis. Movements from prior years in business meters reflect continued re-classification of properties in the non-household retail market.

Company area (4Q.18)

18 The area shown is the sum of the water appointed areas for Anglian Water and Hartlepool Water, less the net aggregate areas of water insets.

Number of lead communication pipes replaced for water quality (4Q.19)

19 In 2019/20 we have replaced 188 lead communication pipes. These have been proactively replaced following compliance failures of the lead standard, notification from a customer that they intend to replace or have replaced their lead pipe, or during planned work on the network. No planned proactive replacements in areas of known high lead pipework have been undertaken in this reporting year, which explains the reduction in the number compared to 2018/19.

Total supply side enhancements to the supply demand balance (dry year critical/ peak conditions) (4Q.20 and 4Q.21)

20 We are not reporting any supply side enhancements to the supply demand balance for 2019/20, under both dry year annual average and critical peak conditions.

Total demand side enhancements to the supply demand balance (4Q.22 - 4Q.23)

21 Demand side enhancement savings have been derived using meter optant data in conjunction with assessed savings from water efficiency measures (these have been based upon per property assumptions).

22 Savings have been assessed for the following programmes.

- 'Bits and Bobs' Service Programme - Assumed savings 50 l/property/day.
- Drop 20 Programme - Assumed savings 25 l/property/day.

- Leakage - Assumed as the difference between the present and previous year.
- Enhanced Metering (Optant Metering, Selective Metering) Programme - Assumed savings 50 l/property/day on switching.

23 For the Dry Year Critical Peak conditions (4Q.22), demand management options impacting measured and unmeasured demand have been modified by the following average regional factors (from the Water Resources Management Plan):

- Average Measured Household Critical Peaking Factor (regional average for all Water Resource Zones - WRZs) 1.313.
- Average Unmeasured Household Critical Peaking Factor (regional average for all Water Resource Zones - WRZs) 1.390.

24 These factors have produced the demand management option savings uplifted to reflect critical peak conditions. Note that only measured and unmeasured effects have been factored (not leakage) for the critical peak**.**

25 For the Dry Year Annual Average conditions (4Q.23), demand management options impacting measured and unmeasured consumption have been modified by the following average regional factors (from the WRMP).

- Average Measured Household Dry Year Annual Average Factor (regions average for all Water Resource Zones - WRZs) 1.027.
- Average Unmeasured Household Dry Year Annual Average Factor (regional average for all Water Resource Zones - WRZs) 1.034.

26 Note that this year the impact has been derived to be positive due to the significant decrease in leakage (from the 2018/19 value of 191.24 Ml/d to the 2019/20 value of 182.39 Ml/d, an 8.85 Ml/d difference), with the remainder being attributable to water efficiency and meter switching.

Energy consumption - Network Plus, Water Resources and Wholesale (4Q.24-4Q.26)

27 Following Ofwat's guidance, energy consumption for water has decreased by 10,098 MWh (2.7 per cent) in 2019/20 from a 2011/12 baseline.

28 The decrease in energy consumption at water operational sites was primarily caused by the decrease in water demand, both from Anglian Water's indigenous customers and through bulk water transfers to neighbouring water undertakers. Water demand was higher in 2018/19 because the weather was generally warmer and drier than average. Less electricity was also used for abstracting raw water, reflecting the both reduced summer demand and the wet weather during the winter refill season. Also, less gas-oil was delivered to sites than in 2018/19 when stocks were boosted in the last two quarters. This was in line with our strategy of being prepared for Brexit.

29 A number of assumptions have been made in calculating the water energy consumption data:

- For water, we have applied a financial split from regulatory accounts between water resource and network plus for grid electricity consumption.
- We have included energy from solar sources generated and used on site.
- Grid electricity and fuel (oil and natural gas) used in offices has been included and split equally between water and water recycling.

- Fuel oil is not recorded on our corporate systems in the categories required and therefore the same split used for electricity has been assumed for each fuel type.
- Transport is not recorded in our corporate systems in the categories required and therefore the same split used for electricity has been assumed.
- For transport (fleet fuel) the split between water and water recycling is not measured and therefore we have assumed a 50/50 split.
- We have assumed a 35 per cent thermal efficiency for natural gas consumption in converting to energy output (boilers and CHP).
- Transport for company cars is collected as mileage. We have converted mileage into kWh through using the UKWIR Carbon Accounting Workbook v13 through calculating miles to carbon dioxide equivalent to litres. We are looking to improve our processes in order to capture consumption by electric cars charged at home and those using our own charging infrastructure.

Mean zonal compliance (4Q.27)

30 Refer to table 3A, line 18.

Compliance Risk Index (4Q.28)

31 The DWI have adopted a strategy of risk based regulation and have developed a new Compliance Risk Index (CRI).

32 The estimated Compliance Risk Score is converted into a Company Risk Index by dividing the sum of compliance risk scores for exceedances in zones, at final water points, supply points and at reservoirs over 12 months by the company population, total supply volume or combined reservoirs capacity respectively, and summing these categories.

33 In 2019, the provisional total CRI score calculated by the DWI for Anglian Water (including Hartlepool) was 1.7, which is an improvement on our 2018 CRI score of 2.1.

34 Final 2019 CRI results will be published in the Chief Inspector's Report in July.

Event Risk Index (4Q.29)

35 The DWI has developed a new Event Risk Index (ERI), alongside CRI, for measuring event based risk.

36 The estimated Event Risk Score is calculated based on the event severity, the DWI assessment, the population impacted and the duration of the event. This is converted into a Company Event Risk Index by dividing the sum of the scores for the year by the company population.

37 In 2019, the provisional ERI score calculated by the DWI for Anglian Water (including Hartlepool) was 8.3, which is an improvement on our 2018 ERI score of 9.1.

38 Interim 2019 ERI results will be published in the Chief Inspector's Report in July, pending the outcome of ongoing event assessments and will be finalised in April 2021.

Volume of leakage above or below the Sustainable Economic Level (4Q.30)

39 For the purposes of this table we have assumed a Sustainable Economic Level of Leakage of 211 Ml/d. For more information please see the commentary to table 3A line 10.

Table 4R - Non-Financial Data - Wastewater Network and Sludge

	Item description	Unit	Current year
A	**Wastewater network**		
1	Connectable properties served by s101A schemes completed in the report year	nr	774
2	Number of s101A schemes completed in the report year	Nr	6
3	Total pumping station capacity	kW	120,923
4	Number of network pumping stations	nr	6,266
5	Total number of sewer blockages	nr	39,177
6	Total number of gravity sewer collapses	nr	270
7	Total number of sewer rising main bursts / collapses	nr	138
8	Number of combined sewer overflows	nr	1,275
9	Number of emergency overflows	nr	896
10	Number of settled storm overflows	nr	371
11	Sewer age profile (constructed post 2001)	km	2,064
12	Volume of trade effluent	Ml/yr	22,325.06
13	Volume of wastewater receiving treatment at sewage treatment works	Ml/yr	632,135.70
14	Length of gravity sewers rehabilitated	km	32
15	Length of rising mains replaced or structurally refurbished	km	9
16	Length of foul (only) public sewers	km	19,145
17	Length of surface water (only) public sewers	km	11,613
18	Length of combined public sewers	km	10,317
19	Length of rising mains	km	4,576
20	Length of other wastewater network pipework	km	6
21	Total length of "legacy" public sewers as at 31 March	km	45,657
22	Length of formerly private sewers and lateral drains (s105A sewers)	km	31,200
B	**Sludge**		
23	Total sewage sludge produced, treated by incumbents	ttds/ year	149.1
24	Total sewage sludge produced, treated by 3rd party sludge service provider	ttds/ year	0.0
25	Total sewage sludge produced	ttds/ year	149.1
26	Total sewage sludge produced from non-appointed liquid waste treatment	ttds/ year	2.8
27	Percentage of sludge produced and treated at a site of STW and STC co-location	%	28.55%
28	Total sewage sludge disposed by incumbents	ttds/ year	84.1
29	Total sewage sludge disposed by 3rd party sludge service provider	ttds/ year	0.0
30	Total sewage sludge disposed	ttds/ year	84.1

	Item description	Unit	Current year
31	Total measure of intersiting 'work' done by pipeline	ttds*km/year	21
32	Total measure of intersiting 'work' done by tanker	ttds*km/year	2,057
33	Total measure of intersiting 'work' done by truck	ttds*km/year	5,069
34	Total measure of intersiting 'work' done (all forms of transportation)	ttds*km/year	7,147
35	Total measure of intersiting 'work' done by tanker (by volume transported)	m3*km/year	85,032,357
36	Total measure of 'work' done in sludge disposal operations by pipeline	ttds*km/year	0
37	Total measure of 'work' done in sludge disposal operations by tanker	ttds*km/year	0
38	Total measure of 'work' done in sludge disposal operations by truck	ttds*km/year	5,057
39	Total measure of 'work' done in sludge disposal operations (all forms of transportation)	ttds*km/year	5,057
40	Total measure of 'work' done by tanker in sludge disposal operations (by volume transported)	ttds*km/year	0
41	Chemical P sludge as percentage of sludge produced at STWs	%	48.40%

s101A Schemes completed In the report year (4R.1 and 4R.2)

1 Five schemes have been completed within year five and a sixth has made connections available to customers giving a total of six S101a requirements having been met. We have included the connectable properties from Moortown and Holton le Moor scheme because the letters to customers have been issued and properties have been connected. Tankering of waste from the works is currently underway awaiting final trial results before treated effluent is returned to the environment directly from the works.

2 These six schemes have resulted in 774 new customers able to connect to a sewerage network.

Scheme Location	No. connectable properties
Bythorn & Keyston	115
Fulmodeston	171
Moortown & Holton le Moor	94
Pitstone	19
Swafield and Bradfield	112
West Pinchbeck	263

Capacity and number of network pumping stations (4R.3 and 4R.4)

3 The number of pumps, rated power for each pump, location and asset status have been used where this information was held in corporate databases. The rated power of the remaining pumps, where data was not currently centrally held, was estimated through extrapolation based on site annual energy consumption (and pump hours run where available). The number of sites was calculated based on this more granular pump specific asset data. A recent assessment of co-located "sites" has identified ten sites where individual pumping stations had been listed as separate sites (i.e. a separate storm PS site and foul PS site) and thirty five duplicate records. A more rigorous assessment of site operational

status has revealed five more "out of service" pumping stations which have now been excluded. Inlet pumping stations sited on sewage treatment works have been excluded because they have been considered to be inter-stage pumping stations.

Total number of sewer blockages (4R.5)

4 The total number of blockages has fallen compared to 2018/19. In 2019/20 we had 39,177 blockages compared to 40,575 in 2018/19. This is due to a fall in the number of blockages on transferred sewers in the reporting period. We continue to focus on proactive measures to prevent blockages, with targeting of known blockage hotspots, and we attribute the reduction to the success in those programmes.

Total number of sewer rising main bursts / collapses (4R.6 and 4R.7)

5 There were 79 reportable public sewer collapses and 191 reportable transferred sewer collapses, totalling 270 for 2019/20.

6 There were 122 reportable public burst rising mains and 14 reportable transferred burst rising mains, totalling 136 for 2019/20.

7 The total of lines 4R.6 and 4R.7 differ from the total number of collapses and bursts reported in table 3B because 3B data excludes collapses and bursts on sewers that transferred under the 2011 regulations.

Numbers of overflows (4R.8 and 4R.9)

8 Figures for 2019/20 are taken from source databases at the end of the reporting year.

9 We are reporting an increase in our number of emergency overflows. These are overflows from pumping stations which were previously permitted to operate under both storm and emergency conditions and were therefore counted as storm overflows. The Environment Agency has now changed these permits so that they cover a discharge in an emergency only. As a result we are now counting them as emergency overflows.

10 The number of combined sewer overflows reported in line 8 might therefore be expected to fall when compared with last year. We have reviewed a number of WRC permits which include references to multiple storm overflows on one site. Previously we have only counted one storm overflow in these situations but where they are clearly different overflows we are now counting them as separate overflows. The overall effect of these two changes is a small increase in the number of storm overflows that we are reporting in line 8.

Sewer age profile (constructed post 2001) (4R.11)

11 The best estimated year laid of every mapped sewer has been maintained. Our approach is iterative, based on our corporate systems, historical development polygons, deed dates (for non-infra sites to sub-catchments) and the length weighted median year for each material.

12 These lengths have increased slightly on last year, with 103kms more lengths in this age band when compared to 2018/19 and is a smaller increase than seen in previous years.

13 We have assumed that the age profile of modelled lengths of section 24 and transferred sewers is spread across the age bands and have used a weighted average method.

Volume of wastewater receiving treatment at sewage treatment works (4R.13)

14 For smaller WRCs (serving less than 250 population equivalent) an estimate has been made of the flow discharged per year. The numbers for this line were then produced by combining the separate values for the measured flows from larger WRCs with this estimated flow from the smaller WRCs.

Length of gravity sewers rehabilitated (4R.14)

15 In 2019/20 we rehabilitated 32.076km of gravity sewers to grade three or higher. We have improved the quality of data available from the rehabilitation programme, identifying the length of assets brought up to acceptable grade by patch repair.

Length of rising mains replaced or structurally refurbished (4R.15)

16 In 2019/20 we refurbished or replaced 9.303 km of rising mains which includes 300m of diversion as a result of Network Rail's electrification of the Midland Main line.

Length of wastewater network pipework (4R.16-4R.21)

17 Our modelled estimate of ex-section 24 sewer lengths have been included in our reported sewer lengths since 2002/03; therefore these have been included in these lines. Our modelled length includes an assessment of the surface water sewers and we have assumed, given the typical sewer practice at the time, the remainder are combined sewers.

18 Lines 16-19 have all seen increases for 2019/20, with foul sewer lengths seeing the largest increase of 140km from 2018/19.

19 Rising mains include both pumped and vacuum movement methods, and there has been a 38km increase in these lengths in 2019/20.

20 In line 4R.20 we have included a length of 6.325km which is for a sludge main.

Length of formerly private sewers and lateral drains (s.105A sewers) (4R.22)

21 We are reporting our total estimated length of modelled transferred sewers. These are 26,700km of laterals and 4,500km of private drains. This estimate is based on the findings of a number of studies we undertook prior to 2011.

Total sludge produced, treated by incumbents (4R.23)

22 The number reported was calculated in the same way as in APR 2019. At present this is at the point of treatment (e.g. thickened blended sludge entering sludge treatment i.e. the advanced digestion process, conventional digester feed or liming), rather than the boundary of network plus and bioresources. Cross boundary raw cake imports from Yorkshire Water Services (0.151 ttds) have been excluded in line with the line definition. We have invested at sites to include and improve dry solids monitoring at the point of treatment at a number of our STCs. The monitor is a new type capable of operating at a higher dry solids range more suited to our operating parameters, we will monitor instrument performance and accuracy and if successful consider further roll out of the technology to our remaining STCs. The amount of sludge treated fell slightly on the prior year (down 1.9 ttds), although the difference is marginal. However, we did treat an extra 2.4 ttds through Advanced Digestion and reduced the amount limed by 40%. This underlines our improvement in the operational management of our STCs, including creation of a separate sludge management team in April 2019. At two STWs we receive wastewater flows from customers of another water company: In common with previous practice, we have included the sludge arising from these flows in this line.

Total sewage sludge produced from non-appointed liquid waste treatment (4R.26)

23 We have only received domestic waste (cess and septic) non-appointed liquid waste in the reporting period. We have calculated this by taking the total wet tonnage recorded (371.0 wet tt) and applying the average Total Suspended Solids (TSS) of randomly sampled loads at the receiving STWs (7636.06 mg/l, n=440) in a similar manner to APR 2019.

Percentage of sludge produced and treated at a site of STW and STC co-location (4R.27)

24 We have included the percentage of sludge produced on an STW and STC co-location only when sludge treatment is present (not raw dewatering sites). We have therefore counted our 9 advanced anaerobic digestion (AD) sites, one conventional AD site and 1 lime plant (Boston was operated for liming by Singleton Birch in May 2019 on its raw cake production only).

25 We have adhered to the updated definition following clarification from Ofwat in 2019, namely:

26 "The percentage of the sludge quantity reported in 4R.25 that is produced at co-located sites. For the purposes of this definition: i) "co-located" includes sites where the STC is physically separate but the sludge is transferred from a wastewater treatment site by pipeline, and ii) STC means any site where sludge is treated to a standard such that it can be recycled to the environment or disposed of without any further treatment".

27 We confirm that we have reported in line with the clarified definition and did so in previous submissions.

Total sewage sludge, disposed by incumbents (4R.28)

28 The number reported was calculated in the same way as in APR 2019 in line with the definition, based on treated material hauled to agricultural land (but not necessarily spread), into composting (zero this year) and into land reclamation (zero this year) as now defined. This number includes the treated equivalent (advanced digested at Pyewipe and Great Billing) of the raw sludge received from Yorkshire Water Services (0.100 ttds). The large reduction in the amount of sludge disposed compared to the prior year is because we still had 7.2 ttds of treated cake on stock at STCs at the end of the year as a result of a wet autumn and winter. The remaining 6.3 ttds can be accounted for by having digested more sludge, treated significantly less with liming.

Total sludge disposed by third party sludge service provider (4R.29)

29 We have reported number to one decimal place as zero. We would include any amounts of sludge transferred to third parties for activated sludge or digester plant seeding, if material. For example, in 2018/19 we did provide a small amount of activated sludge (40 m^3) from Cambridge STW to Etex Ltd. in Meldreth for reseeding their effluent treatment plant. This equates to 0.0028 ttds and therefore is not material. In a similar way it has not been reported in line 37 as the actual number is 0.0812 ttds*km/year. However, there were no such transfers in the reporting period.

Total measure of intersiting 'work' done by pipeline (4R.31)

30 We transfer sludge by underground pipeline a measured distance of 6.325 km from sludge holding tanks at Southend to Centrifuge feed tanks at Rochford. This is the only pumped transfer. We have not included this in Line 25 as it is a raw sludge transfer which goes elsewhere for treatment. This line has been calculated in the same way as for APR 2019 except again we did dewater some sludge at Southend (3.225 ttds) in the reporting period, which was transported by road direct to an STC and so this has been excluded from the calculation.

Truck and tanker distances (4R.32, 33, 35, 37 and 38)

31 All our 'trucked' distance is estimated road distance (km), based on straight line distance x 1.35, which we have assessed as the relationship between straight line and road distance. All 'tankered' lines use measured road distance.

Total measure of intersiting 'work' done by tanker (4R.32)

32 We measure tankering work volumetrically, so to convert cubic meters to ttds we have used an average percentage of dry solids of 2.42. This is the average of measured data for the 2018/19 period. Line 35 is unadjusted for dry solids content equivalent number.

Total measure of intersiting 'work' done by truck (4R.33)

33 We have included all raw cake transfers between dewatering centres and STCs in this line.

Total measure of 'work' done in sludge disposal operations by tanker and by volume transported (4R.37 and 4R.40)

34 We have not passed any liquid sludge to third parties in the reporting year and as our entire disposal to agricultural land, land reclamation (when applicable) and composting is completed as cake, these are zero entries.

Total measure of 'work' done in sludge disposal operations by truck (4R.38)

35 Treated cake that is transferred to intermediate storage, as well as STC direct to the landbank or land reclamation, has been included. This number has reduced slightly during the reported period in comparison to 2018/19. However, we feel that this does not fully reflect the efficiency gained in improving the utilisation of our vehicle fleet. We have increased the amount of treated cake backhauled (treated cake that is transferred to intermediate storage before recycling to local landbank) in order to take advantage of otherwise empty trucks once they have offloaded raw cake at the STCs. This allows us to access landbank around former STCs (now raw dewatering sites) and overall reduces haulage to land distance, as these lorries would be returning in any case. In 2019/20 we backhauled 10.47 ttds of treated cake, this equates to 661 ttds*km.

Chemical P sludge as percentage of sludge produced at STWs (4R.41)

36 The number reported was calculated in the same way as in APR 2019 in line with the definition.

37 We have not included sludge arising from P removal at Whitlingham (Norwich), either now or previously as this site has a biological nutrient removal plant removing P biologically and we do not dose chemicals there. Similarly, we do not include iron salt dosing at Clacton which is for enhanced settlement.

Table 4S - Non-Financial Data - Sewage Treatment

	Line description	Unit	Treatment categories							
			Primary	Secondary		Tertiary				Total
				Activated Sludge	Biological	A1	A2	B1	B2	
A	**Load received at sewage treatment works in 2018-19**									
1	Load received by STWs in size band 1	kg BOD5/day	1 7	378	1,437	227	8	414	0	2,481
2	Load received by STWs in size band 2	kg BOD5/day	0	474	1,321	229	21	752	47	2,845
3	Load received by STWs in size band 3	kg BOD5/day	0	2,077	6,264	1,529	255	6,693	602	17,420
4	Load received by STWs in size band 4	kg BOD5/day	0	9,402	18,752	4,529	3,380	14,883	9,818	60,764
5	Load received by STWs in size band 5	kg BOD5/day	0	10,600	7,126	5,556	14,293	3,229	26,884	67,689
6	Load received by STWs above size band 5	kg BOD5/day	0	107,626	9,375	18,366	123,294	-	25,690	284,350
7	**Total load received**	kg BOD5/day	1 7	130,557	44,275	30,436	141,252	25,972	63,041	435,549
8	Load received from trade effluent customers at treatment works	kg BOD5/day								47,806
B	**Number of sewage treatment works at 31 March 2019**									
9	STWs in size band 1	nr	6	52	299	28	1	49	-	435
10	STWs in size band 2	nr	0	19	57	10	1	32	2	121
11	STWs in size band 3	nr	0	26	96	24	3	100	7	256
12	STWs in size band 4	nr	0	27	71	15	8	56	30	207
13	STWs in size band 5	nr	0	9	8	5	13	3	26	64
14	STWs above size band 5	nr	0	16	3	3	20	-	7	49
15	**Total number of works**	nr	6	149	534	85	46	240	72	1,132

C	**Population equivalent**		
16	Current population equivalent served by STWs	000	7,043.891
17	Current population equivalent served by discharge relocation schemes	000s	0.771
18	Current population equivalent served by filter bed STWs with tightened/new P consents	000s	68.848
19	Current population equivalent served by activated sludge STWs with tightened/new P consents	000s	33.843
20	Current population equivalent served by groundwater protection schemes	000s	0.000
21	Current population equivalent served by STWs with a Flow1 driver scheme	000s	0.000
22	Current population equivalent served by STWs with tightened/new N consents	000s	0.000
23	Current population equivalent served by STWs with tightened/new sanitary parameter consents	000s	40.086
24	Current population equivalent served by STWs with tightened/new UV consents	000s	0.000
25	Population equivalent treatment capacity enhancement	000s	77.952

Line description	Unit	Treatment works consents															
		Phosphorus					BOD5						Ammonia					
		<=0.5mg/l	>0.5 to <=1mg/l	>1mg/l	No permit	Total	<=7mg/l	>7 to <=10mg/l	>10 to <=20mg/l	>20mg/l	No permit	Total	<=1mg/l	>1 to <=3mg/l	>3 to <=10mg/l	>10mg/l	No permit	**Total**
A	**Load received at sewage treatment works in 2018-19**																	
1	Load received by STWs in size band 1	kg BOD5/day	0	0	0	2,472	2,472	-	0	216	234	2,023	2,472	0	0	111	215	2,147	2,472
2	Load received by STWs in size band 2	kg BOD5/day	0	68	56	2,783	2,906	-	82	845	1,667	312	2,906	0	21	397	607	1,882	2,906
3	Load received by STWs in size band 3	kg BOD5/day	0	1922	912	14,784	17,618	76	701	8,661	8,009	171	17,618	0	638	5,106	5,101	6,772	17,618
4	Load received by STWs in size band 4	kg BOD5/day	0	11,193	2,988	45,312	59,493	193	9,543	29,103	20,372	281	59,493	1,661	7,307	27,786	10,984	11,754	59,493
5	Load received by STWs in size band 5	kg BOD5/day	0	10,244	2,540	53,395	66,179	-	10,185	29,464	26,513	18	66,179	1,854	8,481	32,140	11,376	12,328	66,179
6	Load received by STWs above size band 5	kg BOD5/day	0	9,897	18,047	257,914	285,857	-	45,664	127,710	112,484	0	285,857	7,130	61,672	117,263	39,418	60,374	285,857
7	**Total load received**	kg BOD5/day	0	33,324	24,543	376,659	434,526	269	66,175	195,999	169,278	2,805	434,526	10,646	78,120	182,802	67,701	95,257	434,526
8	Load received from trade effluent customers at treatment works	kg BOD5/day																	
B	**Number of sewage treatment works at 31 March 2019**																	
9	STWs in size band 1	nr	0	0	0	432	432	-	0	17	24	391	432	0	0	8	22	402	432
10	STWs in size band 2	nr	0	3	3	115	121	-	3	36	66	16	121	0	1	15	26	79	121
11	STWs in size band 3	nr	0	23	11	221	255	1	8	124	119	3	255	0	8	63	76	108	255
12	STWs in size band 4	nr	0	37	9	155	201	1	28	102	69	1	201	4	23	92	39	43	201
13	STWs in size band 5	nr	0	10	2	52	64	-	10	28	25	1	64	2	8	31	12	11	64
14	STWs above size band 5	nr	0	4	1	45	50	-	9	18	23	0	50	1	12	17	7	13	50
15	**Total number of works**	nr	0	77	26	1,020	1,123	2	58	325	326	412	1,123	7	52	226	182	656	1,123

Loads received (4S.1-4S.8)

1 We have calculated the loads using a process consistent with how we historically reported tables 17c and 17d in the June Return.

2 The size banding of the individual Water Recycling Centres (WRCs) has been determined using the total resident population, which is comprised of domestic population, tankered waste (from septic tanks and cesspools) and trade effluent loads. Non-resident population has not been included when determining the size banding of the works, in line with the guidance.

3 The treatment types at our WRCs are assumed to be the same as prior years, unless evidence from operations has been provided. There have been no changes to treatment types in 2019/20.

4 The loads received numbers in lines 4S.1-4S.7 include non-resident population, but exclude the tankered imports from septic tanks and cesspools. This is consistent with our approach to reporting historically and in line with previous Ofwat guidance JR08/004 and RAG 4.08.

5 The numbers in these lines include loads from nine additional WRCs, which belong to other water companies but to which our customers drain and we receive a charge for the treatment of this load. These WRCs are summarised below.

List of Works Owned by other Companies

WRC Name	2019/20 PE (Population Equivalent)	2019/20 Load	Size Band	Treatment Type
Alkborough STW	544	32.62	3	SB
Brentwood Nag Head Ln STW Tham	5948	356.86	4	TB1
Cheveley Park STW	20	1.21	1	PRM
Stansted Mountfichet STW	2277	136.62	4	TB1
Stevenage STW	1507	90.44	3	TA2
Gt Whelnetham-Stanfld Rd STW	7	0.42	1	SB
Halse STW	1278	76.70	3	SB
Severn Trent STW	257	15.44	2	SB
Wingrave STW	5218	313.08	4	SB

6 Consent information is provided by an extract from our PACE database, which is a live document and holds all the consent limits for the WRCs the company operate. Because we do not have the consent information for the nine WRCs which are not in our control, we have not assigned these loads to any consent banding, and so they are excluded from the consents tables.

Number of works (4S.9-4S.15)

7 The number of WRCs includes nine additional WRCs which belong to other water companies, but to which our customers drain. Details of these WRCs can be found in the table above.

8 As with lines 4S.1-7, we have omitted these nine WRCs from the consents table.

Current population equivalent served by discharge relocation schemes (4S.17)

9 We delivered one effluent relocation scheme in 2019/20 to fulfil a CROW Act obligation. The closure of Castle Acre WRC removed a continuous discharge to the River Nar Site of Special Scientific Interest (SSSI) and was supported by Natural England as the best option for the protected site.

Current population equivalent served by filter bed STWs with tightened/new P consents (4S.18)

10 We delivered 22 phosphorous obligations at filter bed works in 2019/20 . This figure includes 17 schemes constructed in 2019/20 (Badwell Ash, Bildeston, Clare, East Langton, Everdon, Foxton-Cambs., Glemsford, Great Easton-Leics., Guilden Morden, Long Bennington, Mendlesham, Necton/Sporle, Old Newton, Sandy, Swaffham, Weedon, West Stow).

11 Four schemes were constructed in 2018/19 but not signed off as complete until this reporting year when Environment Agency permits came into force (Ketton, Long Melford, Pulham St Mary and Shimpling).

12 There was one effluent relocation scheme that resulted in the closure of Rattlesdean WRC. This schemes was implemented to meet Water Framework Directive phosphorous obligations and does not meet the criteria for inclusion in Table 4S, Line 17.

Current population equivalent served by activated sludge STWs with tightened/new P consents (4S.19)

13 We delivered eight phosphorous obligations at activated sludge plants in 2019/20 (Ashwell, Easton on the Hill, Ely, Great Dunmow, Haslingfield, Littleport, Middleton-Northants, Wrestlingworth). The scheme at Easton on the Hill that was constructed in 2018/19 but not signed off as complete until this reporting year when a revised Environment Agency permit came into force.

14 One phosphorous obligation (Great Dunmow) was met through optimisation of biological removal process rather than capital investment. As a result PE figures for Great Dunmow have not been included in Table 4S, Line 18.

Current population equivalent served by groundwater protection schemes, STWs with a Flow1 driver scheme or STWs with tightened/new N consents (4S.20-22)

15 No schemes under these drivers were expected or delivered this year.

Current population equivalent served by STWs with tightened/new sanitary parameter consents (4S.23)

16 We delivered seven ammonia obligations in 2019/20 to meet Good Status targets in the receiving watercourse (Foxton-Leics, Kibworth, Louth, North Somercotes, Doddinghurst, Tempsford, Ulceby). There were no BOD obligations to deliver in this reporting year.

Current population equivalent served by STWs with tightened/new UV consents (4S.24)

17 There were no schemes delivered during the reporting year which involved the tightening, or introduction, of new or tightened consent conditions for microbiological parameters to meet the requirements of the EU Shellfish Waters or revised Bathing Water Directives.

Population equivalent treatment capacity enhancement (4S.25)

18 In 2019/20 the population equivalent capacity added was 77,982. The enhanced WRCs were Leighton Linslade, Sawtry, Great Barford, Buckingham, Long Buckby, Marston, Swanton Moreley (Mattishall), Raunds, Silverstone, Sleaford and Wickford.

Table 4T - Non-Financial Data - Sludge Treatment

	Item description	by Incumbent %	by 3rd party sludge service providers %
A	**Sludge treatment process**		
1	% Sludge - untreated	0.0%	0.0%
2	% Sludge treatment process - raw sludge liming	4.4%	0.0%
3	% Sludge treatment process - conventional AD	1.7%	0.0%
4	% Sludge treatment process- advanced AD	94.0%	0.0%
5	% Sludge treatment process - incineration of raw sludge	0.0%	0.0%
6	% Sludge treatment process - incineration of digested sludge	0.0%	0.0%
7	% Sludge treatment process - phyto-conditioning/composting	0.0%	0.0%
8	% Sludge treatment process - other (specify)	0.0%	0.0%
9	**% Sludge treatment process - Total**	**100.0%**	**0.0%**
B	**(Un-incinerated) sludge disposal route**		
10	% Sludge disposal route - landfill, raw	0.0%	0.0%
11	% Sludge disposal route - landfill, partly treated	0.0%	0.0%
12	% Sludge disposal route - land restoration / reclamation	0.0%	0.0%
13	% Sludge disposal route - sludge recycled to farmland	100.0%	0.0%
14	% Sludge disposal route - other (specify)	0.0%	0.0%
15	**% Sludge disposal route - Total**	**100.0%**	**0.0%**

Sludge treatment process

1 We have submitted all data to two decimal places so that total in Line 9 correctly totals to 100.0%. Entering data to one decimal place could result in the totals being 99.9% or 100.1%. We can confirm that the quantity of sludge produced to which the percentages reported in Lines 1 to 9 (inclusive) relate is that reported in table 4R, line 23.

% Sludge - untreated (4T.1)

2 We would include here raw sludge that was disposed to land reclamation without treatment. However, in 2019/20 there was no such activity carried out.

% Sludge – raw sludge liming (4T. 2)

3 Our refocus on active management of STC performance has reaped benefits allowing us to process 94.0% through Advanced Digestion in 2019/20, up from 90.9% in 2018/19 and 82.2% in 2017/18. Occasional peak lopping of raw sludge cake loads could still be undertaken by liming and as such 4.4 % was limed in 2019/20 compared with 7.3% and 16.1% in 2018/19 and 2017/18, respectively.

% Sludge treatment process - phyto-conditioning/composting (4T.7)

4 During 2019/20 we did not put any treated biosolids into co-compost.

% Sludge treatment process- other (4T.8)

5 We have previously used this line to report on Thermally dried sludge (2011/12, 2012/13 and 2013/14), however, these assets are now mothballed and have not been used these in subsequent years.

Sludge disposal route

6 We can confirm that the quantity of sludge produced to which the percentages reported in lines 10 to 15 (inclusive) relate to that reported in Table 4R line 28.

% Sludge disposal route - other (4T.14)

7 In the previous year 2017/18 we included Digested Cake disposals into co-compost in the 'by incumbent' section here (0.2%). However, as confirmed above we did not put any treated Biosolids into Co-Compost during 2019/20 or 2018/19. We would also include sludge that went to 3rd parties for activities such as digester seeding or for research projects in the 'by 3rd party sludge service providers' sections. However, no sludge went to 3rd parties in the reporting year.

Table 4U - Non-Financial Data - Properties, Population and Other - Wholesale Wastewater

	Item description	Unit	Current year
A	**Properties and population**		
1	Residential properties connected during the year	000	27.284
2	Business properties connected during the year	000	1.508
3	Residential properties billed unmeasured sewage	000	475.721
4	Residential properties billed measured sewage	000	2,120.438
5	Residential properties billed for sewage	000	2,596.159
6	Business properties billed unmeasured sewage	000	2.346
7	Business properties billed measured sewage	000	110.135
8	Business properties billed for sewage	000	112.481
9	Void properties	000	102.807
10	Total number of properties	000s	2,811.447
11	Resident population	000	6,204.156
12	Non-resident population	000	258.238
B	**Other**		
13	Energy consumption - network plus	MWh	351,953.131
14	Energy consumption - sludge	MWh	139,928.525
15	Energy consumption - wholesale	MWh	491,881.656
16	Population resident in National Parks, SSSIs and Areas of Outstanding Natural Beauty (AONBs)	000s	72.000
17	Total sewerage catchment area	km2	4,121
18	Designated bathing waters	nr	49
19	Number of intermittent discharge sites with event duration monitoring	nr	336
20	Number of monitors for flow monitoring at STWs	Nr	0
21	Number of odour related complaints	nr	3,574
22	Volume of storage provided at CSOs, storm tanks, etc to meet spill frequency objectives	m3	0
23	Total volume of network storage	m3	10,300,718

Residential properties billed (4U.3-5)

1 The changes in data from prior years reflect the continued process of switching customers from unmeasured to measured billing plus new connections.

Business properties billed (4U.6-4U.8)

2 In these lines we report the number of business properties for which we have reported revenue. They were not billed by Anglian Water. We have exited the non-household retail market so all our connected non-household properties are now billed by licensed retailers. Movements from prior years reflect continued re-classification of properties in the non-household retail market.

Void properties (4U.9)

3 The number of void properties has reduced in comparison with the previous year, with a reduction in household voids as a result of ongoing data maintenance but an increase in non-household voids. This increase in non-household voids is due to more properties being transferred to void by retailers.

Resident population (4U.11)

4 Population is calculated, based upon Anglian Water SAP customer information and ONS, population and local authority household data. Population is derived using the estimation of households we serve, as a percentage of the Department for Communities and Local Government (DCLG) totals, applied to the ONS Local Authority and Unitary Authority (LAUA) population assessments. Additional account is taken of the communal population, which is derived using census data.

5 The estimate of household population is based on the 2012 (2018 update) sub-national population and the December 2018 household projections from the ONS. Population projections have been amended to reflect the current ONS mid-year estimates revision.

6 We apportion the data for the districts we serve to derive an estimate of the wastewater population in the Anglian Water region.

7 The estimate of non-household population is based on the latest census data published by the ONS. This 'communal' population covers prisons, care homes and military bases. These projections have been revised in line with the paper *'Updating the Department for Communities and Local Government's Household Projections'*, specifically annex 2 *'Improving Institutional Population Estimates and Projections'*. In addition we have added an estimate of people resident in mixed properties.

8 Population has increased by 55,953, in line with the addition of approximately 27,000 new wastewater properties and year on year changes in occupancy rates for the 65 LAUAs in the Anglian Water recycling region.

Energy consumption - Network Plus, Sludge and Wholesale (4U.13-4U.15)

9 As measured by the reporting requirements in RAG 4.08, energy consumption for water recycling has reduced by 27,608 MWhs (5.3 per cent) in 2019/20 from a 2011/12 baseline.

10 Sound energy efficiency savings at some of our water recycling centres have contributed to the reduction in energy consumption since 2011/12. Consumption increased compared to the previous year due to higher levels of rainfall, especially in June and the winter, which demanded greater pumping. Less gas oil was delivered to sites than in 2018/19 when stocks were boosted in the last two quarters. This was in line with our strategy in being prepared for Brexit.

11 A number of assumptions have been made in calculating the water recycling energy consumption data:

- For water recycling, we have applied a financial split from regulatory accounts between sludge and network plus for grid electricity consumption.
- We have included energy from renewable sources generated and used on site, including CHP (combined heat and power), wind and solar.
- Grid electricity and fuel (oil and natural gas) used in offices has been included and split equally between water and water recycling.
- Fuel oil is not recorded on our corporate systems in the categories required and therefore the same split used for electricity has been assumed for each fuel type with the exception of gas oil delivered to water recycling sites.

- As in Annual Performance Report (APR) 2018/19, an assumption has been made that 90 per cent of gas oil delivered to water recycling sites is used for CHP boilers and therefore allocated to the sludge line. In APRs prior to 2018/19, fuel oil delivered to water recycling operations had adopted the same split as electricity, (e.g. 83 per cent network plus and 17 per cent to sludge in 2017/18). However, this was updated in 2018/19 to reflect a more accurate approach that has been adopted by our Management Accountants. A revised split of 10 per cent allocated to network plus and 90 per cent allocated to sludge has been used.

- Transport is not recorded in our corporate systems in the categories required. This is with the exception of RTS fleet Biosolids haulage which has been allocated entirely to the sludge line. For the remaining transport, the same split used for electricity has been assumed.

- For transport (fleet fuel) the split between water and water recycling is not measured and therefore we have assumed a 50/50 split.

- Sub contracted transport (sludge and cake) has not been included, only fleet (directly operated) vehicles.

- We have assumed a 35 per cent thermal efficiency for natural gas consumption in converting to energy output (boilers and CHP).

- Transport for company cars is collected as mileage. We have converted mileage into kWh through using the UKWIR Carbon Accounting Workbook v13 through calculating miles to carbon dioxide equivalent to litres. We are looking to improve our processes in order to capture consumption by electric cars charged at home and those using our own charging infrastructure.

Population resident in National Parks, SSSIs and Areas of Outstanding Natural Beauty (AONBs) (4U.16)

12 The population resident in Areas of Outstanding Natural Beauty (AONB), Sites of Special Scientific Interest (SSSI), and National Parks was estimated using the following approach:

AONB

13 There are four AONBs within Anglian Water's Water Recycling area. These are Lincolnshire Wolds, Norfolk Coast, Suffolk Coast and Heath and Dedham Vale. Each AONB publishes an estimate of population within its area. We quote the figures below, along with the URL of the source data (URLs last accessed June 2020).

Lincolnshire Wolds	10,701	http://www.lincswolds.org.uk/library/annual_review1_16.17.pdf
Norfolk Coastal	13,235	http://www.norfolkcoastaonb.org.uk/mediaps/pdfuploads/pd003722.pdf
Suffolk Coast	26,191	http://www.suffolkcoastandheaths.org/assets/AONB-Management-Plan-20132018.pdf
Dedham Vale	15,000	http://www.dedhamvalestourvalley.org/assets/About-Us/DV-AONB-infographic.pdf
Total	**65,127**	

14 The Norfolk Coast figure is conservative as it covers only parishes wholly within the AONB. The Suffolk Coast figure is computed using an average household size of 2.4, as the Suffolk Coast report contains household numbers rather than population numbers for two Local Authority areas.

SSSI

15 SSSIs overlap extensively with AONBs. Hence there is considerable potential for double counting of the population. As SSSIs tend to be carefully defined to exclude domestic property, the incremental population in SSSIs is small. We have made an assumption that it represents 1 per cent of the total AONB population. This is likely to be generous.

National Park

16 The only National Park in Anglian Water's area is the Broads. The Broads Authority estimates the population within the National Park at 6,300. (http://www.broads-authority.gov.uk/learning/facts-and-figures).

Total sewerage catchment area (4U.17)

17 The figure quoted for the sewerage catchment area covers the aggregate area of all our sewered areas.

Designated bathing waters (4U.18)

18 Figures are based on the number of designated bathing waters in 2019 which is 49. The designation of new bathing waters is undertaken by the Local Authority and Anglian Water has no control over designations.

Number of intermittent discharge sites with event duration monitoring (EDM) (4U.19)

19 The original EDM2 driver in the National Environmental Programme named 336 EDM obligations in 2019/20. Of these named 336 obligations, we have actually installed or upgraded 288 EDMs. We established that 48 of the overflows have either been blocked off because they no longer operate as storm overflows, or the network has been redesigned and an EDM is no longer required.

All 336 obligations and change requests have been signed off by the EA as each site will have had capital spend associated with surveying /investigating it so we have therefore included a figure of 336 for this line.

Number of odour related complaints (4U.21)

20 The number of odour related complaints is similar to 2018/19.

Total volume of network storage (4U.23)

21 This line has been calculated assuming that each length of sewer and rising main is an enclosed volume, using an average of known diameters to calculate the volume for different shaped sewers.

22 There is insufficient data to make an assessment on all offline and online network storage. However many storage facilities have already been captured in our corporate systems as large diameter pipes, which are accounted for in the calculations.

23 There has been a 0.34% increase in capacity in 2019/20 from the capacity quoted in 2018/19.

Table 4V - Operating Costs - Water Resources

Item description	Unit	Impounding Reservoir	Pumped Storage	River Abstractions	Ground-water, excluding MAR water supply schemes	Artificial Recharge (AR) water supply schemes	Aquifer Storage and Recovery (ASR) water supply schemes	Other	Total
Water resources									
A Opex analysis									
1 Power	£m	0.012	0.090	3.546	4.229	-	-	-	7.877
2 Income Treated as negative expenditure	£m	-	-	(0.004)	(0.064)	-	-	-	(0.068)
3 Abstraction charges/ discharge consents	£m	0.426	3.604	1.771	4.241	-	-	-	10.042
4 Bulk supply	£m	-	-	-	-	-	-	-	-
Other operating expenditure									
5 - Renewals expensed in year (Infrastructure)	£m	-	-	-	-	-	-	-	-
6 - Renewals expensed in year (Non-Infrastructure)	£m	-	-	-	-	-	-	-	-
7 - Other operating expenditure excluding renewals - direct	£m	0.068	0.344	2.135	3.985	-	-	-	6.532
8 - Other operating expenditure excluding renewals - indirect	£m	0.290	0.390	3.508	3.471	-	-	-	7.659
9 Total functional expenditure	£m	0.796	4.428	10.956	15.862	-	-	-	32.042
10 Local authority and Cumulo rates	£m	0.044	0.176	0.142	2.703	-	-	-	3.065
11 Total operating expenditure (excluding 3rd party)	£m	0.840	4.604	11.098	18.565	-	-	-	35.107
12 Depreciation	£m	0.187	3.193	1.916	3.150	-	-	-	8.446
13 Total operating costs (excluding 3rd party)	£m	1.027	7.797	13.014	21.715	-	-	-	43.553

Item description	Unit	Water resources	Raw water distribution	Water treatment	Treated water distribution	Total
B Other expenditure - wholesale water						
14 Employment costs - directly allocated	£m	3.659	0.612	10.030	19.445	33.746
15 Employment costs - indirectly allocated	£m	6.323	1.194	9.202	23.615	40.333
16 Number FTEs consistent with 4V.9 above	Nr	79	13	216	419	727
17 Number FTEs consistent with 4V.10 above	Nr	136	26	198	509	869
18 Costs associated with Traffic Management Act	£m	-	-	-	1.444	1.444
C Service charges						
19 Canal & River Trust service charges and discharge consents	£m	-	-	-	-	-
20 Environment Agency service charges/ discharge consents	£m	10.042	-	0.535	-	10.577
21 Other service charges / permits	£m	-	-	-	-	-
22 Statutory water softening	£m	-	-	-	-	-

Operating costs analysis - water resources (4V.1-4V.5)

1 With the exception of local authority rates which are apportioned based on direct costs, the allocation to activity is based on management assessment carried out at an individual site level.

2 Total operating expenditure of £35.1 million is £1.5 million down on the prior year in real terms, with power costs decreasing by £1.6 million due to reduced abstraction resulting from the extreme wet weather experienced at the start of this calendar year.

Employment costs and FTEs - directly allocated (4V.9 and 4V.11)

3 Although some direct opex employment costs can be allocated to service, many front line employees work across operational boundaries and therefore, where not directly allocated, we have used a management assessment of time spent by service. We have nevertheless classed all employees within this category as direct.

4 The number of direct FTEs is assessed from the total employment costs using an average cost per employee.

Employment costs and FTEs - indirectly allocated (4V.10 and 4V.12)

5 Indirectly attributed employment costs are made up of indirect operational employees, employees engaged on capital schemes and general and support employees.

6 General and support employment costs are allocated by an appropriate cost driver as part of our regulatory accounts process.

7 Indirect operational employment costs and employment costs in relation to capex activity are allocated as a proportion of direct employment costs.

8 The number of indirect FTEs is assessed from the total employment costs using an average cost per employee.

Costs associated with Traffic Management Act (4V.13)

9 Reported costs reflect costs directly charged to treated water distribution jobs, including permits and fixed penalty notices.

Service Charges

Environment Agency service charges/ discharge consents (4V.15)

10 Water resources reflects abstraction charges reported under 'Other direct operating expenditure' (4V.4).

11 The costs reported under Water Treatment reflects discharges made from water treatment works.

Table 4W - Operating Costs - Sludge Treatment

Line	Item description	Unit	DPs	Pipeline	Tanker	Truck	Total
A	**Sludge transport method**						
1	Power	£m	3	0.040	0.003	-	**0.043**
2	Income Treated as negative expenditure	£m	3	-	-	-	**-**
3	Discharge consents	£m	3	-	-	-	**-**
4	Bulk supply	£m	3	-	-	-	**-**
	Other operating expenditure			-	-	-	**-**
5	- Renewals expensed in year (Infrastructure)	£m	3	-	-	-	**-**
6	- Renewals expensed in year (Non-Infrastructure)	£m	3	-	-	-	**-**
7	- Other operating expenditure excluding renewals - direct	£m	3	0.018	17.146	-	**17.164**
8	- Other operating expenditure excluding renewals - indirect	£m	3	0.006	6.045	-	**6.051**
9	Total functional expenditure	£m	3	0.064	23.194	-	**23.258**
10	Local authority and Cumulo rates	£m	3	-	0.059	-	**0.059**
11	Total operating expenditure (excluding 3rd party)	£m	3	0.064	23.253	-	**23.317**
12	Depreciation	£m	3	-	0.547	-	**0.547**
13	Total operating costs (excluding 3rd party)	£m	3	**0.064**	**23.800**	**-**	**23.864**

B	Sludge treatment type			Untreated sludge	Raw sludge liming	Conventional AD	Advanced AD	Incineration of raw sludge	Incineration of digested Sludge	Pre-conditioning / composting	Other	Total
14	Power	£m	3	-	0.191	(0.003)	(0.783)	-	-	-	-	**(0.595)**
15	Income treated as negative expenditure	£m	3	-	-	(0.032)	(7.312)	-	-	-	-	**(7.344)**
16	Discharge consents	£m	3	-	-	0.004	0.240	-	-	-	-	**0.244**
17	Bulk supply	£m	3	-	-	-	-	-	-	-	-	**-**
	Other operating expenditure			-	-	-	-	-	-	-	-	**-**
18	- Renewals expensed in year (Infrastructure)	£m	3	-	-	-	-	-	-	-	-	**-**

				Untreated sludge	Raw sludge liming	Conventional AD	Advanced AD	Incineration of raw sludge	Incineration of digested Sludge	Pre-conditioning / composting	Other	Total
19	- Renewals expensed in year (Non-Infrastructure)	£m	3	-	-	-	-	-	-	-	-	**-**
20	Other direct operating expenditure (New cods? Check def'n)	£m	3	-	1.495	0.390	23.883	-	-	-	-	**25.768**
21	Other indirect operating expenditure (new code? Check def'n.)	£m	3	-	0.329	0.101	5.706	-	-	-	-	**6.136**
22	Total functional expenditure	£m	3	-	2.015	0.460	21.734	-	-	-	-	**24.209**
23	Local authority and Cumulo rates	£m	3	-	0.170	0.052	2.914	-	-	-	-	**3.136**
24	Total operating expenditure (excluding 3rd party)	£m	3	-	2.185	0.512	24.648	-	-	-	-	**27.345**
25	Depreciation	£m	3	-	1.126	14.276	20.184	-	-	-	11.466	**47.052**
26	Total operating costs (excluding 3rd party)	£m	3	**-**	**3.311**	**14.788**	**44.832**	**-**	**-**	**-**	**11.466**	**74.397**

C	**Sludge disposal route**			Landfill, raw	Landfill, partly treated	Land restoration / reclamation	Sludge recycled to farmland	Other	Total
27	Power	£m	3	-	-	-	-	-	**-**
28	Income treated as negative expenditure	£m	3	-	-	-	(2.274)	-	**(2.274)**
29	Discharge consents	£m	3	-	-	-	-	-	**-**
30	Bulk supply	£m	3	-	-	-	-	-	**-**
	Other operating expenditure			-	-	-	-	-	**-**
31	- Renewals expensed in year (Infrastructure)	£m	3	-	-	-	-	-	**-**
32	- Renewals expensed in year (Non-Infrastructure)	£m	3	-	-	-	-	-	**-**
33	Other direct operating expenditure (New cods? Check def'n)	£m	3	-	-	-	7.835	-	**7.835**
34	Other indirect operating expenditure (new code? Check def'n.)	£m	3	-	-	-	2.792	-	**2.792**
35	Total functional expenditure	£m	3	-	-	-	8.353	-	**8.353**
36	Local authority and Cumulo rates	£m	3	-	-	-	0.024	-	**0.024**
37	Total operating expenditure (excluding 3rd party)	£m	3	-	-	-	8.377	-	**8.377**
38	Depreciation	£m	3	-	-	-	0.496	-	**0.496**
39	Total operating costs (excluding 3rd party)	£m	3	**-**	**-**	**-**	**8.873**	**-**	**8.873**

Other expenditure - Wholesale wastewater

Line	Item description	Unit	DPs	Network plus sewage collection	Network plus sewage treatment	Sludge	Total
D	**Opex analysis**						
40	Employment costs - directly allocated	£m	3	20.185	24.133	17.767	**62.085**
41	Employment costs - indirectly allocated	£m	3	17.779	21.656	15.414	**54.849**
42	Number FTEs - directly allocated	Nr	0	429	513	378	**1,320**
43	Number FTEs - indirectly allocated	Nr	0	378	460	328	**1,166**
44	Costs asscociated with Traffic Management Act	£m	3	0.190	-	-	**0.190**
45	Costs associated with Industrial Emissions Directive	£m	3	-	-	-	**-**
E	**Service charges**						
46	Canal & River Trust service charges and discharge consents	£m	3	0.140	-	-	**0.140**
47	Environment Agency service charges / discharge consents	£m	3	2.299	6.097	0.244	**8.640**
48	Other service charges / permits	£m	3	-	-	-	**-**

Sludge transport method (4W.1-4W.13)

1 Sludge transport includes all costs associated with the transport of liquid sludge <10% dry solids and the total costs (Total Column) reconciles to the total sludge transport costs shown on table 4E (Sludge Transport column).

2 All sludge is transported via tankers excluding a very small quantity which is transported from Southend to Rochford via pipeline. The costs shown under pipeline represent the estimated power and maintenance cost for pumping based on the pump capacity and utilisation. The reduction in costs this year is due to a 40% reduction in quantity transported via the pipeline.

3 We have no liquid sludge transported by truck. All transportation of raw cake is recorded under Sludge Treatment (Table B) as it is >10% dry solids.

Sludge Treatment Type (4W.14-4W.26)

4 Sludge Treatment assets are predominantly Advanced AD sites with only Chelmsford treating conventional AD and some emergency liming sites at critical periods. There was a reduction in liming activity this year compared to previous generating a reduction in liming costs and a corresponding increase in Advanced AD costs.

Power (sludge treatment) (4W.14)

5 Power costs are captured by our general ledger costing system (SAP) at site level with allocations employed to allocated costs between sewage treatment assets and sludge treatment assets for combined sites. These allocations are based on a combination of site energy monitoring data and historical energy audits. 100 per cent of all CHP generated power is credited to sludge assets regardless if it was consumed by sludge or sewage treatment assets. Power costs exclude power export credits and ROCS credits from CHP energy generation.

6 The total power costs reconciles to table 4E column sludge treatment Line 4E.1.

Income treated as a negative expenditure (sludge treatment) (4W.15)

7 Costs relate to ROCS and power external export income from CHP energy generation. Credits for power consumed within the business (by sewage treatment assets) are recorded under Line 4W.14 (power). Income predominantly related to Advanced AD treatment with a small amount of income from Chelmsford CHP (conventional AD).

8 The total income reconciles to table 4E sludge treatment column Line 4E.2.

Discharge consents (sludge treatment) (4W.16)

9 EA charges for waste permits are allocated to sites and recorded under discharge consents for sludge treatment sites. These are predominantly related to Advanced AD treatment with a small amount relating to Chelmsford STC (conventional AD). The reduction from last year is due to an over accrual raised in prior year for EA waste permits on sludge treatment sites.

10 The total reconciles to table 4E sludge treatment column Line 4E.3.

Other direct & indirect operating expenditure (sludge treatment) (4W.20-4W.21)

11 Other direct expenditure is captured on our general ledger costing system (SAP) and recorded to STC sites. Allocations are adopted for non site specific direct expenditure. Indirect expenditure is allocated to sites based on the gross direct expenditure excluding power and income. Site costs are subsequently allocated to treatment types. These are predominantly related to Advanced AD treatment with a small amount relating to Chelmsford STC (conventional AD) and emergency liming sites.

12 The sum of other direct and indirect operating expenditure reconciles to table 4E sludge treatment column Line 4E.7.

Local authority rates (sludge treatment) (4W.23)

13 Rates costs are allocated to sludge assets based on Gross Modern Equivalent Asset Values (17/18) and subsequently allocated to sites and treatment types based on gross direct costs excluding Power and Income.

14 The total local authority rates reconciles to table 4E sludge treatment column Line 4E.8.

Total operating expenditure excluding 3rd party (sludge treatment) (4W.24)

15 The total reconciles to table 4E sludge treatment column Line 4E.9.

Sludge disposal route (4W.27-4W.39)

16 100% of our sludge was disposed via recycling to farmland during the financial year.

Power (sludge disposal route) (4W.27)

17 We have no power costs relating to sludge disposal activities.

18 The total reconciles to table 4E sludge disposal column Line 4E.1.

Income treated as a negative expenditure (sludge disposal route) (4W.28)

19 This line includes all income from farm sales for treated final cake. The income is allocated back to sites based on the recorded haulage volumes of final cake to land. The sites are subsequently allocated and totaled by sludge disposal routes from the final sludge treatment sites.

20 The total reconciles to table 4E sludge disposal column Line 4E.2.

Other direct & indirect operating expenditure (sludge disposal route) (4W.33-4W.34)

21 Direct other operating expenditure is captured on our general ledger costing system (SAP) by sites with other direct costs (spreading and farm sales advisers, etc.) allocated to sites based on farm sales income. Indirect management and support expenditure is allocated to sites based on direct expenditure. The sites are subsequently allocated and totaled by sludge disposal routes from the final sludge treatment sites.

22 The total reconciles to table 4E sludge disposal column Lines 4E.7.

Local authority rates (sludge disposal route) (4W.36)

23 This line includes a small allocation of business rates for central offices allocated to sludge disposal routes based on direct expenditure.

24 The total reconciles to table 4E sludge disposal column Line 4E.8.

Total operating expenditure excluding 3rd party (sludge disposal route) (4W.14)

25 The total reconciles to table 4E sludge disposal column Line 9.

Historical cost depreciation (4W.12, 4W.25 and 4W.38)

26 The only sludge pipeline asset we hold is the pipeline between Southend and Rochford which was installed pre-privatisation and, as such, is not separately identifiable in our fixed asset register. As it is not possible to reliably separate out and attach a value to this pipeline, and given the immateriality of any values involved, any associated depreciation charge is included in the Wastewater Network+ depreciation charge reported in table 2D.

27 Any future capital expenditure on sludge pipeline assets will be recorded and reported as such.

28 The sludge depreciation charge for the year is higher than years prior to 2018 due to the depreciation on assets which have been retained for resilience purposes being accelerated over the remainder of AMP 6 as these assets no longer form part of the sludge treatment strategy from 1 April 2020. The resilience assets depreciation increase was effective from 1 October 2017 resulting in a higher charge for the second half of 2018 and the whole of 2019 and 2020.

29 The total depreciation charge for sludge treatment and disposal assets for each year has been shared across the column headings based on the principal sludge treatment technology in use at each sludge treatment centre (STC) and 2019/20 depreciation charges applicable to each STC. Raw sludge liming, Conventional AD and Other are higher than years prior to 2018 due to a second and final full year of accelerated depreciation on resilience assets. Other depreciation is mainly depreciation on resilience assets.

30 All sludge cake is disposed on farmland.

Employment costs and FTEs - directly allocated (4W.17 and 4W.19)

31 Although some direct operating employment costs can be allocated to service, many front line employees work across operational boundaries and therefore, where not directly allocated, we have used a management assessment of time spent by service. We have nevertheless classed all employees within this category as direct.

32 The number of direct FTEs is assessed from the total employment costs using an average cost per employee.

Employment costs and FTEs - indirectly allocated (4W.18 and 4W.20)

33 Indirectly attributed employment costs are made up of indirect operational employees, employees engaged on capital schemes and general and support employees.

34 General and support employment costs are allocated by an appropriate cost driver as part of our regulatory accounts process.

35 Indirect operational employment costs and employment costs in relation to capex activity are allocated as a proportion of direct employment costs.

36 The number of indirect FTEs is assessed from the total employment costs using an average cost per employee.

Costs associated with Traffic Management Act (TMA) (4W.44)

37 Reported costs reflect TMA costs principally charged to sewerage, including permits and administration costs but excluding and fixed penalty notices and fines.

Costs associated with Industrial Emissions Directive (4W.45)

38 We have no costs relating to the Industrial Emissions Directive.

Canal & River Trust service charges and discharge consents (4W.46)

39 We have included here payments we make to British Waterways.

Environment agency service charges/discharge consents (4W.47)

40 We have included here payments to the Environment Agency for discharge consents for Water Recycling Centres and pumping stations and waste permits for sludge treatment.

Other discharge charges/permits (4W.48)

41 We have no other discharge charges/permits.

42 The totals of lines 4W.46-4W.48 reconciles to table 4E Line 4E.3 (discharge consents).

Notes to the Annual Performance Report

The following notes set out additional policies and disclosures required by the Regulatory Accounting Guidelines (RAGs) which have not already been covered by the preceding tables and associated commentaries.

(1) General

The Company's activities are regulated by the conditions of a Licence granted to the Company by the Secretary of State for the Environment. With certain exceptions, the regulatory provisions do not apply to business activities which are not connected with the carrying out of the water and sewerage function; these business activities are referred to as non-appointed business (see note 3).

Under the RAGs the classification of certain balances within the regulatory accounts differs from that disclosed in the statutory financial statements. A reconciliation of the differences is provided in Tables 1A to 1D.

The narrative disclosures required by RAG 3.11, section 4 are provided with the relevant tables, with the exception of the tax reconciliations which are provided in note 8.

(2) Accounting policies

(a) Revenue recognition

The following detailed policy on revenue recognition supplements the turnover accounting policy within the statutory financial statements.

i. Occupied properties are chargeable for water and sewerage, and revenue is recognised based on services supplied. The identity of the occupier is ascertained by either contact initiated from the occupier, completion of a questionnaire sent out by the Company to the premises, a visit by a customer services representative or searches of publicly available property data. Unoccupied and unfurnished properties are vacant properties and deemed void, and therefore no billing is raised and no turnover recognised. The status of a property as vacant/void is confirmed by reading of the meter to ascertain changes in consumption, or in relation to unmeasured properties through providing a questionnaire for completion and return by any occupier, plus an inspection where considered necessary.

ii. Household and non-household charges apply to unoccupied premises in certain circumstances as set out in our Legal Charges Scheme, and revenue is recognised on these properties consistent with occupied properties. Unoccupied premises which attract charges include:

- premises which are left unoccupied for periods of time but are left with bedding, a desk or other furniture so that they may be used as a dwelling or as office or commercial premises.
- premises where renovation or building work is being undertaken.
- premises which are not normally regarded as being occupied such as cattle troughs and car parks.
- all metered premises (furnished and unfurnished) where water is being consumed.

Further, the following provisions are applied in respect of disconnections:

- Premises listed in Schedule 4A of the Water Industry Act 1991 (e.g. any dwelling occupied by a person as his or her only or principal home) cannot be disconnected for non-payment of charges.

- If the water supply to any premises is disconnected for any reason but we continue to provide sewerage services to those premises, the customer will be charged the appropriate sewerage tariff unless it can be demonstrated that the premises will be unoccupied for the period that the premises are disconnected, in which case there is no charge. Revenue is recognised for sewerage services up to the point we are aware the property becomes unoccupied.

- If it is subsequently found that the premises were occupied for any period when we were advised that the premises would be unoccupied, we will apply the appropriate sewerage tariff to that period, raise appropriate retrospective bills and recognise revenue at that point.

- In the event that we suspect that a property is occupied but we have no record of the occupier, we take steps to establish the identity of the occupier in order that billing can commence and revenue be recognised. 'Occupier' is defined to include any person who owns premises as set out in part (i) above, and also any person who has agreed with us to pay water supply and/or sewerage charges in respect of any premises (e.g. a Bulk Meter Agreement).

iii. Charges on income relating to debt recovery costs, which are chargeable to customers, are credited to operating costs and charged to the relevant customer account. Turnover is unaffected by these debt recovery costs. Historically, we have only sought to recover court and solicitors' fees where we have issued a court summons. From 2009/10 the Legal Charges Scheme was amended to allow debt recovery agency fees to be recharged to customers.

iv. As soon as new properties are occupied and furnished or consumption is recorded, liability for water and sewerage charges commences, and revenue starts to accrue.

(b) Bad debt

The underlying customer bad debt provision is calculated based on applying expected recovery rates, using actual historical cash collection performance, for an aged debt profile. Our approach to providing for bad debt has not changed, the methodology being consistent with the expected credit loss impairment approach set out in IFRS 9 'Financial Instruments'. As a result, an atypical bad debt charge was made to reflect the forecast impact on the ability to collect unprovided debt at 31 March due to the impact of Covid-19.

Debt is written off when it falls into one of the following categories.

- The debt is the subject of insolvency proceedings and a claim has been submitted.

- The customer has absconded and subsequent trace activities have proven unsuccessful.

- County Court proceedings and attempts to recover the debt by a collection agency have been unsuccessful.

- The age and value of debt make it uneconomic to pursue.

The debt written off in the current year was £18.9 million (2019: £16.2 million). The reason for the increase is that more debt met the write off criteria during the year. There have been no changes to our debt write-off policy during the year.

(c) Capitalisation policy

The capitalisation policy applied to the APR is consistent with that used in the statutory accounts (accounting policy 1(k) of the Annual Integrated Report), with the exception of the capitalisation of interest. This has been excluded from the APR as per the guidance in RAG 1.08, section 1.6.

(3) Information relating to allocations and apportionments between the appointed and any other business or activity of the appointee or associated company

Non-appointed business activities include legal searches to locate utility infrastructure, domestic emergency and personal accident insurance cover, recreation services, leisure services and the provision of consultancy services. The North Tees water supply agreement to the Huntsman Petrochemical site, which is not in the Anglian Water area, has also been treated as non-appointed business.

Approximately 95 per cent of the operating costs relating to these activities is directly incurred and does not require allocation. Other relevant costs have been allocated according to time spent on these activities, volume of water supplied to customers, or in proportion to direct costs.

We also charge costs to other parts of the organisation that sit outside the regulated business. In these cases, the guidance provided by RAG5 is followed, with costs charged on an arms-length basis, either as a cost pass through or via an hourly rate.

(4) Price control segments

In order to produce the APR and in addition to the accounting structure used for internal management reporting, we have created a separate regulatory cost structure in our financial system. This means that operating costs relating to water, wastewater and household retail price controls can largely be directly assigned. Where costs are not directly allocated to a specific price control, management has assessed an appropriate allocation in accordance with the regulatory accounting guidelines.

Capital expenditure is also largely directly attributable to price control. Where this is not possible, capital expenditure is assigned to the business unit of principal use with an appropriate recharge of depreciation charges for these shared assets made between price control segments in table 2A.

All cost allocations have been carried out in line with the guidance in RAG 2.07, with no material impact on the allocation of costs between price controls when compared to the previous year. More detail on our cost allocation processes can be found in our accounting methodology statement on our company website: www.anglianwater.co.uk

(5) Link between Directors' pay and standards of performance

Directors' pay comprises a package of base salary together with an annual performance-related bonus and eligibility for an award under a long-term incentive plan which is also Company performance related. Directors' bonuses paid by the Company are linked to the standards of performance of the Company and, therefore, in accordance with RAG 3.11. Details of Directors' pay can be found in the Remuneration Report within the Annual Integrated Report.

(6) Measured income accrual

In accordance with RAG 3.11 we highlight the following comments in respect of turnover for the year:

Appointed turnover for the year ended 31 March 2019 included a measured income accrual of £272.2 million (year ended 31 March 2018: £262.7 million). The value of billing recognised in the year ended 31 March 2020 for the prior year was £272.6 million. This has resulted

in the recognition in the current year's turnover of an estimation difference for the prior year of £0.4 million (2019: £7.3 million), representing 0.1 per cent of prior year measured turnover (2019: 1.1 per cent) and within acceptable tolerances for accounting estimates.

There have been no changes to the methodology used in calculating the measured income accrual from the prior year.

(7) Information in respect of transactions with any other business or activity of the appointee or any associated company

To the best of the Directors' knowledge, all appropriate transactions with associated companies have been disclosed in notes (a) to (j) below.

(a) Receivables

Receivables totalling £0.7 million were outstanding from other Group companies at 31 March 2020 (2019: £0.3 million).

(b) Payables

An amount payable of £48.6 million was owed to Anglian Water Services Financing Plc at 31 March 2020 (2019: £46.6 million).

(c) Borrowings

Sums borrowed, including accrued indexation by the appointee from Anglian Water Services Financing Plc at 31 March 2020, are set out in full in our Annual Integrated Report, note 20, which can be found on the AWS website:

https://www.anglianwater.co.uk/about-us/our-reports/

(d) Dividend policy

Dividend payments were marginally down on prior year. Dividend paid in the year of £60.2 million (2019: £61.5 million) were retained within the Group and used to finance Group operating costs and working capital needs. No dividends were paid to the shareholders of Anglian Water Group Limited (AWGL), the ultimate parent company, in the year (2019: £nil).

Based on the available free cash flow there was capacity to pay a further dividend of £192 million. However, the Directors have not proposed to pay a final dividend in line with their de-gearing target.

This decision to retain £192 million follows on from the previous £165 million shareholder investment into the resilience of the Company. Both of these decisions reduced shareholders returns in AMP6 for the benefit of the company.

The Company's dividend policy is to identify the cash available for distribution, allowing for the business's liquidity requirements in respect of funding its operations, the capital programme, servicing its debt for the next 18 months. The dividend policy is also based on ensuring that there is adequate headroom in relation to all of its financial covenants. In assessing the dividend payment, the Directors review the business performance forecasts and give consideration to the potential impact of external factors in the economy and regulatory environment on the Company's forecast cash flows.

The Directors consider this cash-based approach provides a more appropriate consideration of the needs of our customers, employees, pensions schemes and other stakeholders whilst ensuring the liquidity requirements of the business are met fully. The overall amount of the Company's ordinary dividends will not exceed the free cash flow (defined as operating cash flow less interest and capital maintenance payments) generated by Anglian Water, and in

practice will be limited by its current and forecast financial covenants. Special dividends may also be paid in addition to ordinary dividends, but these too are limited by specific financial covenant constraints. This policy is consistent with condition F of the Licence.

As part of its PR19 process Ofwat has introduced a mechanism which penalises more highly geared companies (such as Anglian Water) and therefore provides these companies with an incentive to reduce their level of gearing. Anglian Water is challenging this mechanism (together with many other aspects of Ofwat's AMP7 determination) by way of an application to the CMA for a redetermination. The company's approach to de-gearing will be reviewed in the light of the CMA's decision which is expected no later than March 2021.

(e) Guarantees/securities

The Company, as part of the Anglian Water Services Financing Group, guarantees unconditionally and irrevocably all the borrowings and derivatives of Anglian Water Services Financing Plc, which at 31 March 2020 amounted to £8,724.3 million (2019: £7,921.6 million). The borrowings of Anglian Water Services Holdings Limited and Anglian Water Services UK Parent Co Limited are also guaranteed unconditionally and irrevocably by the Company. Anglian Water Services Holdings Limited and Anglian Water Services UK Parent Co Limited had no outstanding indebtedness at 31 March 2020 (2019: £nil).

(f) Supply of services

In order to achieve economies of scale across the Anglian Water Group, some services are provided to associated companies by the appointed business. We ensure that the cost of any services provided to associated businesses are fully recovered including an element of overhead costs. There has been a slight increase in recharges from the prior year as we have moved a number of employees back into the regulated business who spend a small amount of their time on the non-regulated business activities.

Recharges by the appointee to associated companies during 2019/20:

Service provided	Company	Turnover of Associate £m	Terms of supply	Value £m
HR, Payroll, OHS, Regulation	AWG Group Limited	-	Actual Costs	0.267
Strategic Delivery and Commercial Assurance	AWG Group Limited	-	Actual Costs	0.085
Strategic Delivery and Commercial Assurance	AWG Land Holdings	-	Actual Costs	0.472
Brand and Communication	AWG Group Limited	-	Actual Costs	0.175
Finance	AWG Group Limited	-	Actual Costs	0.148
IT	AWG Group Limited	-	Actual Costs	0.147
IT	AVH	-	Actual Costs	0.065
Accommodation - Lancaster House	AWG Group Limited	-	Actual Costs	0.138
Accommodation - Osprey House	AVH	-	Actual Costs	0.152
Laboratory services	Alpheus Environmental Limited	7.633	Actual Costs	0.000
Land rental	Alpheus Environmental Limited	7.633	Actual Costs	0.189
Vehicle costs	AWG Group and Alpheus Environmental Limited	-	Actual Costs	0.061
Tide recharge	TIDE	-	Actual Costs	0.029
Total				**1.927**

Service provided	Company	Turnover of Associate £m	Terms of supply	Value £m
Corporation tax group relief surrendered by regulated business	AWG Group Limited	n/a	See note 1 below	11.400

Note 1 The losses surrendered to AWG Group Limited are provided for at a rate of 19%. However, AWS already has a liability to pay for losses surrendered to it in earlier years and there is an agreement that AWS will not have to pay for these losses until it receives the benefit of the capital allowances that were disclaimed in order to generate the taxable profits against which the surrendered losses could be utilised. The losses incurred this year will reduce the liability for prior years and so will give rise to lower payments to other group companies in future years.

Recharges by associated companies to the appointee during 2019/20:

Nature of transaction	Company	Turnover of associated company £m	Terms of Supply	Value £m
Directors' costs	AWG Group Limited	-	Time apportioned	0.190
CEO costs	AWG Group Limited	-	Time apportioned	1.881
Finance Director Services	AWG Group Limited	-	Time apportioned	0.813
CFO	AWG Group Limited	-	Time apportioned	0.974
Treasury Services	AWG Group Limited	-	Time apportioned	1.010
IS Services	AWG Group Limited	-	Time apportioned	0.268
Corporate Affairs services	AWG Group Limited	-	Time apportioned	0.092
Health and Safety services	AWG Group Limited	-	Pass through	0.414
Legal Services	AWG Group Limited	-	Time apportioned	0.254
HR Services	AWG Group Limited	-	Time apportioned	0.324
Property Services	AWG Group Limited	-	Time apportioned	0.046
Business Change	AWG Group Limited	-	Time apportioned	0.312
Internal Audit services	AWG Group Limited	-	Direct	0.434
Insurance Administration	AWG Group Limited	-	Negotiated	0.750
Group Life Assurance	AWG Group Limited	-	Pass through	1.168
Income Protection Costs	AWG Group Limited	-	Pass through	0.346
Taxation Services	AWG Group Limited	-	Direct	0.287
Pension Admin, Advice and Audit	AWG Group Limited	-	Pass through	1.016
Miscellaneous Items	AWG Group Limited	-	Pass through	0.047
Office Accommodation - Lancaster House	Ambury Developments Limited	0.632	Other market testing	0.474
Bulk Purchase of Water	Ardleigh Reservoir Commitee	1.426	Actual costs	0.846
				11.947

Services provided by the non-appointed business:

Service provided by the non-appointed business	**Basis of recharge made by the appointed business**	**Value of the recharge made by the appointed business** **£m**
Treatment of imported sludge	During 2019/20 we treated sludge from Yorkshire Water for part on the year on a short-term contract and charged on a marginal cost basis to cover the incremental costs of transport and treatment. In line with RAG5 guidance, the recharge therefore excluded capital costs/depreciation and any financing charges. An small administration overhead was included.	0.026
Treatment of tankered waste	Recharge to non-appointed is based on full cost including fixed and variable cost and depreciation and financing.	2.629
Others	Key activities include mapping and data services, recreation facilities and wind turbines. The recharges made to the non-appointed business have been derived on a bottom-up bases to include recovery of fixed and variable costs along with an appropriate share of depreciation and financing costs. A positive margin is made on this activity. Approximately £0.7 million of the reported costs are in relation to depreciation and financing recharges.	10.706
Total non-appointed operating costs		**13.361**

(g) Omissions of rights

No material omissions took place during the year.

(h) Waivers

There were no material waivers during the year.

(i) Compliance with Condition K

The Company has been compliant with Condition K3.1 of the Licence throughout the year. We have provided more detail on the adequacy of resources in our ring fencing certificate (or certificate of adequacy), which we are required to submit to Ofwat.

(8) Current tax reconciliations

A reconciliation of the appointed corporation tax charge reported in Table 1A to that resulting from applying the standard rate of tax to the profit on ordinary activities before tax as shown in Table 1A is set out below.

	Notes	£m
Profit before tax per the Annual Performance Report		**28.6**
Corporation tax charged at 19%		**5.4**
Depreciation and amortisation		**50.1**
Capital allowances	**(i)**	**(64.2)**
Items not taxable	**(ii)**	**(0.4)**
Items not deductible for tax purposes	**(iii)**	**2.0**
Short-term timing differences		**(11.9)**
Fair value losses on financial instruments (not deductible)		**5.8**
Adjustments in respect of previous years	**(iv)**	**(3.1)**
Current tax (credit) for the year		**(16.3)**

The table below sets out the reconciliation between the UK corporation tax charge reported in Table 1A to the total current tax charge allowed in price limits.

	Notes	£m
Tax charge allowed in price limits at 20% and in 2012/13 prices		**7.9**
Tax effect at 20% of and in 2012/13 prices:		
Decrease in profits before tax		**4.1**
Reduction in disallowable depreciation and amortisation		**(5.4)**
Increase in capital allowances	**(i)**	**(13.9)**
Reduction in pension deductions		**0.2**
Other		**(4.6)**
Current tax (credit) before adjustments for previous years at 20%		**(11.7)**
Effect of the reduction in corporation tax rate to 19%	**(v)**	**0.6**
Adjustments for previous years	**(iv)**	**(2.6)**
Current tax (credit) in APR at 2012/13 prices		**(13.7)**
Indexation up to outturn prices		**(2.6)**
Current tax (credit) in APR		**(16.3)**

Notes

i. The increase in capital allowances reflects our programme of disclaiming capital allowances in previous years in order to utilise Surplus ACT held on the balance sheet. These disclaimed capital allowances are now available to claim in the current and future years.

ii. The items not taxable are profits arising on the sale of land.

iii. Items not deductible for tax purposes mainly consists of depreciation on assets not eligible for capital allowances and compliance fines.

iv. The adjustment for previous years reflects an over-prudent view taken in previous years.

v. The main rate of corporation tax reduced from 20% to 19% on 1 April 2017. As the corporation tax in the price limits was calculated at a rate of 20% there is a reconciling item included above and will be for each of the remaining years of the AMP. The corporation tax rate was expected to reduce further to 17% on 1 April 2020, but this reduction was reversed in March 2020.

Tax and transparency

We have prepared a statement on tax and transparency which can be found on our website at www.anglianwater.co.uk and is also included within the "Fair charges, fair returns" section of our Annual Integrated Report.

Data Assurance Summary

Introduction

1 We understand that customers and other stakeholders want information about our performance and that the information needs to be accessible and understandable. We are committed to providing information that is reliable and can be trusted.

2 Our overall approach to assurance is set out in *Our Assurance Framework* which can be viewed on the Anglian Water website. This submission has been completed within that framework.

3 In March 2020 we published our Final Assurance Plan (*Performance Reporting 2019/20*) after consulting with stakeholders on our draft plan. This document outlined the approach that we intended to take to provide assurance for our 2019/20 performance information. In the plan we set out our assessment of the risks to data quality for the non-financial data of the Annual Performance Report (APR), which is our main performance report of the year. We also set out the controls we intended to apply to our APR financial data.

4 Also in the scope of our Final Assurance Plan were our Charges Scheme, Water Resources Market Information and Bioresources Market Information.

5 In this Data Assurance Summary we confirm the actions we have taken to provide assurance to stakeholders over our reported information.

General assurance processes

6 We have an enterprise-wide Business Management System (BMS) that is certified to the ISO 9001 quality management systems standard, whose scope includes the processes for ensuring the collection and storage of reliable performance data. We have established processes and procedures that we adopt when compiling performance data for publication into the public domain:

- Roles and responsibilities are established, including the allocation of named data providers for each line of data
- Methodologies for compiling data are documented in procedures if necessary
- Draft data and commentaries are reviewed by individuals (including senior managers), who are independent of the processes being reviewed
- Final data and commentaries are signed off by the relevant individuals assigned by the risk assessment rating assigned to each individual line
- Data may be subject to review by our third party assurance provider, Halcrow, or our independent financial auditors, Deloitte. Our use of third parties as part of the assurance process is informed by our assessment of risks to data quality.

Specific assurance processes for 2019/20 performance information

Annual Performance Report (APR) Non-financial data

7 As proposed in our Final Assurance Plan we have carried out the assurance activities in two stages: Stage 1 'in-year' assurance reviews and Stage 2 'year-end' assurance reviews.

8 The assurance reviews were prioritised based on the results of the risk assessment. We documented the results of this assessment, in *Performance Reporting 2019/20*. This document includes also our assessment of the strengths and weaknesses of our assurance framework and analysis of stakeholders' information needs relating to reporting of performance.

Stage 1 'in-year' assurance reviews

9 For this stage of the assurance programme we selected for review a number of APR data lines that were rated as higher risk in our risk assessment process. These reviews were all conducted by Halcrow and employees of Anglian Water (who are independent of the processes being reviewed). The terms of reference of these reviews were to:

- Confirm whether the identified risks to data quality appear to be reasonable and that the controls, if implemented, should mitigate them
- Examine in detail the risk assessments, including how controls are implemented and checked
- Validate calculations carried out by the company to provide information related to data which are publicly available via a regulator
- Identify areas for improvement
- Verification to check the completion of actions resulting from previous audits
- Discuss and test whether changes to the reporting guidelines will impact on year-end reporting.

Stage 2 'year-end' assurance reviews

10 This stage of the assurance programme focussed on the data we intended to report against our Outcome Delivery Incentives (ODIs). These reviews were all conducted by Halcrow. The terms of reference of these reviews were to:

- Review the company's methodologies and procedures for identifying, analysing and recording data and, on a sample basis, test the application of those methodologies and procedures.
- Provide an opinion on the adequacy of the methodologies and procedures adopted by the company to provide reliable information.
- Alert the company to any material areas of concern or weakness observed.
- Review progress against issues raised in the last audit.
- Review whether the APR procedures and any associated local procedures / work instructions are current, accurate and appropriate.
- Check that data stated in the tables is supported by audit trails which are reliable, accurate and complete.
- Check that suitable commentary is provided which explains performance.
- Confirm that changes from previous submissions have been adequately explained.
- Seek understanding of the upstream processes which generate data and the controls in place for ensuring the reliability of those data. Test where possible.

11 The reviews were carried out between April and June 2020. The results of each review were documented in summary audit reports, including information about the tests applied and the results, along with details of recommendations for longer term improvements. Any outstanding data issues were addressed prior to finalising the data.

12 A summary of the findings of Halcrow's review is set out in their Technical Assurance Executive Summary. A summary of all the in-year and year-end assurance reviews and their key findings is listed in the Appendix.

Director sign-off

13 As set out in *Performance Reporting 2019/20*, the sign-off protocols which form part of our assurance process are based on our data quality risk assessment. All APR data lines are approved by the nominated 'line approver', who is a different individual from the one who provided the data. Further sign-off is required for higher risk data lines: by the Head of Business Unit (for lines rated as Medium risk) or Management Board Director (where the rating is High or Critical). These protocols were all applied to the APR.

14 At the AWS Board on 28 May 2020 the Board delegated authority to certain directors to approve the final versions of the APR as well as the Risk and Compliance Statement and the Annual Integrated Report. Final drafts of the APR were approved by the company's Executive Directors on 10 July.

APR Financial data

15 Our Regulatory Accounts have been prepared in accordance with the Regulatory Accounting Guidelines issued by Ofwat. In accordance with our plan, they were subject to review by the company's independent financial auditors, Deloitte, to ensure compliance with Condition F of the Instrument of Appointment as a water and sewerage undertaker under the Water Industry Act 1991.

16 The review took the following form:

- Audit of APR Tables 1A-1E, lines 1F.1 to 1F.10, line 1F.13, line 1F.19, lines 1F.21 to 1F.23 of the statement of financial flows (table 1F) and 2A-2K and the related notes and commentaries. Deloitte's audit was conducted in accordance with International Standards on Auditing (UK) issued by the Financial Reporting Council, and included such tests of transactions and of the existence, ownership and valuation of assets and liabilities as they considered necessary. Deloitte planned and performed their audit to be able to provide reasonable assurance that the regulatory accounting statements are free from material misstatement and are properly prepared in accordance with Regulatory Licence Condition F.

- In line with the approach last year, in order to provide more robust assurance, Deloitte conducted audits on the financial data in tables 4D, 4E, 4F, 4H (excluding line 5 and section C), 4I, 4J and 4K and the related notes and commentaries.

- It is important to us that our Annual Performance Report (APR) to Ofwat is completed accurately and in line with the guidance provided (Ofwat Guidance RAG 4.08). We have obtained assurance over the majority of the values to be submitted which includes an opinion from Deloitte, our external auditors, of certain financial values. However, Deloitte have identified certain data within Table 1F (Financial Flows) that they consider to be outside the scope of their opinion. We have therefore requested that Internal Audit perform a series of agreed upon procedures over these remaining values to confirm the values entered into the prescribed fields of the Table 1F have been accurately drawn from the relevant data source.

17 Our auditor has provided its audit opinion that our Regulatory Accounting Statements have been prepared in all material respects, in accordance with Condition F, the Regulatory Accounting Guidelines as issued by Ofwat, and the accounting policies. The full audit opinion is included in our APR.

18 The first line of defence against data error lies in the processes that we follow to prepare our regulatory accounts tables. The following table reports the risks we have identified around our processes that could, without controls, result in mis-statement in our APR. It also shows the controls we have implemented for 2019/20 reporting.

Issue	Risk	Controls applied for 2019/20
Spreadsheet based consolidation process	Errors may arise from input errors, formula errors and maintaining version control	• Additional validation tests built into APR spreadsheets • Collective reviews of all tables held with table and line owners and Financial Control teams
Internal process has no direct link to Ofwat tables	Ofwat tables and company spreadsheets are both standalone with the risk that data may be copied incorrectly	• Detailed review at line item detail and sign off with table/line owners to ensure consistency between spreadsheets and Ofwat return
Comprehensive audit trail required for manual adjustments	Post close adjustments and other adjustments to reported figures have the potential to be done in isolation with the result that the impact may not be correctly reflected in other areas of the return	• Spreadsheet tracker of changes made to APR table to be kept for all changes following specified cut-off date. • Password protection in place on master APR table to ensure all changes are made via Financial Controls team after specified cut-off date • Defined version control for all key APR tables
Shared spreadsheets	Risk of data corruption and/or data loss due to more fragile nature of shared files	• Back up of spreadsheets taken on a daily basis at key times during the APR process
Continuity of Personnel	Some knowledge centered around a few key individuals with the risk that unplanned absence will lead to lower knowledge base and more risk of error	• Detailed procedure notes updated for all APR tables
Security of access to data and tables	The need to strike a balance between access for all key individuals whilst maintaining security of data and the likelihood of unauthorised changes	• Password protection and restricted access in place for key APR spreadsheets
Robust change management process	The need to ensure that all changes are logged with version control fully functional and a detailed reconciliation between versions	• Password protection in place on master APR table and commentaries to ensure all changes are made via Financial Controls team after specified cut-off date • Defined version control for all key APR tables
Potential uncertainty or ambiguity in Ofwat APR guidance	Potential ambiguity around some of the Ofwat guidance leading to inconsistencies in the way in which the RAGs are applied, both internally and between other companies.	• Comprehensive commentaries on all the APR tables have been included again this year. By setting out our key assumptions and year-on-year variances, we expect stakeholders will gain a better understanding of our financial and operational performance. There is also an improvement in internal control that comes from the review and explanation of variances
Consistency between submitted tables and APR	Risk that due to manual completion processes, final tables may not be 100 per cent consistent	• Full consistency checks between statutory accounts and APR tables prior to final sign-off of APR, followed by subsequent lock-down of APR table master spreadsheets
Intra-table consistency	Potential lack of consistency between tables showing different versions of the "same" number (e.g. Total operating costs may be shown including or excluding depreciation).	• Separate, off-line tables to reconcile different versions of APR tables that show the 'same thing'
Significant year-on-year variances not identified	Variances which require an explanation in the commentary may be overlooked, giving rise to Ofwat queries	• Data analytics tool developed with our data science team to help identify variances requiring an explanation

Charges Scheme

19 In accordance with our assurance plan, we invited Deloitte to perform agreed upon procedures relating to charges for 2020/21 for Wholesale and Household Retail customers, to assist the Directors of the Company in determining the accuracy of proposed charges in recovering allowed revenue.

20 Deloitte issued its report on 8 January 2020. All procedures were completed with no exceptions noted.

Water Resources Market Information

21 Following publication of our final Water Resources Management Plan in December 2019, we updated and republished our Market Information data in April 2020. This data was assured by an independent third party.

Bio-resources Market Information

22 We have published on our website tables about our bioresources assets and activities and submitted to Ofwat a report on sludge trading activity. We invited our external assurance provider, Halcrow, to provide assurance over these tables. We have published their Technical Assurance Summary alongside the tables on our website.

Feedback

23 We welcome feedback from stakeholders on all aspects of our performance reporting. You can contact us in any of the following ways:

- email: Stakeholderfeedback@anglianwater.co.uk
- call: 03457 91 91 55

24 We undertake to share the feedback we receive and explain how we have responded to it.

Appendix: Summary of assurance reviews carried out in 2019/20

The tables below shows the assurance activities carried out during 2019/20, first 'in-year' then 'year-end'. All of our in-year and year-end audits were carried out by our external assurance provider Halcrow.

Topic	Comments
Connected Properties	No material issues.
Discharges and Consents	No material issues.
Length of Mains	Minor amendments required for the procedure document.
Length of Sewers	Recommendation to add more resilience into the reporting process which includes adding higher levels of automation for reporting.
Metering	More detail required in the procedure and methodology for reporting.
Odour Complaints	No material issues.
Outputs Water	Recommendation to add further checks on the data gathered from the field to identify where possible jobs might not be reported. However this only represents a small numbers of replacements and is not an area of material concern.
Population	Recommended further checks to make sure the data migration in March was accurate.
Treated Water	No material issues.
Wastewater Properties Billed	Minor amendments required for the procedure document.
Water Pressure	Amendments required for the procedure document.
Water Properties Billed	No material issues.
Water Quality Contacts	No material issues.
Water Service Facilities	No material issues.
Water Sources	Minor amendments required for the procedure document.
Water Treatment Works	No material issues.

Topic	Comments
Burst Mains	No material issues.
Flooding	No material issues.
Interruption to Supply	Ongoing debrief following the Leighton Linslade event which would benefit from a review during the next audit, however no material impact to the 2019/20 numbers.
Outputs Wastewater	No material issues.
Outputs Water	No material issues.
Security of Supply	No material issues.
Serviceability	No material issues.
Sewage Treatment Works	Recommendation to add additional areas for audit next year to assess the trade effluent dataset.
Sewer Activity	Recommendation to add in further metadata to allow for jobs to be checked in more detail for future reporting.
Single Supply	No material issues.
Unplanned Outages	Minor amendments required to an element of the calculation. During a second review the information was updated.
Wastewater Quality Indicators	No material issues.
Water Balance and Leakage	No material issues.
Water Quality Indicators	No material issues.
Water Pressure	Minor updates to procedure in preparation for AMP7.
Vulnerability	Recommendation to put in place additional checks in preparation for the migration due to take place in AMP7.

Independent Auditors' Report

Independent Auditors' report to the Water Services Regulation Authority (the WSRA) and the Directors of Anglian Water Services Limited

Report on the audit of the Regulatory Accounting Statements

Opinion

We have audited certain tables within Anglian Water Services Limited's ("the Company") Annual Performance Report for the year ended 31 March 2020 ("the Regulatory Accounting Statements") which comprise:

- the regulatory financial reporting tables comprising the income statement (table 1A), the statement of comprehensive income (table 1B), the statement of financial position (table 1C), the statement of cash flows (table 1D), the net debt analysis (table 1E), Lines 1F.1 to 1F.10, Line 1F.13, Line 1F.19 and Lines 1F.21 to 1F.23 of the statement of financial flows (table 1F) and the related notes;

- the regulatory price review and other segmental reporting tables comprising the segmental income statement (table 2A), the totex analysis for wholesale water and wastewater (table 2B), the operating cost analysis for retail (table 2C), the historical cost analysis of fixed assets for wholesale and retail (table 2D), the analysis of grants and contributions and land sales for wholesale (table 2E), the household water revenues by customer type (table 2F), the non-household water revenues by customer type (table 2G), the non-household wastewater revenues by customer type (table 2H), the revenue analysis & wholesale control reconciliation (table 2I), the infrastructure network reinforcement costs (table 2J), the infrastructure charges reconciliation (table 2K) and the related notes; and

- the Wholesale Totex Analysis – Water (table 4D excluding section E), the Wholesale Totex Analysis – Wastewater (table 4E excluding section D), the Operating Cost Analysis – Household Retail (table 4F), the Financial Metrics (table 4H excluding line 5 and section C), the Financial Derivatives (table 4I), the Atypical Expenditure – Wholesale Water (table 4J), the Atypical Expenditure – Wholesale Waste Water (Table 4K) and the related notes.

We have not audited Lines 1F.11 to 1F.12, 1F.14 to 1F.18, and 1F.20 of Table 1F, the Outcome performance table (tables 3A to 3S) and the additional regulatory information in tables 4A to 4C, 4G, 4L to 4W.

In our opinion, Anglian Water Services Limited's Regulatory Accounting Statements within the Annual Performance Report have been prepared, in all material aspects, in accordance with Condition F, the Regulatory Accounting Guidelines issued by the WSRA (RAG 1.08, RAG 2.07, RAG 3.11, RAG 4.08 and RAG 5.07) and the accounting policies (including the Company's published accounting methodology statement(s), as defined in RAG 3.11, appendix 2, and available on the Company website at https://www.anglianwater.co.uk/about-us/our-reports/) as set out in the notes to the Annual Performance Report.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)"), including ISA (UK) 800, and applicable law and having regard to the guidance contained in ICAEW Technical Release Tech 02/16 AAF 'Reporting to Regulators on Regulatory Accounts' issued by the Institute of Chartered Accountants in England & Wales.

Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the Regulatory Accounting Statements within the Annual Performance Report section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit, including the Financial Reporting Council's (FRC's) Ethical Standard as applied to public interest entities, and we have fulfilled our ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of matter – special purpose basis of preparation

We draw attention to the fact that the Regulatory Accounting Statements have been prepared in accordance with a special purpose framework, Condition F, the Regulatory Accounting Guidelines, the accounting policies (including the Company's published accounting methodology statement(s), as defined in RAG 3.11, appendix 2) set out in the statement of accounting policies and under the historical cost convention. The nature, form and content of the Regulatory Accounting Statements are determined by the WSRA. It is not appropriate for us to assess whether the nature of the information being reported upon is suitable or appropriate for the WSRA's purposes. Accordingly we make no such assessment. In addition, we are not required to assess whether the methods of cost allocation set out in the accounting methodology statement are appropriate to the circumstances of the Company or whether they meet the requirements of the WSRA.

The Regulatory Accounting Statements are separate from the statutory financial statements of the Company and has not been prepared under the basis of International Financial Reporting Standards as adopted by the European Union ("IFRSs"). Financial information other than that prepared on the basis of IFRSs does not necessarily represent a true and fair view of the financial performance or financial position of a Company as shown in statutory financial statements prepared in accordance with the Companies Act 2006.

The Regulatory Accounting Statements on pages 59 to 76 have been drawn up in accordance with Regulatory Accounting Guidelines with a number of departures from IFRS. A summary of the effect of these departures from Generally Accepted Accounting Practice in the Company's statutory financial statements is included in the tables within section 1.

The Regulatory Accounting Statements are prepared in accordance with a special purpose framework for the specific purpose as described in the Responsibilities for the audit of the Regulatory Accounting Statements section below. As a result, the Regulatory Accounting Statements may not be suitable for another purpose.

Our opinion is not modified in respect of this matter.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which ISAs (UK) require us to report to you where:

- the directors' use of the going concern basis of accounting in the preparation of the Regulatory Accounting Statements is not appropriate; or
- the directors have not disclosed in the Regulatory Accounting Statements any identified material uncertainties that may cast significant doubt about the Company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the Regulatory Accounting Statements are authorised for issue.

Other information

The other information comprises all of the information in the Annual Performance Report other than the Regulatory Accounting Statements and our auditors' report thereon. The directors are responsible for the other information. Our opinion on the Regulatory Accounting Statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the Regulatory Accounting Statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the Regulatory Accounting Statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the Regulatory Accounting Statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

We have nothing to report based on these responsibilities.

Responsibilities of the Directors

As explained more fully in the Statement of Directors' Responsibilities set out on page 27, the directors are responsible for the preparation of the Annual Performance Report in accordance with Condition F, the Regulatory Accounting Guidelines issued by the WSRA and the Company's accounting policies (including the Company's published accounting methodology statement(s), as defined in Appendix 2 of RAG 3.11). The directors are also responsible for such internal control as they determine is necessary to enable the preparation of the Annual Performance Report that is free from material misstatement, whether due to fraud or error.

In preparing the Annual Performance Report, the directors are responsible for assessing the Company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the Audit of the Regulatory Accounting Statements within the Annual Performance Report

Our objectives are to obtain reasonable assurance about whether the Regulatory Accounting Statements are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Regulatory Accounting Statements.

A further description of our responsibilities for the audit of the Regulatory Accounting Statements is located on the Financial Reporting Council's website at.

https://www.frc.org.uk/auditors/audit-assurance/auditor-s-responsibilities-for-the-audit-of-the-fi/description-of-the-auditor%E2%80%99s-responsibilities-for

This description forms part of our auditors' report.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on other legal and regulatory requirements

Opinion on other matters prescribed by Condition F

Under the terms of our contract we have assumed responsibility to provide those additional opinions required by Condition F in relation to the accounting records. In our opinion:

- proper accounting records have been kept by the appointee as required by Condition F; and

- the Regulatory Accounting Statements are in agreement with the accounting records and returns retained for the purpose of preparing the Annual Performance Report.

Use of this report

This report is made, on terms that have been agreed, solely to the Company and the WSRA in order to meet the requirements of Condition F of the Instrument of Appointment granted by the Secretary of State for the Environment to the Company as a water and sewage undertaker under the Water Industry Act 1991 ("Condition F"). Our audit work has been undertaken so that we might state to the Company and the WSRA those matters that we have agreed to state to them in our report, in order (a) to assist the Company to meet its obligation under Condition F to procure such a report and (b) to facilitate the carrying out by the WSRA of its regulatory functions, and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the WSRA, for our audit work, for this report or for the opinions we have formed.

Our opinion on the Regulatory Accounting Statements is separate from our opinion on the statutory financial statements of the Company for the year ended 31 March 2020 on which we reported on the 15th of June 2020 which are prepared for a different purpose. Our audit report in relation to the statutory financial statements of the Company (our "Statutory audit") was made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our Statutory audit work was undertaken so that we might state to the Company's members those matters we are required to state to them in a statutory audit report and for no other purpose. In these circumstances, to the fullest extent permitted by law, we do not accept or assume responsibility for any other purpose or to any other person to whom our Statutory audit report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Deloitte LLP

Statutory Auditors

London, United Kingdom

13 July 2020

External Assurance Report

Technical Assurance Executive Summary

Terms of Reference and Assurance Approach

1 Anglian Water Services Limited ('Anglian Water') commissioned Halcrow Management Sciences Limited (a Jacobs company) to provide independent technical assurance on selected non-financial data tables/lines for the Annual Performance Report (APR) submission to Ofwat. This information is part of Anglian Water's APR which is required by Ofwat and is published in July 2020. The APR is a collection of data and commentary relating to Anglian Water's performance in defined areas, including the Performance Commitments (PCs) for 2019/20 which is the final year of AMP6.

2 Anglian Water has revisited its risk assessments for the ODIs and APR information as reported in its Final Assurance Plan. The purpose of the review was to ensure risks to the quality of information to be presented in Ofwat's APR data tables were fully assessed such that the appropriate level of internal and/or external assurance was applied. There was a greater emphasis for external assurance on financial ODIs and key APR data with less audit focus on data for the company's internal Yearbook where it doesn't feed into APR data.

3 Our audit took place in two phases. Phase 1 was a series of process audits in February 2020 to review the methodologies used to generate key metrics assessed as the highest risk. Phase 2 was a series of 17 data audits completed in May 2020. Phase 2 audits took place remotely using Webex, MS Teams or conference calls following the UK Government's lockdown instructions as a result of the Covid-19 pandemic. The teams from Anglian Water and Jacobs worked together to make arrangements for the remote audits which progressed to plan. Some minor limitations were consequential for example not always being able to check information back to live corporate data systems, however this did not undermine our ability to complete the work.

4 The purpose of the year end audit was to provide assurance that the processes and systems of control for generating data included in the Company's Annual Performance Report are adequate and that the resulting data can therefore be reliably used for describing its performance and managing the business. Anglian Water issued Terms of Reference for the scope of our year end audits which required us to:

- Review the company's methodologies and procedures for identifying, analysing and recording data and, on a sample basis, test the application of those methodologies and procedures
- Provide an opinion on the adequacy of the methodologies and procedures adopted by the company to provide reliable information
- Alert the company to any material areas of concern or weakness observed
- Review progress against issues raised in the last audit
- Review whether the APR procedures (copies to be supplied with this terms of reference) and any associated local procedures / work instructions are current, accurate and appropriate
- Check that data stated in the tables is supported by audit trails which are reliable, accurate and complete
- Check that suitable commentary is provided which explains performance
- Confirm that the confidence grades are appropriate and supported by evidence

- Confirm that changes from previous submissions have been adequately explained
- Seek understanding of the upstream processes which generate data and the controls in place for ensuring the reliability of those data. Test where possible

5 The technical assurance team comprised technical and operational specialists led by the Assurance Director. We used risk-based samples to trace data to source. Audits have been documented in Summary Audit Reports (SAR).

Audit Opinion and Conclusion

6 Based on sample checks, we are satisfied that for those Ofwat APR data lines and PCs we were asked to examine, there are no material issues with the reported information. For some processes we have recommended additional checks are implemented as part of Anglian's internal assurance. We have made observations detailed in Key Findings (identified as 'Amber') which we recommend are addressed. In our SARs, we highlighted a number of non-material observations and recommendations for Anglian Water's consideration (identified as 'Blue'). These are either work in progress by Anglian Water or opportunities to improve processes and/or additional confidence in resulting data.

7 We noted several areas of good practice or improvements that have been made in the year following investments made by the Company. We have made recommendations for audits of contributing data in a number of areas, although we anticipate these may be included in the refresh of the risk assessments for APR reporting.

8 We confirm the APR metrics provide a fair and reasonable account of Anglian Water's performance during 2019/20, and confirm the outturn of AMP6 for those PCs we were asked to assure.

9 G D Hindley, Technical Assurance Director, 22 June 2020

Key Findings

10 We identified some issues to which we have alerted the Company at audit and included in the Summary Audit Reports we provided to the company. Key items of note, including exemplary performance, are detailed below. We did not identify other residual material risks or concerns, about which the Company is not already aware.

11 Audit RAG Key:

No concerns	Minor concerns	Material concerns	Non-material observation or recommendation

APR data table / ODI	ANH risk rating	Audit RAG	Summary findings by exception and/or good performance
4P, 3S, Leakage	Critical		Anglian Water's three year average leakage level is 185 Ml/d which outperforms the Performance Commitment of 192 Ml/d (attracting a reward). The leakage team continues to improve methods and analytic methods. These will bring the advances in analytics to the AMP7 leakage consistency methods where relevant. Additional scrutiny was applied to household use due to COVID-19 lockdown with data from smart meters and the SODCON monitor. Inclusion of the reallocated summer peak (2018 and 2019) and COVID-19 brings the measured data in line with the domestic reconciliation process method tolerances.
3A, 3B, 3S, Interruptions to Supply (I2S)	Med		We confirmed performance of 18 minutes and 39 seconds per property which misses the ODI target of 12 mins per property. Anglian Water's performance was influenced by a single large event in Leighton Linslade in December 2019 which contributed 12 mins 40 secs to the overall score. Without this event, Anglian would have met the target outturning with a performance of 5 mins 59 secs. Despite missing the target, we confirmed Anglian's processes for collecting, recording and monitoring of data during events and subsequent verification of the number of properties and duration of interruption are robust.

APR data table / ODI	ANH risk rating	Audit RAG	Summary findings by exception and/or good performance
			Anglian is continuing to assess the operation of the Leighton Linslade event in order to refine the management of I2S events and how information can be used during live events. We confirmed Shadow Reporting meets Ofwat's Consistency Reporting requirements.
4Q connected properties	High		Connected properties at year end (31 March 2020) is used as a numerator in a number of Performance Commitments and was therefore assessed as 'high risk'. This was subject to a process audit in February 2020. We assured the process as robust where the data source is SAP. Although there is some manual running processing of numbers to derive the year end position, Anglian has a control version of the calculations and a subsequent checking process to compare the two sets of results. We noted that information for the Hartlepool region has been migrated to SAP.
4R, sewer blockages	Low		As we highlighted in APR 2019 some blockages are being excluded due to their response duration being coded as less than 5 minutes. 117 have been excluded this year. Based on previous years, around a third (40 no.) of these could be reportable blockages. We recommend that these are inspected individually to determine which should be reported. We note that this will only have a minor impact on the reported figures.
			The team explained that the SAP database contains opportunities for ambiguity in the various date and time fields which are available for incidents. This could be part of why some incidents are coded as less than five minutes, when it is not possible for the work to be completed in that time. We note that the team plans to review problem and action codes to remove ambiguity as to whether an event is a reportable blockage or not. This is an example of good practice.
3B, 4R, Sewer collapses	Critical		The methodologies are considered adequate to provide reliable information.
			A risk area for sewer collapse reporting is the reliance on the four Alliance partners to provide consistent and accurate data which forms the basis of these figures. We recommend feedback to operations partners that the commentary for some incidents is poor would benefit from more detail. We had previously identified that Anglian was unable to determine the split between reactive and proactive jobs, as required for Table 3S consistency reporting. In June 2019 Anglian implemented new codes in SAP to allow this element of the reporting to take place and had briefed the field teams accordingly. We consider this to be a satisfactory improvement and complies with the Table 3S requirements.
			We note that the method has inbuilt checks to identify anomalous records and have them resolved by the originator, which is good practice. However, as noted in previous audit reports there remains a weakness in that some records do not have sufficient metadata to check whether they were coded correctly.
3B, 3S mains bursts	Critical		Improvements have been made to reporting following our audit for APR 2019 where the total length of mains (used as a denominator) was not separately assured. For APR 2020 this is now audited, and the team demonstrated their confidence in the number. The APR 2019 issue of an increase in removals without substantiation in the records has been resolved.
			We identified the sequencing of the audit of contributing data could be improved in future so contributing data (total length of mains) is assured before it is used in the mains bursts metric, however we note that the total length of mains varies by approximately 0.25% per year so the impact on the final mains burst number would be minimal.
Table 3S Risk of Sewer Flooding in a Storm	Low		Anglian has a clear process for calculating this metric, modelling all catchments using the 'option 1b' route. The methodology is already moving beyond Ofwat's current guidance for this metric and Anglian is able to model 100% of its catchments, produce 2D flood extents and count building polygons rather than address points. Because of this, Anglian is using good practice to develop its own methodology for some aspects where there is no guidance.
			In order to convert the number of properties into Population Equivalent (PE), the method uses average occupancy factors which are calculated for each catchment (based on the number of properties and total population of each catchment). We reviewed these factors and there are a number of unexpected values, for example: · There are ~60 catchments with a factor >5 · There are ~50 catchments with a factor <1.2 (and several at 0) The majority of these relate to small catchments and the overall PE affected is not material, but these should be reviewed and, if appropriate, corrected.
Table 3S Unplanned outage	Critical		Anglian has a thorough and pragmatic approach to capturing unplanned outages > 24 hours which is consistent with Ofwat guidance. We agreed with Anglian that it is not possible to fully automate the recording of all unplanned events because of limitations with the telemetry system, however Anglian has identified developments that may make more automation possible in the future.

APR data table / ODI	ANH risk rating	Audit RAG	Summary findings by exception and/or good performance
			We made an observation relating to the process of compiling and presenting data for audit where the Peak Week Production Capacity data (the denominator of the outage metric) had not been updated from the previous year. The PWPC data has since been updated and reviewed in a second audit. It is recommended that Anglian considers the process that was used in preparing the initial data and put in place additional checks.
Percentage of population supplied by a single supply system	High		We reviewed projects that have been completed in line with the programme to meet the AMP6 ODI target of 24.7%.
Sewer flooding	High		We confirmed a 179 reduction in internal sewer flooding which follows an improving trend through the AMP and is over 100 properties beyond the reward cap. The process has been consistently applied throughout the AMP to calculate the AMP6 performance commitment outturn.
			A series of checks and controls are in place to check that jobs do actually represent sewer flooding and are coded correctly however, the audit identified that no proactive checks were in place to identify jobs which may represent flooding but have not been coded correctly (i.e. identifying false negatives). Considering the level of reward associated with the AMP6 PC we recommended a review as soon as possible. Anglian responded with sample records of evidence of spot checking jobs raised as flooding but closed as something else for six work types. The spot checking carried out confirmed there were no records missing from within the sample of 50. We are satisfied with this.
Serviceability assessment	Critical		We confirmed the overall serviceability as follows: Water infrastructure – Amber (due to supply interruptions>12 hours missing the target) Water non-infrastructure – Green Sewerage infrastructure – Green Sewerage non-infrastructure - Green

Glossary

Annual Performance Report (APR) – report produced by the Company for regulatory reporting purposes, known previously as the Regulatory Accounts.

Appointed business – the appointed business comprises the regulated activities of the Company which are activities necessary in order for a company to fulfil the function and duties of a water and sewerage undertaker under the Water Industry Act 1991.

Arm's-length trading – arm's-length trading is where the Company treats the associate companies on the same basis as external third parties.

Asset Management Plan (AMP) – a plan agreed with Ofwat on a five-yearly basis for the management of water and wastewater assets. The plan runs for a five-year period. AMP5 covers April 2010 to March 2015 and AMP6 covers April 2015 to March 2020.

Associate company – Condition A of the Licence defines an associate company to be any group or related company. Condition F of the Licence requires all transactions between the Company and its associated companies to be disclosed subject to specified materiality considerations.

CEMARS (Certified Emissions Measurement and Reduction Scheme) - The CEMARS methodology for producing an organisational carbon footprint is aligned with the internationally recognised Greenhouse Gas Protocol for corporate accounting and reporting.

CMOS (Central Market Operating System) - CMOS is the core IT system which underpins MOSL's role in the water retail market. CMOS manages all the electronic transactions involved in switching customers and provides usage and settlement data that is used in the billing process.

Consumer Price Index including owner occupied housing costs (CPIH) - compiled and published monthly by the Office of National Statistics. This is an additional measure of consumer inflation including a measure of the owner occupied housing costs (costs that are associated with owning, maintaining and living in one's home) and council tax.

Final Determination (FD) – this is the conclusion of discussions on the scale and content of the Asset Management Plan for the forthcoming five-year period. It is accompanied by a determination of the allowable 'K' factor for the forthcoming five-year period.

K factor – the annual charge, set by Ofwat, in revenue that companies in the water industry can make. The amount by which a company can increase (or must decrease) its charges is controlled by the price limit formula RPI + or – 'K'. RPI is expressed as the percentage increase in the Retail Price Index in the year to November before the charging year. 'K' is a number determined by Ofwat for each company, usually at a price review, for each year to reflect what it needs above or below inflation in order to finance the provision of services to customers, and is subject to adjustment mechanisms to reflect prior year revenue recovery and in-period performance commitments.

Licence – the Instrument of Appointment dated August 1989 under Sections 11 and 14 of the Water Act 1989 (as in effect on 1 August 1989) under which the Secretary of State for the Environment appointed Anglian Water Services Limited as a water and sewerage undertaker under the Act for the areas described in the Instrument of Appointment, as modified or amended from time to time.

Menus – menu regulation is an innovative system in which companies are presented with a choice of regulatory contracts. Companies are rewarded or penalised based on how well their business plan matches expenditure during the subsequent price control.

MOSL (Market Operating Services Limited) - MOSL is the not-for-profit company which operates the business water market which opened on 1 April 2017.

Non-appointed business – the non-appointed business activities of the Company are activities for which the Company as a water and sewerage undertaker is not a monopoly supplier (for example, the sale of laboratory services to an external organisation) or involves the optional use of an asset owned by the Company (for example, the use of underground assets for cable television).

Ofwat – the name used to refer to the Water Services Regulation Authority (WSRA). The WSRA acts as the economic regulator of the water industry.

Outcome Delivery Incentives (ODIs) – the rewards earned and penalties incurred by companies according to how well they perform against the Performance Commitment Levels.

Performance Commitment Level (PCL) – in consultation with Ofwat and our customers, we have set measurable targets for each ODI that represent the delivery of our outcomes.

Periodic Review – the price determination process undertaken by Ofwat every five years. Each water and sewerage undertaker submits an Asset Management Plan covering the five-year period for which Ofwat will determine prices (the 'K' factor – see above).

Price Control Units – at the 2014 price review, Ofwat introduced separate price controls for wholesale water, wholesale wastewater, retail household and retail non-household.

Regulatory Accounting Guidelines (RAGs) – the accounting guidelines for the APR issued, and amended from time to time, by Ofwat.

Regulatory Capital Value (RCV) – the capital base used in setting price limits and the value of the appointed business that earns a return on investment. It represents the initial market value (200-day average), including debt at privatisation, plus subsequent net new capital expenditure including new obligations imposed since 1989. The capital value is calculated using the Ofwat methodology.

Retail Price Index (RPI) – the RPI is compiled and published monthly by the Office for National Statistics. RPI is an average measure of change in the prices of goods and services bought for the purpose of consumption by the vast majority of households in the United Kingdom.

Retail services – the elements of the business responsible for direct contact with customers e.g. the contact centre, billing and reading meters. From April 2017, following the opening of the non-household market, business customers are able to choose their retail supplier. The appointed business exited all non-household market activities.

Section 24 Sewers - In England there is a category distinction between sewers built before or after 1937. Sewers dating from after 1937, and that only serve your own home albeit that the drain line crosses somebody else's land, are "private" or "lateral drains". On the other hand if your house was constructed before 1st October 1937 and your drains are shared, serving two or more homes, then that drain line is a "public" sewer (a "section 24 sewer").

Service Incentive Mechanism (SIM) – Ofwat's measure of customer satisfaction based on surveys of customers who have contacted the Company and the number of contacts received which express dissatisfaction.

Third-party contributions since 1989/90 – grants and third-party contributions received in respect of infrastructure assets and any deferred income relating to grants and third-party contributions for non-infrastructure assets.

Totex – total expenditure comprising operational expenditure (opex) and capital expenditure (capex).

Transferred private sewers - On 1 October 2011 all privately owned sewers and lateral drains which drained to existing public sewers as at 1 July 2011 became the responsibility of the sewerage undertaker. This covers foul, surface water or combined sewers, and any

drains serving individual properties, which are outside the curtilage of the property they serve, connect to the public sewerage system and were previously the responsibility of homeowners.

UKWIR (UK Water Industry Research) - the body which facilitates, manages and delivers a strategic programme of research projects for its members, the water companies of the UK and Ireland, to address the key challenges they face

Water and Sewerage Company (WaSC) – a company responsible for the provision of both water and sewerage services.

Water only company (WOC) - a company responsible for the provision of water services only.

Water recycling - to promote public understanding of the water cycle and encourage stakeholders to value water appropriately, we use this term to describe our waste water or sewerage service.

Water Recycling Centre (WRC) - we use this term, rather than sewage treatment works, to describe the facilities which return used water to a condition where it can safely be discharged to environmental waters.

Wholesale services – the elements of the business responsible for the abstraction, treatment and distribution of water and the collection, treatment and disposal of sewage and sludge.

Working capital – the aggregate of stocks, trade debtors and trade creditors.

WRFIM – Wholesale Revenue Forecasting Incentive Mechanism.