NORTHUMBRIAN WATER LIMITED

ANNUAL PERFORMANCE REPORT

FOR YEAR ENDED 31 MARCH 2020

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BOARD STATEMENT – OUR VISION AND PERFORMANCE

This statement sets out how we, the Board of Northumbrian Water Limited, set the company's aspirations in respect of the services we provide to our customers and other stakeholders, both now and into the future, how we are performing against our aspirations and how we structure management rewards to incentivise delivery of these aspirations.

The Board has a long-term vision for the company, which is to become the national leader in the provision of sustainable water and wastewater services. This will require us to deliver outstanding service to our customers across our water and wastewater businesses as well as maintaining the highest levels of environmental performance. We are also clear that to be the national leader means to continue raising the bar to improve standards further and we encourage a culture of innovation to achieve this, as demonstrated by our annual Innovation Festivals. Many other examples of our innovative approach to improving our customer service and resilience are set out in this report.

HOW WE SET OUR ASPIRATIONS

The aspirations we set for the current price control period 2015-20 were developed through a process of engagement and consultation with customers and other stakeholders as part of our business planning process for the period. This engagement led to a set of agreed Outcomes for customer service, the environment and the way in which we manage the business. For each of these Outcomes we agreed a range of Measures of Success (MoS) and challenging Performance Commitments (PCs), which we use to monitor and report on performance.

We set out Outcomes and how we deliver these across our strategic themes and through our corporate purpose and values. We report on our performance against these Outcomes and our MoS and PCs in this report.

However, in order to drive the year on year performance improvements necessary to deliver our vision of being national leader, we set ourselves tougher, stretching targets within the business. These targets are reported internally through a balanced scorecard of key performance indicators which cover the full range of strategic themes that underpin the vision. We re-set these targets each year, taking account of how other companies in the industry have performed and what our customers have told us about their priorities.

We also work closely with the Water Forum which brings together expertise from the wide range of stakeholders. The Water Forum's Chair has attended a number of full Board meetings and our Independent Non-Executive Directors, and Executive Directors, regularly attend Forum meetings and workshops. This ensures that the Board directly understands the areas where the Forum members are challenging us to improve performance and Outcomes for our customers and stakeholders.

In order to ensure that the Executive Leadership Team's focus is aligned with the business Outcomes we want to attain, stretching internal targets from across our balanced scorecard of performance measures represent 90% of the potential value of the short-term incentive plan for our Directors, with a further 10% available for the achievement of bespoke personal targets. The Remuneration Committee Report, is available within our **Annual Report and Financial Statements**, a separate report available on our NWG website, provides full, transparent detail on our directors' remuneration policy and how remuneration in the year has been calculated.

PERFORMANCE IN 2019/20

Our performance in 2019/20 against our Measures of Success is described in detail throughout this report.

We are delighted to be the first out of eleven water and wastewater companies (WaSCs) in CCW's (previously known as the Consumer Council for Water) Water Mark assessment, placing eighth for water only companies (WoCs).

Our customers continue to be satisfied with the services we provide, and in the round they consider those services to be good value for money.

We are very pleased to achieve our leakage target in both our operating areas, for the second year in a row, and to have significantly decreased the number of water mains burst.

We were disappointed not to achieve our drinking water quality PC but are confident that improvement activities have been identified to achieve the new Compliance Risk Index measure in the future.

We are pleased that our sewer flooding performance in the round continues to compare very favourably to our commitments, and is improving.

We welcome the key role that the Water Forum play in providing challenge on behalf of our customers. As part of this process we report to and discuss our performance with the Water Forum and they provide their independent commentary on **pages 9 to 10**.

LOOKING TO THE FUTURE

Customer engagement and participation is very much an ongoing process, not a once every five years exercise for each business plan. We published our approach to customer participation in our report '**From customer consultation to a culture of customer participation**' in 2017 and co-creation of our plans with customers is part of our DNA. This is led from the top with our Independent Non-Executive Directors actively engaging in many customer and stakeholder engagement events over the year. Understanding from our customers what matters most to them about the services we provide shapes both our immediate targets and our long term plans, which have been brought together in our **2020-2025 Business Plan**.

We set out our ambitions for customers in our long term vision statement '**Shaping our Future**', published in 2018 which looked ahead as far as 2040. This plan focuses on the next five years but is set in the longer term context of providing affordable and resilient services for today's generations and our customers of the future. We published more detail on how we will deliver these ambitions in our Business Plan for 2020-2025, developed in partnership with our customers.

As a Board, we remain committed to continuing our drive to be the national leader and to deliver outstanding service to our customers and other stakeholders both for now and into the future.

Signed on behalf of the Board of Northumbrian Water Limited:

Andrew J Hunter, Chairman

Heidi Mottram, Chief Executive Officer

Paul Rew, Senior Independent Non-Executive Director

CHIEF EXECUTIVE OFFICER'S WELCOME

Our vision is to be the national leader in the provision of sustainable water and wastewater services, and I am delighted that we have made further progress towards this vision during 2019/20, and remain one of the leaders in our industry.

Before I review some of the achievements we are most proud of this year and look forward to the year ahead, I would like to talk about the impact of the current COVID-19 pandemic and how we have responded to the many challenges it has created.

COVID-19

During this time the vital importance of delivering clean water and safely, and taking away wastewater has perhaps never been so clear. I am incredibly proud of how our teams and partners have come together to continue to provide our customers with this essential public service in the face of the pandemic.

Keeping our employees safe was our first priority, and we were able to quickly enable our customer and support teams to work from home, in line with government guidance, as well as taking measures to ensure that our operational and field workers could continue to carry out their essential work safely. We utilised multiple communication channels to keep our people informed and engaged, using daily email updates to share vital information and a variety of online tools to bring our people together. Guides such as our Health & Wellbeing Guide were delivered in interactive formats to encourage employee take up.

We understand how difficult this time has been for many of our customers and we built on our existing 'Water without the Worry' campaign through direct communications to customers. We were able to offer payment breaks to over 5,000 customers and apply our social tariffs to 2,000 customers with affordability issues. We signed up 1,700 extra customers to our Priority Services Register. We also built on other customer messages such as 'Bin the Wipe' to reinforce that, even during toilet roll shortages, other materials should not be flushed down the toilet.

Our purpose is not only to deliver this essential service for customers, but also to make a wider contribution to support our communities and enhance the environment we all depend on. The impact of the pandemic has brought this responsibility into even sharper focus. Recognising this we were one of the first businesses to sign the 'C-19 Business Pledge' (see page 6). This pledge commits us to helping our customers, employees and communities as our part in helping the country pull through the COVID-19 crisis.

We chose as a business not to furlough any staff, with those who could not carry on their normal work either trained to support other parts of the business or given the opportunity to help others in our communities. This included delivering essential food and prescriptions, and making welfare phone calls to vulnerable, isolated people.

The COVID-19 situation is not over yet and we will continue to respond to government guidance as it develops and ensure that we keep delivering our key services safely, and look after our employees, customers and communities.

We will continue to work with our regulators to understand how best to reflect the impact of COVID-19 in relation to our PCs for 2020-25.

OUR C-19 PLEDGE

Making **OVER £1,000,000** of support available during the COVID-19 pandemic

This matches our commitment as one of the first signatories of the C-19 Business Pledge

SUPPORTING OUR PEOPLE

£250,000
of in-kind support through volunteering by more than 160 of our people, whose time has been gifted meaning ZERO colleagues unable to do their usual jobs will be furloughed

1,372
people working on site and in the field in line with Government guidelines to keep our water flowing and toilets flushing

19,461
Covid-19 safety checks carried out by our teams, ensuring tasks are completed in line with social distancing guidelines

1,576
people now working from home supported by investment in new technology

SUPPORTING OUR CUSTOMERS

4,000
extra customers signed up to our Priority Services Register to match our support to their circumstances

6,200
households benefiting from a three-month payment break

15million
bathtubs – or **1.2 billion litres** – of the best quality water supplied to customers every day

2,000
customers receiving bill reductions through being added to our Social Tariff and WaterSure schemes

SUPPORTING OUR COMMUNITIES

£165,000
funding to help environmental groups sustain their work

4,816
people accessing education resources since school closures, including new careers sessions delivered via Zoom

3,000
businesses helped to bounce back through taking a leading role in North East England Chamber of Commerce's plan for economic recovery

15,000litres
of emergency water supplied to keep NHS teams hydrated, plus extra work to ensure resilient supplies to new and existing NHS sites

Please note that the data and information contained within this document relates to Northumbrian Water Limited's operations in both the North East of England (trading as Northumbrian Water) and in the South East of England (trading as Essex & Suffolk Water). Information accurate as of 10 July 2020.

OUR PERFORMANCE IN 2019/20

We have been through a major transformation programme in our customer teams over the past few years. This year we followed the implementation of our new customer contact and billing system with our new operational contact and planning system and, at the same time, we've launched our new digital platforms. As with any major change programme this has required a huge amount of effort and learning from our people and I would like to personally thank the project and business teams for their tremendous efforts.

These systems give us a much improved platform to engage with our customers in the way they choose, but our most important asset in providing unrivalled customer experience is our people. With our Just Add You approach, we're taking best practice approaches and tailoring them to deliver what our customers have told us are their top priorities. I believe this sets us up well to deliver against C-Mex, the new more holistic measure of customer experience.

We made steady improvements across almost all of our targets in our water business, meeting our leakage targets again in both of our operating regions and continuing long term improvements in reducing contacts related to the appearance and smell of our water. We have continued to lead the way on water efficiency adding our 'Leaky Loos' campaign to our existing 'Every Drop Counts' message.

While we continued our strong environmental performance, we have continued to focus on sewer flooding, which is one of the worst service failures our customers can experience. Our Bin the Wipe campaign is aimed at changing customer behaviour to avoid blockages and I have been really impressed by some of the early results where we have targeted three hot spot areas with different innovative approaches. We will look to build on this over the coming year.

I was pleased to have the opportunity to speak at Water UK's Delivering a Net Zero Water Sector conference earlier this year. Our industry is embedded in the environment and it is something we, as a business, care about passionately. We met our previous target to reduce greenhouse gas emissions by 2020 by a considerable margin, through our investment in generating energy from sewage sludge and our commitment to sourcing renewable energy. We have now set ourselves a really challenging target of being carbon neutral by 2027, and I'm very pleased with the real progress we are making.

Innovation remains key to improving our long term performance. We hosted our third Innovation Festival this year, and also held a joint Innovate East event with Anglian Water. I am delighted to see ideas from our earlier events coming through into practical use within our business, such as our Digital Twin to help us better understand our customers' experience of our services. We have also gone global this year, launching our Amplify platform and opening up real life challenges for people around the world to work on solutions.

The common theme running through all of these achievements is that they are the result of the hard work that our people put in every single day. Through our Great Place to Work strategy we aspire for all of our people to have a great experience at work, to understand the part they play to achieve our vision and to deliver an unrivalled customer experience. We were delighted to be recognised as the Best Place to Work in the North East in our northern operating area at the Best Places to Work awards.

LOOKING FORWARD

We are now entering the next five year business plan cycle for our sector. I am still extremely proud of Our Plan, the engagement we had with over 400,000 customers in developing it, and of the ambitious goals and significant bill reductions we set out as a result. However, our Board decided unanimously that Ofwat's FD did not adequately reflect what our customers said were their priorities and we asked Ofwat to refer its FD to the CMA.

This will not distract us from our focus which remains, as always, on our customers and continuing to deliver an unrivalled service for them. Our goals are ambitious and so we need to push on and put our efforts firmly on delivering against the Outcomes which our customers told us were so important to them, which are set out on **page 15** of this report.

We know we are building on strong foundations in many areas, such as leakage and our environmental performance, where we have been performing strongly for a number of years. Equally we know we have to improve our performance across other areas such as water quality and sewer flooding in order to meet our stretching PCs and industry-leading ambitions, and our plans are already underway.

We are proud of the improvements we have made over the past five years, but we are never complacent and are focussed on delivering the ambitious goals we've set for the next five years and beyond. I hope you find our Annual Performance Report and Financial Statements helpful and informative.

Heidi Mottram CBE

Chief Executive Officer

WATER FORUM STATEMENT

As part of our role as the independent Customer Challenge Group (CCG) for Northumbrian Water Limited's two operating areas, the Water Forum has the opportunity to review the performance of the company against the areas that customers have said are important to them – the performance commitments (PCs) and output delivery incentives (ODIs).

Where there are fluctuations in performance over time, in either direction, we seek to understand why these are and what the company is doing to either address issues or sustain improvements. Financial scrutiny doesn't fall within our remit.

Customer satisfaction was once again very high throughout the year, and looking ahead, we believe that continued engagement with customers throughout what is a period of deep uncertainty – as a result of both Covid-19 and the CMA process that is underway – will be vital in sustaining such high levels.

We are pleased to note improvements in some of the areas we challenged the company on in last year's Annual Performance Report:

- **Sewer flooding and customer behaviour**: although susceptible to storm events, sewer flooding is also caused by flushing wet wipes, period products and other items down toilets. NWL strengthened its 'Bin the Wipe' message and trialled three innovative pilot projects to encourage customer behaviour change – if proven successful, these are positive steps that should contribute to fewer households suffering from highly unpleasant sewer flooding.
- **Interruptions to supply:** having urged NWL to learn from large supply interruption events and take proactive steps to reduce response times, we are pleased to note the improvement from an average 9.5 minutes to 6 minutes. By reacting to the very first call that is received about a mains burst, and finding sometimes innovative methods of quickly reinstating a supply of water, customers are getting better service from their water company.
- **Taste and odour:** we challenged NWL to review the way it communicates about blending water, acknowledging that small variations to 'their normal' are easily detected by customers. The company rose to this challenge, holding sprint events with staff and other organisations to understand the issue more deeply, and proactively informing and reassuring customers whose water will be affected by upcoming work. This has given fewer customers cause to complain about taste and odour.

Leakage performance continued to improve this year, which is positive news for customers. As well as good asset maintenance, pressure management is a contributory factor here, and we will keep a keen eye on this area to ensure this doesn't cause any problems, as the company balances potential increases in household demand due to the ongoing Covid-19 situation.

The new customer billing system has bedded in further over the last year, and as well as adding resource into the team to handle customer contact, we are pleased that customers can now get in touch and manage their accounts using alternative means such as Messenger. The system has clearly been an enabler of home-working, such that the transition appeared virtually seamless from a customer perspective; and the data it holds has helped identify those customers who may need financial support as a result of Covid-19.

Looking ahead to next year, we would like to see a continued focus on the following areas, to raise performance levels even higher for customers:

- **Customer complaints:** Although by April 2020 the levels of customer service (call response time, dropped calls) returned to where they were at before the new system arrived, NWL's aim must remain to minimise the reasons for customers to get in touch in the first place.
- **Bathing water quality**: we are aware that the company and its partners are endeavouring to get to the root cause of the issues at Cullercoats Bay, which has not met the minimum standard.
- **Drinking water quality**: we will keep a focus on this area through our sub-group working with the company. Engagement with the Drinking Water Inspectorate will be important; as will communication with customers about performance against the new CRI measure.
- **Bin the Wipe campaign**: the work done this year presents a great opportunity for further development in the next 12 months, and we look forward to seeing plans for a broader roll-out of those pilot projects that are deemed a success, in order to drive further reduction in sewer flooding of houses and spills from combined sewer overflows into rivers

We are mindful that for the company and its customers, what the next year has in store is uncertain; but from our interactions with the Leadership Team, we are confident that the all-important culture of responding to and learning from problems is in place. We therefore look forward to continued improvements being delivered for customers in 2020/21; and will continue to fulfil our role of providing independent challenge, insights and expertise.

Melanie Laws

Water Forum Chair

WHO WE ARE

Northumbrian Water Limited provides:

- Water and wastewater services to 2.7 million people in the north east of England trading as Northumbrian Water.
- Water services to 1.9 million people in the south east of England trading as Essex & Suffolk Water.

OUR VISION

Our vision is to be the national leader in the provision of sustainable water and wastewater services.

OUR VALUES

As important as what we do is how we do it. Our values are the principles that define how we work to deliver our Outcomes and achieve our vision.

CUSTOMER FOCUSED

We aim to exceed the expectations of our external and internal customers.

RESULTS-DRIVEN

We take personal responsibility for achieving excellent business results.

ETHICAL

We are open and honest in meeting our commitments, with a responsible approach to the environment and our communities.

CREATIVE

We continuously strive for innovation and better ways to deliver our business.

ONE TEAM

We work together consistently, promoting co-operation, to achieve our corporate objectives.

OUR PURPOSE

ALIGNING OUR PURPOSE TO OUR VISION AND VALUES

While we have always led with purpose and clearly communicated our vision and values to our people and our stakeholders, we want to explicitly define our true purpose; our reason for doing what we do. Sustainability is at the core of our purpose. This means seeking to protect and enhance the environment in everything we do; being the best we can in meeting our customers' needs and having a positive impact on the communities where we operate; and making a financial return so we are economically viable long into the future.

OUR PURPOSE

Water is life. Every living cell on earth needs water to survive. The single most essential ingredient for human life to thrive, is clean drinking water. Our work is instrumental in fulfilling our basic human needs and protecting the source of life.

WE ARE CUSTODIANS OF WATER

Delivering reliable and resilient services that are vital to public health.

We are the caretakers of water in our regions. Our practical purpose is to supply safe clean water, and remove and treat wastewater, ensuring excellent public health. We safeguard resilient supplies for future generations while preparing for and mitigating climate change. This requires innovation and making the right decisions for the long term, while maintaining a financially viable business that can always deliver our commitments. We set effective targets to match our ambition, going beyond regulatory requirements and always considering the legacy we leave.

WE ARE STEWARDS OF THE ENVIRONMENT

Valuing the natural capital and ecosystems we depend on.

We hold ourselves to account on an ambitious set of indicators designed to protect and improve the environment within our regions. We recognise the significant contribution we can make to reducing pollution, generating renewable energy, preventing flooding and improving public access to recreation. Going beyond compensating for loss of natural resources, our activities should have a lasting positive impact on the natural environment.

WE ARE COMMITTED TO DELIVERING WORLD-CLASS CUSTOMER SERVICE

Giving unrivalled customer experiences every time.

We strive to lead in customer service in our own industry and beyond. Customer service is core to our brand, values and culture. Our customers are supported to participate fully in our business, designing the services they receive; while our people know what is expected of them, and want our customers to always have complete trust and confidence in what we do. We listen, keep our promises, and show each customer that they are special by focusing on their individual needs.

WE ARE THE LIFEBLOOD THAT FLOWS THROUGH OUR COMMUNITIES

Demonstrating our value and making a wider contribution to society.

We are integral to our communities, always listening to our customers so we understand what matters most to them, and their expectations of us as a business that delivers public value. We are driven to provide affordable and inclusive services, including protecting the most vulnerable people in our society and eliminating water poverty. Working, living and volunteering in our regions helps us to understand and positively impact the wellbeing of the communities we serve.

WE ENABLE EXTRAORDINARY LEADERS

Empowering people to know their purpose.

Working with a sense of purpose throughout our business gives our people personal fulfilment. We foster a high performing culture and value diverse perspectives and skills. We support our leaders to develop high emotional intelligence, empowering our people to behave responsibly. Our people are held to account for living out our purpose, vision and values.

TAKING OUR PURPOSE FORWARD

We want our purpose statement to effectively convey what we stand for in historical, ethical, emotional and practical terms. We want to be sure it resonates with our customers, stakeholders and employees not only now but into the future. This will ensure it continues to fit with our vision and values, demonstrating to all how we deliver public value.

Over recent months we have further reviewed best practice, looking not just at corporate reporting guidance, but considering how other companies are addressing purpose to ensure ours resonates with all these audiences. We have also engaged with organisations that are driving purpose across the business sector, including the CBI, Business in the Community, and This is Purpose, through the Social Mobility Pledge and more recently the C-19 Business Pledge. Through this we have confirmed that our purpose continues to drive our business effectively, and also identified ways in which we might further develop our purpose statement to ensure it fully encapsulates and communicates this ethos.

Our next steps will be to carry out detailed work co-creating and developing our purpose statement to keep it powerful and relevant. This will involve senior executive leaders and board members in the business working alongside expert advisers, and in consultation with our employees, stakeholders and customers. As we move beyond our immediate response to the COVID-19 pandemic, we will put these actions into place.

OUR OUTCOMES

CUSTOMER

- We deliver water and sewerage services that meet the needs of current and future generations in a changing world
- We supply clean, clear drinking water that tastes good
- We provide a reliable and sufficient supply of water
- Our customer consider the services they receive to be value for money
- Our customers are well informed about the services they receive and the value of water
- We provide a sewerage service that deals effectively with sewage and heavy rainfall
- We provide excellent service and impress our customers

ENVIRONMENT

- We help improve the quality of rivers and coastal waters for the benefit of people, the environment and wildlife
- We protect and enhance the environment in delivering our services, leading by example

COMPETIVENESS

- We are an efficient and innovative company
- Our finances are sound, stable and achieve a fair balance between customers and investors

PEOPLE

- Our people are talented, committed and inspired to deliver great services to customers
- Our people act in line with our values
- We are seen as a great place to work
- Our workplaces are healthy and safe

COMMUNITIES

- We are proud to contribute to the success of local communities
- We work in partnership towards common goals

REPUTATION

- We are a company that customers trust

OUR STAKEHOLDERS

We provide essential services to our customers and operate within a strict regulatory environment. Ofwat regulates prices and levels of customer service, the Environment Agency (EA) covers environmental protection and the Drinking Water Inspectorate (DWI) monitors drinking water quality. Customers' interests are represented by the Water Forum and Consumer Council for Water (CCW).

It is very important that we understand the needs of our stakeholders, provide a great service and deliver our business Outcomes. We engage proactively with all of our stakeholders and, in our continuing efforts to provide an unrivalled customer experience, invite our customers to participate in the co-creation of our strategies and approaches. In addition to our shareholders, other key stakeholders are listed below.

STAKEHOLDERS/KEY ISSUES WE ENGAGE ON	HOW WE ENGAGE	EXAMPLES OF 2019/20 ACTIVITIES
Customers • PCs • Risk management • Data protection • Resilience • Co-creation of services • Our Plan 2020-25 and beyond • Water Resources Management Plan (WRMP) • Think Digital: our web and customer app services • Customer journey and experience maps	• Focus groups / deliberative workshops • Co-creation workshops • Online surveys • SMS surveys • Flo customer engagement vehicle, pop-up shops and Customer Heroes • Social media • Community Portal • Online community groups – Have Your Say	• Make My Day campaign • PR19 engagement with customers • Customer Zone at our 2019 Innovation Festival, plus road-testing web design and experiences • Customer focus groups on journey and experience mapping • Age UK events to share issues including Priority Services Register and digital opportunities • Whole Town Approach delivering engagement across five campaigns in Ashington and Leigh-on-Sea • Developer Conference jointly discussing planning and regulation issues
Ofwat • License modifications • Periodic review • Market reform • Annual performance • Governance and assurance • Non-domestic retail market	• Responding to consultations • Targeted reviews • Peer to peer contact and meetings • Annual Performance Report (APR) • Annual Assurance Plan • Periodic Review 19 (PR19) submissions	• Hosted Chief Executive on visit to Innovation Festival and Chair on visit to Innovate East • Participation in Ofwat Future 30 conference • Participation in Ofwat's key campaigns: innovation, resilience, customer participation and water stories • Monthly account management calls • Participating in the marketplace for ideas
Environment Agency • Environmental performance • Discharge compliance • Flooding • Pollution • Strategic level objectives including catchment approaches • Catchment Based Approach (CaBA) partnership activity • Drainage and Wastewater Management Planning (DWMP) • Innovative approaches for water management • 25-year Environment Plan • Biodiversity • Bioresources • Environmental permitting	• Responding to consultations • Annual and monthly performance reviews • Management reviews • National strategy and practitioner networks • Industry task and finish groups • Collaborative workshops and joint learning • Joint working group on pollution incidents and monthly pollution challenge group meetings • Regional and local partnerships and groups, including North East Water Leaders Group, Regional Flood and Coastal Committee, Northumbria Integrated Drainage Partnership (NIDP) and Catchment Partnerships • Catchment Partnership strategy and activity • DWMP Steering Group • North East Environmental Leaders Group	• Senior director visits to Innovation Festival and Innovate East • DWMPengagement events • Chair visit to Tyne Estuary Flood Forum • Love Water Steering Group • Presented at Flood and Coastal Erosion Risk Management strategy launch and responded to consultation • Prioritising and engagement through the Northumbrian Integrated Drainage Partnership • Contribution to Regional Flood and Coastal Committee and subsequent subgroups • Contribution to Strategic Regional Flood Meetings with Lead Local Flood Authorities (LLFA) and EA • Joint community events such as Tynedale Flood Forum • Water Hub Project Meetings and organised events • Catchment Partnership steering groups and sub-groups through our regions • Sustainable Urban Water Management Workshop

Drinking Water Inspectorate (DWI) • Drinking water quality • Customer satisfaction • Progress with named schemes • Quarterly performance reviews • Cyber security • British, European and International Standards • (BS EN ISO) • Laboratory method development • License to Operate / competent operator • Resilience planning • Research & development	• Responding to consultations • Quarterly operational liaison meetings • Senior leadership strategy meetings • Chief Inspector's report launch meetings • Water Safety Plan forums • Consultation and negotiation via Water UK groups at board, strategy and policy level • Regulatory commitments reviews • Promoting good practice • Industry task and finish groups Onsite collaborative investigations and audits	• Deputy Chief Inspector attended our 2019 Innovation Festival • Undertakings agreed • Achieving support for enhancement as part of PR19 submission
Water Forum • Our Plan 2020-25 and beyond • Customer service • PCs • Customer participation, research and engagement • Affordability • Drinking water quality • Trust and confidence • Environment • Community	• Participation in co-creation and research workshops and events • Partnership events • Formal meetings and sub-groups • Meetings with senior managers, Executive Leadership Team, and the Board and INeDs • Operational fact finding tours, e.g. customer centre, partnership drainage sites' wastewater treatment works	• Review and input into our Annual Performance Report and Our Contribution report • Attendance by Water Forum members at our Innovation Festivals, Innovate East and company engagement/information events • Regular contact between Water Forum's chair and CEO / Board • Subgroup visits to operational sites • Review and input into company Assurance Plan • Meeting, review and independent response to Ofwat's Draft Determination of business plan
CCW • Vulnerability • Our Plan 2020-25 and beyond • Complaints management and best practice • Water Matters research • Tariffs, including social tariffs • New campaigns such as Bin the Wipe • Think Digital – launch of new website and app products	• Responding to consultations • Sharing material for review • Quarterly liaison meetings • Attendance at regional public meetings • Bespoke engagement sessions • Onboarding sessions for new team member	• Chief Executive attended roundtable on water poverty • Discussing C-Mex and D-Mex readiness • Attendance at Innovation Festival and Innovate East • Attendance and engagement in the Water Forum • Visit to central team in Birmingham for engagement and relationship development • Workshop series discussing new complaints definition
Supply Chain Partners • Capex programme delivery • Health, safety and environment • Attracting and developing the next generation of engineers and project managers • Developing our approach to digital construction (BIM) • Leaving a positive lasting legacy from our investment projects • Innovation	• Framework agreements for long term relationships • Joint Framework Governance Groups • Integrated programme delivery teams • Joint conferences and workshops • Joint recruitment and development of employees • Awards ceremonies • Leading and participating in industry bodies • Presentations at conferences and events • Partner participation in our Innovation Festivals	• Joint initiatives and approaches to health, safety and welfare, such as mental health first aiders, fire safety officers, wellbeing initiatives, psychological health checks • Innovation Festival – joint sprint on legacy • DWMP engagement events • GEM Awards recognising supply chain partners going the extra mile • Establishment of a Customer Forum with our partners • Monthly "lunch and learn" sessions at our Seaham hub where suppliers and manufacturers showcase their products and services • Run2Academy – Summer placements, year in industry students and work experience opportunities • Collaborative Just An Hour community volunteering activity
Local authorities • Planning • Customers in vulnerable circumstances • Economic development • Emergency response • Flooding risk	• Regular meetings with senior officials and lead councillors • Technical input and support on planning matters • Participation in consultations and steering groups relating to	• Met Leaders of multiple councils including Darlington, Gateshead, Newcastle and Northumberland • Met Chief Executives / Managing Directors of multiple councils including Chelmsford, Colchester, Essex, North Tyneside,

	environment or economic development issues • Lead flood authority on flooding risk and mitigation	Northumberland, Stockton and Tees Valley Combined Authority • Input into work on eradicating water poverty, including joint work with Basildon Council on special publication • Partnership on developing underground asset map in North East • Updates and engagement on 2020-25 business plan and PR19 process • Developer Conference jointly discussing planning and regulation issues • DWMP engagement events • Engaged with councils including Basildon, Brentwood and Thurrock on Local Plans • Participation at our Innovation Festivals
Employees • Our Plan 2020-25 • Creating a great place to work • Health, safety and wellbeing • Company values and behaviours • Diversity and inclusion • Employee benefits • Volunteering opportunities	• Employee roadshows and other events • Internal communication channels – intranet, weekly newsletter, Yammer • Tap Into online benefits portal • Face-to-face Teamtalk sessions for managers to update teams on key business issues • Annual company-wide employee survey • Discussion groups to consult with employees	• Continuation of the Great Place to Work programme for all employees focusing on specific areas of feedback from survey results • 42% of employees participated in Just an Hour – our employee volunteering scheme • New benefits introduced including Neyber financial management • Series of Health & Safety campaigns run throughout the year under our Everyone Home Safe Every Day banner, plus development of new Health & Safety handbook • Leadership Management Development Programme for people managers • ViVa awards scheme recognises our employees for living our vision and values • Two Leadership Conferences - where leaders across the business come together to collaborate on how to improve performance • Long service award celebrations
Media and opinion formers • Capital schemes • Environmental initiatives • Innovation and skills • Community investment • Corporate responsibility • Corporate campaigns (including Bin the Wipe, Every Drop Counts and BYOB/Refill)	• News releases • Briefings • Face-to-face meetings • Feature articles • Case studies • Social media messaging • Events	• Partner in Reach plc Invest North East media campaign • Dedicated partnerships with Made TV and Archant on innovation events • Award nominations for activity on key projects including Innovate East, Bring Your Own Bottle/Refill and Every Drop Counts • Record number of reach on social media channels for 2019 (11.7 million) • Record level of media coverage for the business in 2018, reaching more than 540 million people (83% of which was positive or neutral in tone) • National print / online coverage for key stories on innovation, flushability and environmental performance • International print and online coverage for asset mapping innovation project • Local broadcast coverage for stories including Innovation Festival and environmental performance • Positive coverage in print / broadcast media in response to handling of bursts and other critical incidents • National children's TV programme from Kielder Reservoir featuring water resources and flushability messages
Government and Policy Makers • Capital schemes • Environmental initiatives • Innovation and skills • Community investment • Corporate responsibility	• Briefings • Site visits • Face-to-face meetings • Attendance at key forums • Party conference activity	• Participated in water industry meeting at Defra chaired by Michael Gove (Secretary of State)

• Resilience • Corporate campaigns		• Meetings with Thèresé Coffey (Minister of State) and Lord Gardiner (Parliamentary Under-secretary of State) • Visit of Priti Patel MP (now Home Secretary) to Hanningfield Water Treatment Works and Sandon Valley House • Events at both Conservative and Labour Party Conferences • Visit of Defra Water and Strategy Teams, alongside Defra Non-Executive Directors to the Abberton Scheme • Supported Chamber of Commerce private dinner in Westminster • Hosted a Dinner for the Natural England Board and local stakeholders in Essex, following a tour of the Abberton Scheme • Ministers, Shadow Ministers and senior civil servants attended Innovation Festival and Innovate East • Speaking at Cabinet Office Geospatial Commission Westminster Reception • Meetings with multiple constituency MPs
Debt providers • Financial results and regulatory and operating performance • Funding, hedging and liquidity • Regulatory environment • Political environment • UK legislation • Capital programme update	• Non-deal roadshows • Presentations • Visits • Meetings	• Investor update • Monthly reporting • Board meetings • Credit agency meetings • Engagement with banks
Non-Governmental Organisations and charities • Community investment • Environmental initiatives • Regional policy • Economic and social wellbeing • Innovation	• Sponsorship • Just an Hour volunteering programme • Donations • Policy input • Governance support • Fundraising • Meetings and forums • Collaboration	• Part-funded and supported the Blueprint for Water Natural Resilient Research • Powered by Water programme with sporting club partners • Engagement with Rivers Trusts on Water Rangers programme • Working with NHS partners on campaigns including Priority Services Register and hydration • Governance roles with North East England Chamber of Commerce and Confederation of British Industry North East Councils • Business in the Community Water Task Force national activity • Working with North East Learning Enterprise Partnership (NELEP) on engaging SMEs in our Innovation Festival • Involvement in NELEP policy development activity including on Local Industrial Strategy and Brexit response • Participation in the Innovation Supernetwork to engage with start-up companies and SMEs on innovation projects • Partnerships with local universities on developing game changing innovations and cutting edge research
Non-Governmental Organisations and charities • Community investment • Corporate Social Responsibility (CSR) • Environmental initiatives • Volunteering • Regional policy • Economic and social well being • Innovation	• Sponsorship • Just an Hour • Donations • Fund raising • Meetings and forums • Collaboration on innovation project	• Workshop on circular economy in Tees Valley and in London with HRH with Business in the Community • Powered by Water programme with sporting club partners • Business Plan presentations to Chambers of Commerce and CBI • Engagement with Rivers Trusts on Water Rangers programme expansion • Working with NHS partners on Priority Services Register and hydration • Support for Great Exhibition of the North

		• Our CEO is Vice Chair of Learning Enterprise Partnership and regional HRH ambassador • Our Director of Corporate Communications is on the North East Chamber of Commerce and Confederation of British Industry North East Councils • Business in the Community Water Task Force national activity • Working with North East Learning Enterprise Partnership (NELEP) on engaging SMEs in our Innovation Festival • Participation in the Innovation Supernetwork to engage with start-up companies and SMEs on innovation projects • Partnerships with Durham University, Newcastle University and Northumbria University on developing game changing innovations and cutting edge research

ASSURANCE SUMMARY

Within this Annual Performance Report, we publish a range of information about our services and performance, including how we are performing against the commitments we made in our 2015-20 Business Plan. This helps to provide our customers and stakeholders with assurance that we are delivering what they have told us they need and want from us.

It is important that we have robust assurance arrangements in place to ensure that this information is accurate, clear and transparent. This is essential to building and maintaining a high level of trust and confidence with our customers and stakeholders.

In March 2019, following consultation with customers and stakeholders, we published **Our Assurance Plan for 2019/20**. Consistent with guidance from our economic regulator, Ofwat, this document firstly assessed any risks, strengths and weaknesses associated with either meeting our obligations and commitments, or providing information of appropriate quality. It then detailed the checks and balances - or assurance - we planned to put in place to address these risks and make sure we remain on track.

A significant proportion of this assurance is targeted at making sure that the information that we publish in our Annual Performance Report is of appropriate quality. We have published a **Data Assurance Summary** to sit alongside this Annual Performance Report. This provides detail on how we decide what level of assurance should be applied to our data (i.e. who should be our assurance provider), and whether this has been completed during the year. It also provides details of any key findings and, in conclusion, confirms that there were no significant issues to report.

INTRODUCTION

This report summarises our performance against our Outcomes during the regulatory year ending 31 March 2020. This is the fifth and final year of us delivering our 2015-20 Business Plan.

We have underpinned our drive to be the best with five strategic themes: customer, environment, competitiveness, communities and people. Our Outcomes are aligned to these themes and set out what we aim to achieve. They represent what our customers have told us they value in the long-term. They are our commitments, or promises, to our customers.

Our Outcomes were developed with our customers and stakeholders. We have 12 delivery Outcomes covering our strategic themes of customer, environment and competitiveness. We also have seven enabling and reputational Outcomes which cover our strategic themes of communities and people.

Everything we do is driven by an Outcome for our customers.

To track performance against our Outcomes we have clear metrics – our Measures of Success (MoS). Each Outcome can have several Measures of Success and we must as a minimum deliver a stable level of service to our customers. These are our Performance Commitments (PCs).

For delivering better performance we could earn a financial reward. However, poor performance means that we could incur a financial penalty. These rewards and penalties are called Outcome Delivery Incentives (ODIs).

Some of our MoS are reputational and do not incur financial penalties or rewards.

Our two baskets of asset health measures (one for water services and one for wastewater services) are an innovative way of monitoring, protecting and incentivising the long-term sustainable stewardship of our assets. They are linked to our customers' valuations of service improvements that they want us to deliver between 2015-20.

This performance report sets out in an open, transparent and clear way the work that we are doing to deliver our 2015-20 Outcomes and provide the water and wastewater services that our customers want. It also outlines how our Outcomes are being refreshed for 2020-25 and how we will measure future performance.

The report provides extended commentary for '**Table 3A**' which is a summary of our performance against our Outcomes that we must provide for our regulator, Ofwat, every year. '**Table 3A**' can be found in Appendix 1.

Measurement of performance and calculation of any penalties or rewards is calculated using the methodology set out in our PR14 Final Determination, as agreed with Ofwat. This process is subject to robust assurance. Some of the ODIs have earned a reward in the five years to 31 March 2020, and some have incurred a penalty.

Our asset health ODIs are calculated on a three-year average. The first assessment took place at the end of 2017/18, the second assessment at the end of 2018/19 and now at the end of 2019/20 we make our final assessment.

Within '**Table 3A'**, performance against our PCs for asset health measures has been assessed. This report covers all of our Outcomes including our enabling and reputational Outcomes which are not part of '**Table 3A**'. Performance is highlighted by Outcome and we report on each MoS. Further information about our performance is available on our website **www.nwg.co.uk**. For information about how we are performing in comparison to other water and sewerage companies visit **www.discoverwater.co.uk**.

OUR LONGER TERM PLANS

When preparing our Business Plan for 2020-25, we consulted with over 400,000 of our customers and stakeholders to make sure that we were building a plan based on their needs and wants. We have revisited our Outcomes and have adjusted them accordingly to reflect our customers' preferences as well as our own ambitious goals.

Our Plan for 2020-25, is structured across six key themes to deliver the Outcomes that matter most to our customers. Our Plan 2020-25 can be found here **www.nwgourplan.co.uk**.

Our ambitious goals for 2020-25 are:

UNRIVALLED CUSTOMER EXPERIENCE

Our customers' expectations are rising, and what customers want from us is changing too. We will deliver a package of measures to support our aim to deliver an unrivalled customer experience.

Our ambitious goals in this are to:

- Deliver world class customer service; and
- Give every single customer the opportunity to have a strong voice and engage with us, with at least 2m customers participating by 2025.

AFFORDABLE AND INCLUSIVE SERVICES

Water and sewerage services should be affordable for all of our customers, whatever their circumstances, and they should all have equally access to an unrivalled customer experience.

Our ambitious goal in this area is to:

- Eradicate water poverty in our operating areas by 2030.

LEADING IN INNOVATION

Super-charging our innovation culture is essential if we are to continue to deliver unrivalled experiences within the context of rising customer expectations, technological advances and changing political and physical climates.

Our ambitious goal in this area is to:

- Be leading in innovation within the water sector and beyond.

RELIABLE AND RESILIENT SERVICES

We will continue to deliver reliable and resilient services by anticipating change, planning ahead, and by making the right long-term decision about how to run our business.

Our ambitious goals in this area are to:

- Have the lowest levels of leakage in the country in our water-stressed Essex & Suffolk Water (ESW) operating area;
- Have a per capita consumption (PCC) for water use of 118 litres per person per day by 2040;
- Promote confidence in our drinking water so that nine out of ten of our customers choose tap water over bottle water; and
- Eradicate sewer flooding in the home as a result of our assets and operations.

IMPROVING THE ENVIRONMENT

We will create a step change in our environmental activities, building on our role as stewards of the environment to demonstrate leadership, and to protect and improve the environment within our regions.

Our ambitious goals for this area are to:

- Be leading in the sustainable use of natural resources, through achieving zero avoidable waste by 2025 and being carbon neutral by 2027;
- Demonstrate leadership in catchment management to enhance natural capital and deliver net gain for biodiversity;
- Have the best rivers and beaches in the country; and
- Have zero pollutions as a result of our assets and operations.

BUILDING SUCCESSFUL ECONOMIES IN OUR REGIONS

As a responsible business with a strong track record, it is important to us that we demonstrate leadership and make a wider contribution to life within our regions.

Our ambitious goals within this area are to:

- Spend at least 60p in every £1 with suppliers in our regions; and
- Be the most socially responsible water company.

OUR PERFORMANCE AT A GLANCE

We show (●) where we have met our performance against our promise this year, (●) where we have not met our performance but not incurred a penalty, and (●) where we have not met our performance and have incurred a penalty.

MEASURE OF SUCCESS	OUR PROMISE	OUR PERFORMANCE			CALENDAR OR REGULATORY YEAR PERFORMANCE
		2019/20	ACHIEVMENT	THREE YEAR AVERAGE PERFORMANCE (ASSET HEALTH MEASURES)	
We provide excellent service and impress our customers					
Ofwat Service Incentive Mechanism (SIM)	n/a	77.4	n/a		R
Independent overall customer satisfaction survey (out of 10)	8.2	8.6	●		R
Domestic customer satisfaction (net promoter score)	+32	+40	●		R
Our customers consider the services they receive to be value for money					
Independent value for money survey (out of 10)	7.9	8.1	●		R
CCWater value for money survey – Water Services Northumbrian Water	83%	79%	●		R
CCWater value for money survey – Sewerage Services Northumbrian Water	84%	84%	●		R
CCWater value for money survey – Water Services Essex & Suffolk Water	73%	76%	●		R
Our customers are well informed about the services they receive and the value of water					
Independent survey on keeping customers informed	94%	93%	●		R
We provide a reliable and sufficient supply of water					
Leakage (Ml/day) - Northumbrian Water area	137	134.8	●		R
Leakage (Ml/day) - Essex & Suffolk Water area	66	63.2	●		R
Water mains bursts* (per year)	4,586	2,817	●	3,628	R
Interruptions to water supply for more than 3 hours (per property per year)	05:29	06:08			R
Properties experiencing poor water pressure*	216	220	●	202	R
We supply clear, clear drinking water that tastes good					
Overall drinking water compliance*	100%	99.915%	●	99.934%	C
Discoloured water complaints* (per year)	2,908	2,349	●	2,492	C
Satisfaction with taste and odour of tap water (no. of properties per year)	987	862	●		C
We provide a sewerage service that deals effectively with sewage and heavy rainfall					
Properties flooded internally (per year)	186	139	●		R
Properties flooded internally (TDS) (per year)	228	205	●		R
Properties flooded externally (per year)	1,318	1,001	●		R
Properties flooded externally (TDS) (per year)	2,931	3,102	●		R
Repeat sewer flooding* (in the last 10 years)	496	75	●	58	R
Sewer collapses* (per year)	58	50	●	48	R
Sewer collapses (TDS) (per year)	84	63	●		R
We help to improve the quality of rivers and coastal waters for the benefit of people, the environment and wildlife					
Pollution incidents* (Category 3)	115	63	●	60	C
Bathing water quality compliance (no. of sufficient bathing waters)	34	33	●		C
Sewage treatment discharge compliance* (no. of discharge permit condition failures)	0	2	●	1	C
We protect and enhance the environment in delivering our services, leading by example					
Greenhouse gas emissions	172	139	●		R

Asset Health Measures are highlighted with *

We are pleased to have achieved or beaten 19 out of our 26 performance commitments in 2019/20 In particular:

- Our customers continue to be satisfied with the services we provide, and in the round they consider those services to be good value for money.
- We are very pleased to achieve our leakage target in both our operating areas, for the second year in a row, and to have significantly decreased the number of water mains bursts.
- We were disappointed not to achieve our drinking water quality PC but are confident that improvement activities have been identified to achieve the new Compliance Risk Index measure in the future.
- We are pleased that our sewer flooding performance in the round continues to compare very favourably to our commitments, and is improving.
- Our taste & odour and Interruptions to supply performance has also improved since 2018/19, with the former achieving its target for 2019/20, and the latter only narrowly missing it. Both aspects of performance continue to compare favourably to the rest of the industry.
- We continue to be delighted with our industry leading performance on pollution.

The following pages describe each aspect of our performance in more detail

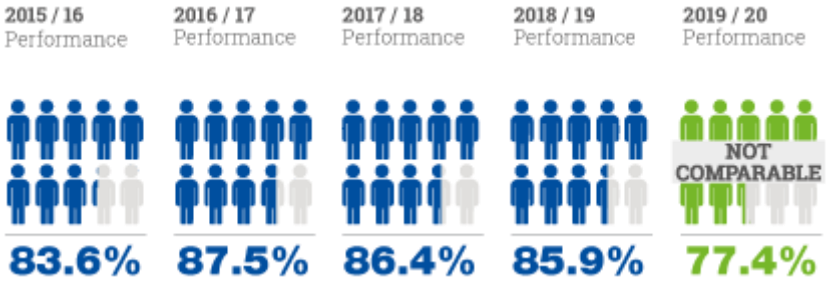
WE PROVIDE EXCELLENT SERVICE AND IMPRESS OUR CUSTOMERS

There are three measures of success for this Outcome:

- Ofwat's Service Incentive Mechanism (SIM)
- Independent overall customer satisfaction score
- Domestic customer satisfaction score (Net Promoter Score)

Between 2015-20, we also had a bespoke PC around the installation of our new Customer Care and Billing (CC&B) system.

OFWAT SERVICE INCENTIVE MECHANISM (SIM)



When we developed our business plan for 2015-20, we made an annual PC for SIM. As the industry moves towards the new Customer Measure of Experience (C-Mex), Ofwat decided that 2019/20 would be used as a shadow year for C-Mex and SIM surveys would not take place.

Ofwat provided guidance to companies that had SIM PCs for 2019/20 on how to calculate a proxy SIM score, and it's acknowledged that it won't be a like-for-like comparison due to the difference in activities carried out in year. We have applied that guidance and the result is a score of 77.4, which is lower than in previous years. Scores across the whole industry are lower. To give reassurance that our performance remains strong, we have noted below where we ranked in industry using the shadow year C-MeX measure.

There are a number of reasons, which we outline in this narrative, why we think that this score is not truly reflective of our performance or comparable with previous years, or the PC set and why we should look at the shadow year performance metric and placing.

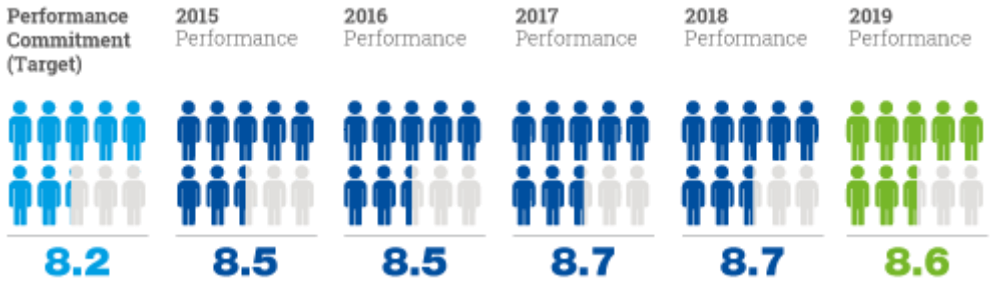
A proportion of surveys now take place by email where previously all surveys were conducted by telephone. Ofwat and the company they have contracted to conduct the research have recognised that online survey scores are typically lower than telephone survey scores.

The proportion of online scores can vary significantly from one company to another making scores uncomparable across the industry. We believe around 35% of surveys for our score were conducted online, and other companies tell us that that one company had as few as 10% of surveys online and another as many as 50%.

Within C-Mex customers are asked to rank satisfaction using a scale of 0-10, to provide a SIM proxy this has been converted to a scale of 1-5. This conversion means that a reflection of customers' true scores is lost. In addition, surveys have moved from quarterly to monthly.

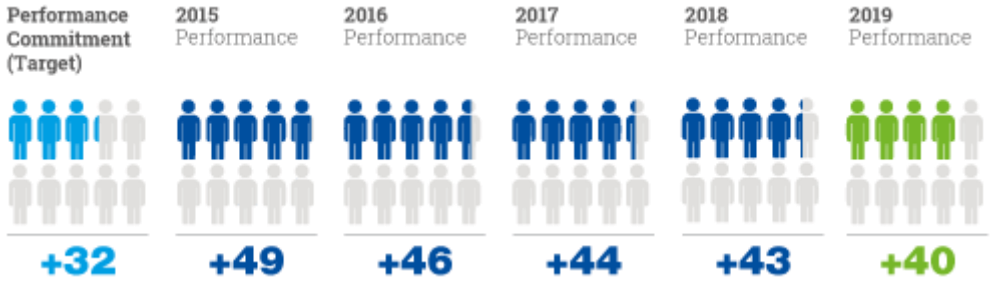
Across 2019/20 we continued to work across the industry to develop C-MeX in its shadow year. The new measure, and its shadow year operation, was different to SIM in many ways. We used the year as an opportunity to learn, try and test new models for engagement with customers, and to explore new ways of working within our operational teams. At the end of the year we ranked 5th (out of 17) in the industry overall, and had demonstrated a quarter-on-quarter improvement in consistency and scoring.

INDEPENDENT OVERALL CUSTOMER SATISFACTION SCORE



Although there was a very slight dip in customer satisfaction in 2019, we exceeded our PC,

DOMESTIC CUSTOMER SATISFACTION (NET PROMOTER SCORE)



Whilst we achieved our PC, there was decline in the final phase of Net Promotor Score (NPS) in 2019. This can be attributed to a mixture of service issues and an extremely challenging landscape with many customers citing that they have lost trust in large businesses, are feeling particularly hard pressed due to rising prices and have been influenced by negative media coverage in the run up to the election.

CUSTOMER MEASURE OF EXPERIENCE (C-MEX)

This is a new common measure for 2020-25 that all companies are required to report on this year – the 'shadow year'.

The PC is designed to incentivise companies to improve the experience they provide to residential customers. This PC should increase residential customer satisfaction, by improving both the overall customer experience and companies' handling of customer contacts.

C-MeX is the new financial and reputational common PC designed to provide customers in the water sector with excellent levels of service. It is a broader and more representative measure, covering customers who make contact, as well as those who may not have been in touch and hold a more 'experiential' view. Replacing SIM, C-MeX ran in 'Shadow Year' – without any reward or penalty opportunity – across the period 1 April 2019 to 31 March 2020, following the Draft Determination

policy and guidelines set out by Ofwat in March 2019. During the Shadow Year all water companies were invited to share thoughts and challenges, and to work with Ofwat, and their chosen research company, to aid understanding of the new metric and its likely application. In December 2019 Ofwat published its Final Determination policy and guidelines for the AMP; this included changes to the PC, which are effective from 1 April 2020 until 31 March 2025.

Our ambition is to be in the top two companies for C-MeX across the AMP. For the Shadow Year, we ranked 5th out of 17 water companies overall with a score of 79.64.

DEVELOPER SERVICES MEASURE OF EXPERIENCE (D-MEX)

This is a new common measure for 2020-25 that all companies are required to report on this year – the 'shadow year'.

The PC is designed to incentivise companies to improve the experience they provide to developer services (new connections) customers, including property developers, self-lay providers and those with new appointments and variations (NAVs). This PC should increase developer customer satisfaction, by improving the overall customer experience for all developer services customers.

The Developer Measure of Experience (D-MeX) is the new financial and reputational common PC designed to provide customers in the water sector with excellent levels of service, It is a broader and more representative measure, looking at a broad range of Water UK metrics as well as qualitative feedback. D-MeX ran in 'Shadow Year' – without any reward or penalty opportunity – across the period 1 April 2019 to 31 March 2020, following the Draft Determination policy and guidelines set out by Ofwat in 2019. During the Shadow Year all water companies were invited to share thoughts and challenges, and to work with Ofwat, and their chosen research company, to aid understanding of the new metric and its likely application. In December 2019 Ofwat published its Final Determination policy and guidelines for the AMP; this included changes to the PC, which are effective from 1 April 2020 until 31 March 2025.

Our ambition is to be in the top two for D-MeX across the AMP. For the Shadow Year, based on a data share between the water companies in England and Wales, we were very proud to be ranked 1st out of 17 Water companies overall for the qualitative score. Our score was 86.64.

Customer Care and Billing System

Our considerable investment in technology and new platforms – from our Customer Care and Billing (CC&B) systems, to our episerver platforms, to our iAM apps and our customer app – has been a hugely positive strategy, which has brought many positive changes for our customers and our people. As with any 'once in a generation' transformation programme, we felt some immediate short terms challenges – from speed to competency challenges, through to cultural changes for our customers and our people – as we transitioned from disparate legacy systems to an holistic suite of future-proofed and integrated systems. Having invested in the right resources and training to ensure the positive embedding of change, we successfully stabilised across 2019 and with that stability came a rich suite of reporting and insight which has enabled us to better-leverage a number of experience-enhancing capabilities. Having a single version of the truth with all customer engagements in one system is itself hugely beneficial but numerous other enhancements, such as every day direct debits, clearer online billing capability.

Some specific examples of performance improvements are:

- An 80% increase in multi-media messages in credit and collection activities, resulting in more timely collection from customers. Overall increase in multimedia messages from 346,000 to 622,000.
- Reduced time from meter read to the customer receiving a bill. The KPI was five days, it's now one day.
- Automation of key business processes e.g. meter installations and GSS payments, has increased first contact resolution, making us more efficient and enhancing the customer experience.
- Increased self -service through IVR and the website reducing inbound phone contact by over 21,000 calls p.a.

Direct benefits for our customers include:

- Customers can pay by direct debit on any day of the month with more flexible payment arrangements.
- Improved call routing so customers can speak to the right person first time.
- Customers have a consistent experience regardless of channel (achieving an NPS of 70 for customer satisfaction for digital self service).
- Our Customer Service staff can recognise our customers from their telephone number which auto-populates in CC&B. This provides a fantastic personalised customer experience and increases first contact resolution.
- More timely bills for customers – as soon as we read the meter we send their bill.

With the investment in our web capability we can be much more agile in changing and adding content, are able to act on customer feedback in real time to make enhancements, are able to provide end-to-end digital journeys for the first time, and have provided a mobile-first clear, crisp and highly intuitive customer experience on mobile and desktop devices, truly transforming our digital estate and capability, really setting ourselves up to deliver brilliantly through this increasingly popular channel. Since stabilisation it has been pleasing to see positive performance, with demand profiles and levels of dissatisfaction returning to a strong performance baseline. It's also great that the improvements and enhanced capabilities – and what we can leverage from them – have been noted in our meetings with CCW and other stakeholders, as well as in customer feedback.

Our customer service approach and strategy

Providing an unrivalled customer experience remains our core strategy and one we're incredibly proud of. Engaging with customers remains critical to our success in delivering more of what matters most to them and we're really pleased that we've been able to drive this forward again this year, in anticipation of refreshing our strategy in 2020 for the next AMP.

Talking with customers, getting their feedback, insight and ideas on what world class service looks and feels like will always be something that informs our approach. We also know that to be the best we must compare ourselves not only against other water and utility companies, but against industry disruptors and the best service companies the world over. We work closely with the Institute of Customer Service (ICS) and have recently been awarded their prestigious Training Mark accreditation for a suite of our soft skills training modules which really set out for our people how we live and breathe our commitment to 'unrivalled customer connections – first time, every time'. This is a key step in our roadmap to achieving Service Mark with the ICS – a broader validation of world class service culture and strategy within our organisation. We've also undertaken a lot of great work to benchmark against other fantastic companies and really understand how we can

sharpen our service design and further enhance all customer journeys, regardless of channel of choice for engagement with us.

As a further example of diversity of research and where we've engaged our customers is in the digital space. Think Digital is a key component of our overall Unrivalled Customer Experience Strategy, an increasingly popular channel of choice, and one where we've driven significant improvement and engagement across the year. We've engaged with colleagues and customers through a number of channels, including face-to-face interviews, A-B testing, digital focus groups, customer testing, online forum engagement to test ideas and online digital challenges. We've tried to engage with different customer groups for this, working with customers from school work experience 'future customer' groups, to students, to working customers to customers who have retired and we engaged with as part of our link with Age UK. This has led to us designing and developing specific web pages and help areas, specifically addressing feedback and opportunities recognised.

We've also done a considerable amount of engagement with university students as we know they have different experiences and that their engagement is cyclical at certain times of the years. We've taken Flo, our community engagement vehicle / or our people to events and engagements at Newcastle, Durham and Northumbria universities and we've developed specific web pages to better engage and inform our student customers, so improving their experiences.

Flo is a valuable tool for engaging with our customers to understand their interests - onboard Flo we've talked with customers about key parts of our strategy from things like water efficiency and our every drop counts campaigns, to Bin the Wipe campaigns, to testing our new Just Add Water branding. We've also used Flo as a place to share our inclusivity strategies and to encourage customers to talk with us about the things that matter most. Linked to this was our Whole Town Approach campaign – centred in Ashington and in Leigh on Sea – where we tested awareness of and recall for our brand and a number of key campaigns pre- and post- spending lots of structured time in regions.

We ran an Unrivalled Customer Experience sprint at our 2019 Innovation Festival, bringing together key speakers from across a number of industries and from a number of key 'north east' companies, ensuring we were aware of what businesses and customers expect in 2020 and beyond, in respect of service, experience and corporate social responsibility. From there we've begun developing a new strategy, building on previous work.

Reduction in written complaints

Complaints performance in the latter part of 2018/19 and into first half of 2019/20 was challenging post-implementation of our new CC&B system, due mainly to the speed-to-competency of our people, and changes for our customers having a negative impact on experience. This led to an atypical spike in complaints and we were asked to submit additional complaints reporting to CCW, as well as commit to overall reduction targets. Pleasingly, we have met and exceeded our agreed reduction targets with a downward trend in complaints being realised overall. There has been a 7% overall reduction in complaints for the reporting period (6,812 to 6,326), and we are pleased that we continue to make significant progress in reducing complaints across reportable areas, and now broadly back to baseline performance.

Our new websites and customer App

The launch of our new Customer and Group websites in October 2019, saw a move to new and more agile platforms, as well as completely new customer journeys, experiences and engagement. Our new websites have a completely new look

and feel and our customers love them. This is a key part of our digitalisation strategy – and our plans to give customers access to their channels of choice, the ability to self-serve and to really engage with us in a new way. Since going live we have been closely tracking the impact to both customers and the business, which has all been positive. Where there are suggestions to enhance, we have act quickly and made changes in real time where it's right to do so.

Since October we have been working to implement over 100 enhancements to the customer experience of using our websites. This continual improvement is evident in some of the key performance metrics as shown below.

March 2020 we saw record high numbers of transactions coming through our websites and apps. There were around 49,000 transactions completed in March 2020, compared to 42,000 in March 2019 – a 16% increase year-on-year. In terms of our highest volume contact – home moves – we have seen record high numbers coming through via the website since going live. In March 2020, 42% of home moves came through via the website – in March 2019 that figure was just 33%. That equates to over 1,600 calls taken out of the call centre in March 2020 alone.

With regards to NPS, we track NPS scores on our website at the end of each key journey. The NPS scores for the past month for each area are:

- Home move: **+67**
- Make a payment: **+71**
- Submit a meter read: **+52**
- Request a meter: **+73**

Finally, our new **Customer app**, which launched on 11 February 2020, now has over **25,000** active users. Customers have made over **6,000 payments** via the app – with around 80 payments being made every day. Over 2,000 customers have created online accounts via the app.

Refreshing our Unrivalled Customer Experience and Inclusivity strategies

We continue to evolve our thinking in line with best practice from UK plc – using the Institute of Customer Services' UKCSI as a benchmark – but also through working with organisations like KPMG to understand some of their international benchmarking principles and measurements. Customers' expectations are continually growing and we're evolving our thinking in order to meet them. As the country begins to recover from COVID-19 it is likely that customers' expectations will grow even further and we're already thinking about how we best articulate and iterate to keep ahead of the curve. We are refreshing our unrivalled customer experience strategy,

The effect of COVID-19 on the economy is also going to impact on our inclusivity strategy, and what that means practically to customers. We are keeping a close eye on our customers' needs and will refresh our inclusivity strategy appropriately.

CASE STUDY: JUST ADD WATER… JUST ADD YOU

We are passionate about water, and understand its importance to everyday life.

Our 14 ambitious goals clearly lay out the steps we need to take to become the best – and importantly, they reflect what our customers have told us matters to them.

Our customers' expectations are rising all the time, along with those of our shareholders and regulators. We're proud of what we do already but know we can do more to consistently create unrivalled customer service experiences. Making sure we get it right first time is more important than ever. We want our customers to think we've done a great job, and to know that they matter to us.

In 2019 we launched our external customer campaign across our regions – **'Just Add Water'**. The campaign focuses on the value of water, as well as reminding our customers of the great work we do in providing clean, clear and great tasting tap water, and of course that we take away all their wastewater too.

We know that we can't give our customers an unrivalled experience without every one of our team playing a part in that so we created - **'Just Add You'.** To showcase the diverse and brilliant ways our people help our customers every day!

Without our people we won't be able to wow our customers and it's really important that each and every one of our customers knows how important they are to us.

Every interaction a customer has with us could be their lasting memory and the only thing they recall about us if asked. Taking a moment to think about how we behave when we're working – or if wearing branded clothing outside of work, or driving branded or co-branded vehicles –and acting in a way that we're proud of will give a really positive impression.

Our five customer priorities (chosen by customers) are:

- Show each customer that they're important to us
- 'Own' the customer's problem
- Make it easy for them
- Be proud to promote our great work in local communities
- Keep our promises

To complement these, and to support in delivering an unrivalled customer experience every time, we've taken some great learning from a model developed by KPMG Nunwood; the Six Pillars of customer experience excellence. The Six Pillars provide a framework that supports leading companies around the world in driving positive change in their businesses.

The Six Pillars are:

INTEGRITY

Comes from us demonstrating trustworthiness. Doing what we say we will do builds trust moments and our individual actions add up to creating trust in us.

RESOLUTION

Turning a poor experience into a great one is key. Even with the best processes, things go wrong. Great companies put issues right quickly, and make customers feel really good as they do.

EXPECTATIONS

Customers' expectations are increasingly being set by the best brands they have dealt with. Great organisations understand, deliver and – where possible – exceed expectations

TIME AND EFFORT

Customers want their interactions meet their timescales and requires minimal effort. Removing obstacles to allow the customer to achieve their objectives quickly and easily – when and how they want to – has been shown to increase loyalty and satisfaction

PERSONALISATION

This is the most valuable part of most experiences. It involves demonstrating that you understand a customer's specific circumstances and adapt their experience accordingly. Using their name, knowing their preferences and history with us helps make an experience feel personal to them.

EMPATHY

This is simply being able to show you understand someone else's experience and can relate to it; then going that one extra step because you understand how they feel.

Our customers are at the heart of everything we do and being recognised by our customers for great customer service is really important to us. By using the Six Pillars and our five customer priorities whenever we engage with a customer means we can make sure we are delivering a world class service – one that we can be really proud of – for them each and every time.

OUR PLAN 2020-25: OUR CUSTOMERS TELL US WE PROVIDE EXCELLENT CUSTOMER SERVICE AND RESOLVE ISSUES QUICKLY

The two new measures for 2020-25 that were introduced this year will continue:

- Customer measure of experience (C-Mex)
- Developer measure of experience (D-Mex)

Additional measures that will be introduced will cover:

- Priority services for customers in vulnerable circumstances
- Satisfaction of customers who receive additional non-financial support
- Awareness of additional non-financial support
- Response time to written complaints
- British Standards Institution Award for Inclusive Services
- Visible leak repair time

OUR CUSTOMERS CONSIDER THE SERVICES THEY RECEIVE TO BE VALUE FOR MONEY

There are four measures of success for this Outcome:

- Independent value for money survey
- Three CCW value for money surveys covering water and sewerage services

INDEPENDENT VALUE FOR MONEY SURVEY

We saw a 0.1 point reduction in the score out of 10 for value for money. This result of 8.1 out of 10 exceeds our PC of 7.9.

Pensioner Tariff

We have been working with Department for Work and Pensions (DWP) in order to make use of the powers within the Digital Economy Act 2017 to identify customers who would be eligible for our financial support schemes. In particular we have been working to be able to data match for eligibility for both Watersure and our Pension Credit tariff reduction scheme. Once live we will be able to check eligibility proactively for our customers and carry out annual reviews using the data matching process rather than requiring customers to send in proof of income or benefits statements.

We have made really good progress with the DWP agreeing the detail of the data match in technical terms and the process for sharing. DWP were progressing through the process building stage with a target delivery date of April 2020, however the current COVID-19 situation has meant that he DWP have had to temporarily redeploy resources.

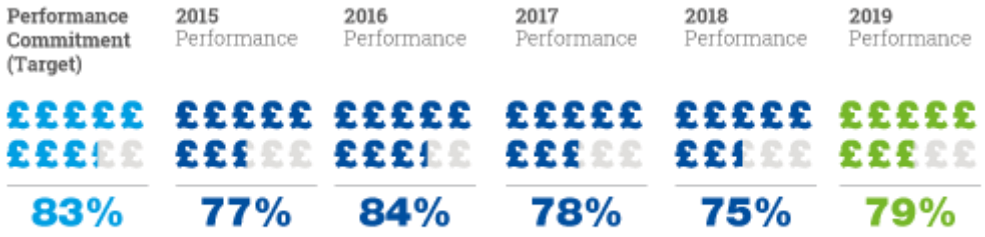
The delays in getting this process live have meant that we do not have as many customers on our pension credit tariff at the end of the year as we had originally forecast but will be able to rapidly catch up once the datashare goes live.

SATISFIED WITH VALUE FOR MONEY (CCW RESEARCH)

These three measures are taken from CCW's Water Matters survey. This survey is completed annually, and allows us to compare ourselves with other water, and water and sewerage companies.

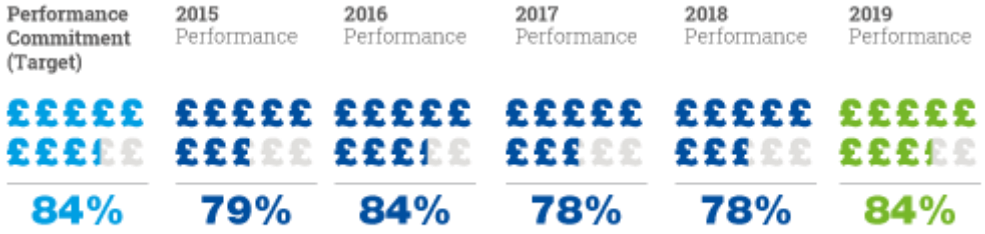
CCW have provided us with early sight of the results from their Water Matters survey. This is due to be published in July 2020. We are reporting the provisional results now and will issue an amendment to this Annual Performance Report if they differ when CCW publish them.

Satisfied with value for money of water services – Northumbrian region



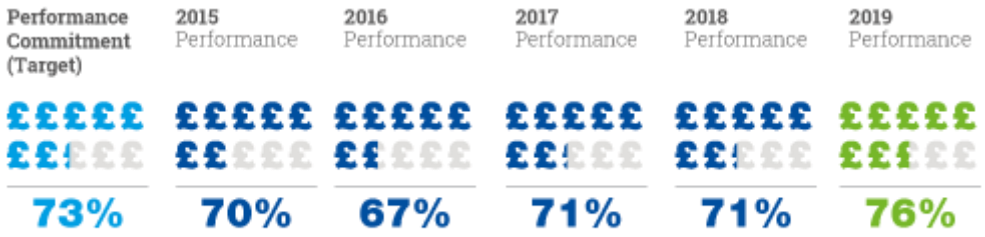
We saw an increase in the satisfaction with value for money of water services in the Northumbrian region. Whilst we did not achieve our PC, our score of 79% was above the industry average for value of money of water services which was 76%.

Satisfied with value for money of sewerage services – Northumbrian region



We achieved our satisfaction with value for money of sewerage services PC in our Northumbrian region. Our performance was significantly higher than the industry average of 77%.

Satisfied with value for money of water services – Essex & Suffolk region



We are delighted that we exceeded our PC scoring 76% for satisfaction with value for money of water services in our Essex & Suffolk Water regions.

OUR PLAN 2020-25: OUR CUSTOMERS SAY OUR SERVICES ARE GOOD VALUE FOR MONEY AND WE WORK HARD TO KEEP WATER AND WASTEWATER SERVICES AFFORDABLE FOR ALL

The NWL independent value for money measure will continue throughout 2020-25.

New measures will be introduced covering:

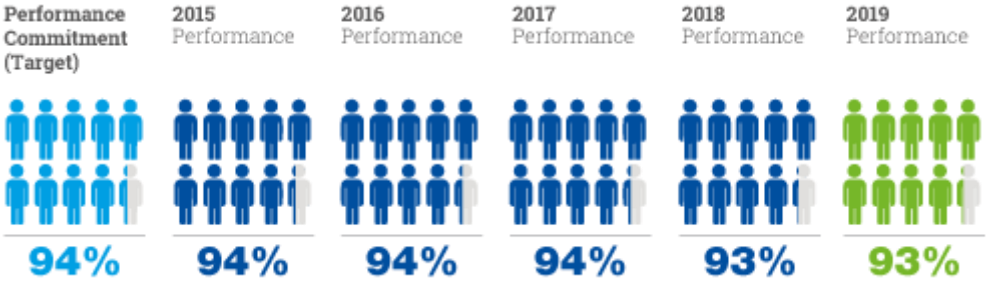
- Percentage of households in water poverty
- Satisfaction of customers who receive additional financial support
- Awareness of additional financial support
- Percentage of void household properties
- Non household gap sites

OUR CUSTOMERS ARE WELL INFORMED ABOUT THE SERVICES THEY RECEIVE AND THE VALUE OF WATER

There is one measure of success for this Outcome:

- Independent survey on keeping customers informed

INDEPENDENT SURVEY ON KEEPING CUSTOMERS INFORMED



The 2019 result of 93% remains consistent with 2018. This result of 93% is 1% below our PC of 94%.

WE PROVIDE A RELIABLE AND SUFFICIENT SUPPLY OF WATER

There are five Measures of Success for this outcome:

- Leakage in our Northumbrian Water operating area
- Leakage in our Essex & Suffolk Water operating area
- Interruptions to water supply >3 hours
- The number of properties affected by low pressure
- Water mains bursts

LEAKAGE NW

Leakage from the water network is measured in megalitres (millions of litres) lost per day. Leakage levels fluctuate throughout the year as the weather changes and we report the average daily level at the end of the year.

In Northumbrian Water (NW), leakage averaged at 134.8 megalitres per day (Ml/d) in 2019/20. This is better than our PC level of 137.0 Ml/d.

To improve leakage performance we have continued to invest in our network reactively to repair leaking assets, as well as investing in our meters and logging capability to maintain the integrity of our District Meter Areas. This is critical to managing and prioritising our active leakage control detection programme. We will continue to investigate and trial new technologies to improve the efficiency of our Leakage Technicians. We are also investing in an enhanced pressure management programme which will enable more control over pressures within the network, which will reduce leakage in areas which have excessively high pressures relative to customers' needs.

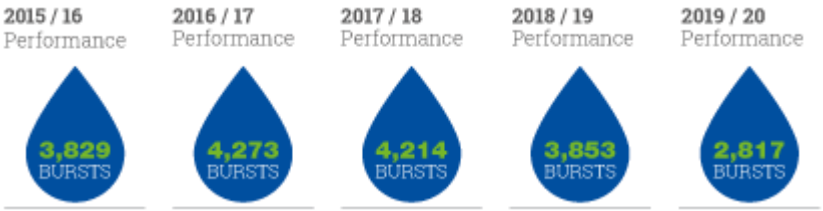
LEAKAGE ESW

In Essex and Suffolk, leakage averaged at 63.2 Ml/d which was better than our PC level of 66.0 Ml/d. However, this is not low enough to earn a reward.

Last year we reported that 2017/18 was a difficult year due to the 'Beast from the East' and challenges posed by the hot summer of 2018. The good news is that thanks to the innovative actions taken through that period we commenced the 2019/20 reporting year in a healthy position.

Starting in a good position has aided performance as has our continued focus on leakage throughout the year. The weather of 2019/20 also contributed to the performance. Mild weather is beneficial to leakage as stable ground conditions protect pipes from bursting. In contrast severe winters with freeze thaw events and very hot summers that dry out the ground and impact upon leakage performance by causing large numbers of bursts and leaks.

WATER MAINS BURSTS (ANNUAL PERFORMANCE)



This is an asset health measure. We measure the number of mains bursts by counting the number of repairs we make to water mains each year.

To maintain a stable burst rate we invest in replacing sections of our vast network of water pipes each year. In 2019/20 we replaced 48.5 km of distribution main in the north and 21.1 km of distribution main in ESW. We have also been progressing with an innovative project looking at how we could further reduce bursts in the future by better managing 'pressure transients' which are high pressure shocks that reduce the life of water pipes and cause bursts.

We have also continued the process of cleansing all mains repair jobs to ensure they fit with the Ofwat measure definition of a mains burst. The most significant contributing factor in the step change seen in 2019/20 has been the benign weather we have experienced over the last 12 months, with no significantly dry summer or cold winter this has resulted in reduced

ground movement overall. This period follows the relatively severe conditions in 2018/19 where we saw extensive failures of weak points in the network, both of these factors combined have resulted in less mains failures occurring in 2019/20.

The graph below shows our three-year average performance.

WATER MAINS BURSTS (THREE-YEAR AVERAGE)

As this is one of our asset health measures, our PC applies to a three year rolling average of performance. Finishing the year with a total of 2,817 mains bursts brings our three-year average down to 3,628 which is well below our PC of 4,586. This asset health measure has no outperformance financial reward.

WATER SUPPLY INTERRUPTIONS >3 HOURS

An interruption to the water supply can occur on a planned basis when we carry out network maintenance or unexpectedly when a burst or other failure occurs in the network. We recognise that interruptions to the water supply can cause our customers real inconvenience; especially when they are unexpected and we cannot warn customers in advance. For this measure, all interruptions of three hours or longer are added up to give a total time that customer supplies were lost across our supply area. We then divide this total time by the number of properties we serve. This gives an average number of minutes and seconds we have interrupted each customer for three hours or longer.

Following challenging performance in 2018/19 we have reviewed all the factors behind performance deterioration and have plans in place to prevent a repeat occurrence. We have learnt that we need to refocus our commitment to a speedy response to keep interruptions as short as possible. We also need to ensure that temporary supply equipment is being used wherever possible. We have delivered a refresher training course about managing supply interruptions to all relevant field and office based employees to ensure they understand how their actions impact on performance.

To support this we are also working with partners to improve our prioritisation and response to alarms, and investing in new equipment such as Arlington tanks and digital pressure gauges. In addition we are investing in enhanced pressure management, to reduce the number of events on the network which can trigger an interruption.

These actions have improved performance to 06:08 and brought it close to the PC of 05:00.

Despite missing the PC we will not pay a penalty as the penalty threshold we have for interruptions performance is set at a level which recognises that our targets are stretching and well above industry average.

Interruptions to supply 1-3 hours

This is a bespoke measure for 2020-25, that we committed to publishing three years of data from 2018/19 through to 2020/21 to establish a 'baseline' level of performance from which we can then measure our rate of improvement.

PROPERTIES EXPERIENCING POOR PRESSURE (ANNUAL PERFORMANCE)

This is an asset health measure. We measure the number of customers who are experiencing poor pressure using an industry standard level of pressure equivalent to being able to fill up a 15 litre bucket in 100 seconds. We proactively monitor and investigate water pressures in the network so that we can identify customers who are not receiving pressure at this standard and take action. Properties which are not receiving the minimum standard pressure are added to our low pressure register (LPR). During 2019/20 we have invested to increase the pressure for 947 customers leaving 220 properties on the LPR at the year end. This is an increase on the number of properties on the LPR at the end of 2018/19.

The following graph shows our three year average performance.

PROPERTIES EXPERIENCING POOR PRESSURE (THREE-YEAR AVERAGE)

As experiencing low pressure is usually the result of deteriorating mains or water pumps, this is one of our asset health measures. The PC applies to the three year rolling average, which is 202. This is better than our PC of 216 and has not triggered a financial reward.

CASE STUDY: WATER EFFICIENCY

Every Drop Counts

Per Capita Consumption (PCC) has been introduced as a common measure of performance for 2020- 25. We have an ambitious goal to reduce PCC to 118 litres per person per day by 2040. This is a decade earlier than the recent National Infrastructure Commission (NIC) report recommendation. As with leakage, our PCC performance will be measured over a three-year rolling average to allow for variations in the weather, which can significantly affect water usage in the home.

Over the past five years through our Every Drop Counts campaign, more than 24,126 households in 10 towns have received one of our industry leading free water efficiency retrofit visits. As a result our customers have saved on average 21.3 litres each per day; a reduction in consumption that has been shown to be sustained in the following years through independent statistical analysis. Our water efficiency programme also involves the identification and repair of leaking toilets, a substantial primary school education programme, housing association home retrofits, water saving kits, product trials and research and application of behavioural science techniques.

Many of the aforementioned schemes will be increased in scale between 2020-25. There are also a number of new approaches we'll be taking to directly reduce PCC including incentivising building standards and introducing smart water metering. We will also be developing a digital engagement platform – linked to smart water metering – whereby customers will be able to better understand their water usage and receive tailored water-saving advice and support. Our intention is to deliver behavioural change on a large scale through engaging with our customers face–to-face and digitally, and helping customers to view and understand their own water consumption.

Whole Town Approach

In 2019 our Whole Town Approach, which has been used over the past five years to successfully deliver water efficiency messages to our customers, was enhanced to co-deliver several key corporate campaigns with the aim of raising customer awareness, educating them about key messages and changing their behavior.

These campaigns included;

- Every Drop Counts – using water wisely messaging, water use behavior change campaigning and encouraging customers to choose tap water over bottled water
- Every Customer Counts – Priority Services register messaging for customers in vulnerable circumstances
- Every Penny Counts – financial support and advice for customers in vulnerable circumstances
- Every Flush Counts – encouraging behavior change around bathroom waste and supporting Bin the Wipe messaging
- Every Leak Counts – education around leaks, raising awareness of the part that customers can play in leak detection and encouraging online engagement on our leak reporting platform

All of the above was delivered in a community-focused and targeted programme which involved, educated and informed our customers. We targeted the towns of Ashington, Northumberland and Leigh-on-Sea, Essex with the programme and ensured engagement, at all levels, by working in partnership with local organisations and stakeholders as well as talking directly with customers.

Our additional objectives for this innovative approach were to realise efficiencies by combining campaign resources, increase our brand awareness and Net Promoter Score (NPS), deliver sustainable behaviour change and increase engagement and participation in each of the individual campaigns.

In an 'industry first', we offered customers a one-stop-shop for all queries, advice and support for all of the services we offer, without the more traditional approach of separating between business functions or individual corporate campaigns. We wanted to be able to provide help in any way we could and talk to customers about what mattered to them most. This allowed conversations to flow from water bills, to water meters, to saving water, to looking after the local environment and doing their bit by binning the wipe. We had a constant presence in their community, with a combination of employee attendance at events, holding surgeries at local community hubs, networking and partnership involvement, and an integrated communications campaign plan. The pilot has been a success as demonstrated in the highlights below:

- Increases in **NPS**, **Value for Money** and **Overall Satisfaction** scores in both areas, with a particular stand-out success in Leigh-on-Sea where our NPS increased by +94,
- **Improvements in awareness** of our Bring Your Own Bottle, Every Drop Counts and Water Without the Worry campaigns (rebranded as Every Customer Counts and Every Penny Counts for the pilot) in both areas,
- Significant **increases in registrations for our Priority Services Registers** across both areas,
- Successful pilot of new Community Engagement Coordinator roles within each town with particular **successes in customer and stakeholder engagement**,
- Coordinated efficient use of various marketing tactics to allow evaluation of which approaches were successful.

This successful pilot has shown that there is definite value in co-delivering multiple key corporate campaigns in one town at one time. The programme was delivered at no extra cost to the business. We have demonstrated several important outcomes that will contribute positively to our ambitious goals to give every single customer the opportunity to have a strong voice and engage with us, with at least two million customers participating by 2025, eradicate water poverty in our

operating areas by 2030 and our PCs around customers' perceptions of trust and satisfaction scores. Based on our learning, pilot research and a range of recommendations, we are now exploring how we adapt the programme further with delivery planned for when current COVID-19 restrictions are lifted.

Leaky Loos

We know from several industry-wide collaborative studies – and our own data – that between 5-8% of properties have a leaking toilet and each one wastes between 200 and 400 litres of water a day. This equates to approximately 105,000 homes wasting around 23Ml/d of water daily. This is roughly equivalent to the daily output of Wear Valley Water Treatment Works being wasted down our customers' loos.

We have introduced a service where we help customers identify if their toilet is leaking and repair it for them if it is. The benefits are clear for the customer. If they are metered, we're helping them save a huge amount of money – around £200 on their annual water and sewerage bill. We're proactively supporting them with simple tools to identify internal plumbing losses whilst also providing great customer service.

Our Leaky Loo programme delivers a number of benefits to us too. The repair of one leaking toilet saves as much water as ten home water efficiency retrofit visits so it is a very cost-effective solution with regard to delivering our ambitious Per Capita Consumption (PCC) ODI. It's also great for C-Mex as we're delighting our customers and hopefully news of the positive experience spreads among their networks. It's also contributing positively to our goal to eradicate water poverty by 2030 as we help remedy internal leaks and reduce customers' bills.

In the past year we identified and repaired over 2,000 leaking toilets for our customers saving a conservative estimate of over 430,000 litres per day. Our ambition is to scale this up over 2020-25 as a key tool in delivering our PCC PC.

OUR PLAN 2020-25: WE ALWAYS PROVIDE A RELIABLE SUPPLY OF WATER

The following measures will continue throughout 2020-25:

- Water supply interruptions over 3 hours
- Interruptions to supply 1-3 hours
- Leakage (two measures - NW and ESW)

The above measures will be supplemented with PCs for:

- Interruptions to supply greater than 12 hours
- Mains repairs
- Unplanned outage
- Per capita consumption (PCC)

WE SUPPLY CLEAN, CLEAR DRINKING WATER THAT TASTES GOOD

There are three Measures of Success for this Outcome:

- Overall drinking water quality compliance
- Discoloured water complaints
- Satisfaction with taste and odour of tap water

OVERALL DRINKING WATER QUALITY (ANNUAL PERFORMANCE)

Clean, clear drinking water that tastes good is the outcome we aim to deliver and very high quality drinking water is something that we all benefit from. Customers expect the water we supply to be healthy and safe to drink, free of colour and particles, and free of poor tastes and smells.

The Drinking Water Inspectorate (DWI) is the regulator for drinking water quality. The DWI sets exacting standards for all water companies.

This measure is an Asset Health measure. In 2019 our performance was 99.915%, based on the results of almost 87,000 (50,063 NW and 36,848 ESW) individual tests carried out in the year. Out of the 86,911 tests carried out there were 58 failures in 2019. In comparison our annual performance in 2018 was 99.949%, with 50 sample failures in 2018.

We expect variation in performance due to the fact that samples are taken on a random basis. It is important to note that none of the failures represented a risk to health.

We continue to be committed to improving water quality and have been delivering our long-term plans to achieve this. In previous years we have described the work that is being undertaken through the water supply system, from protecting raw water in catchments through to maintenance and improvements of the water treatment and distribution processes and systems.

In 2020-25 this measure is to be updated and replaced with Compliance Risk Index (CRI).

The figures above represent our annual performance. Overall drinking water quality compliance is one of our asset health PCs and compliance with the PC is assessed on three year average performance.

OVERALL DRINKING WATER QUALITY (THREE-YEAR AVERAGE)

This infographic shows our three-year average performance. As 2017-19 performance of 99.934% is less than the penalty threshold value of 99.950% a penalty is due of -£3,984,750.

DISCOLOURED WATER COMPLAINTS (ANNUAL PERFORMANCE)

Very occasionally, for a short time, customers' tap water may appeared discoloured. This is caused by the disturbance of harmless material in our water supply network, possibly caused by a burst or a leak. Discoloured water is an asset health measure.

The water we supply is normally free from discolouration and clear and bright in its appearance. Drinking water has miniscule amounts of chemicals and minerals in it, such as calcium, potassium and iron. The levels of these chemicals are measured in millionths or billionths of a gram in a litre of water. The discolouration causing material comes from accumulation of some of these chemicals, they coat the insides of the pipes used to move drinking water around our regions. This is a known consequence of piping water supplies and affects all water companies to differing degrees.

To help combat any accumulation the water leaving the treatment works meets standards that are a fraction of the standard at the customer tap, quite often a quarter of the tap standard or less. We manage our network of pipes to move this material on and prevent accumulation, but small amounts still occur.

This measure reflects the number of times we have been contacted by customers due to their tap water being discoloured. The figures show our 2019 annual performance improved greatly from 2,594 contacts in 2018 to 2,349 contacts in 2019 and for the fifth year in a row we have performed better than our PC.

We have been working to improve discoloured water complaints for more than ten years now and our sustained good performance is due to culmination of this work. However, when industry comparisons are made we recognise there is still more to do.

In previous years we have reported on how we have made improvements at our water treatment works and in our networks to tackle this important issue. To continue our improvement journey we have identified a new programme of work and have received DWI support for our discolouration management plans for 2020–25.

In 2020-25 this measure is to be updated and replaced with contacts regarding water appearance. This is a group measure which includes discoloured water as well as water that is white due to aeration, water with particles in it and other categories. Our plan for 2020-25 continues to focus on appearance discoloured water – brown orange black, which is a major contributor of contacts to this basket of contact types.

We have agreed programmes of work with the DWI to improve the number of trunk mains in which flow can automatically be raised to reduce discolouration in downstream supply areas. We will continue to flush smaller sized pipes closer to customers on a prioritised and optimised basis. We will investigate how we can improve the other contact types such as water coloured white due to aeration. We will also look for innovations that can cleanse parts of the network which cannot be managed with our current tool box of techniques.

DISCOLOURED WATER COMPLAINTS (THREE-YEAR AVERAGE)

The figures above discuss annual performance. Discoloured water complaints is one of our asset health measures and compliance with our PC is assessed on three-year average performance. This infographic shows our three-year average performance.

In line with the incentivised structure of this measure an outperformance reward is available for performance better than 2,908 contacts capped at 2,705 contacts. The reward is equivalent to 203 contacts at £2,000 per contact, amounting to £406,000. This asset health measure reward is inactivated by the penalty position for overall drinking water quality - no reward or offset to that penalty will be claimed.

SATISFACTION WITH TASTE AND ODOUR OF TAP WATER

This measure reflects the number of times we have been contacted by customers to report perceptive issues with the taste or odour of their tap water.

The drinking water we supply is very high quality but occasionally some of our customers perceive different tastes or odours. This could be due to:

- The use of chlorine to maintain good hygiene in our water supply network.
- A change in where a customer's water comes from, or how it is treated.
- Issues with a customer's own plumbing, inside their home.
- A change in a customer's perception.

We received 862 taste and odour contacts in 2019 compared to 1,060 in 2018. This level of performance is better than the upper quartile (top 25%) threshold and better than our stringent PC of 987 contacts. An outperformance reward of £1,375,000 is payable for the measure. This is equivalent to 125 contacts at £11,000 per contact.

Understanding the reasons for taste and odour contacts is complex. Some customers perceive changes in their tap water when other customers do not. Water that tastes of chemicals or chlorine is unacceptable and we recognise that. We use chlorine in water treatment as a disinfectant to ensure water remains wholesome through the water supply system. However, it has a distinctive taste and odour and this is the main taste and odour factor that is, to some extent, within our control. Around 30% of customer taste and odour contacts are recorded as chlorine based. We have been carefully controlling the level of chlorine in the water balancing the needs of water safety and water acceptability. This is something we review routinely to make sure we are always striking the right balance between wholesome water and lower chlorine levels to maximise the acceptability.

Customer engagement has also identified that change is a cause for concern and can trigger contact. Water supplies for most areas routinely come from the same source. However, to undertake asset maintenance, or in response to a reactive issue such as a burst pipe, water can be re-zoned to an area through a different route or come from a different source works. It may also be necessary to change the source of supply in drier weather to protect resources and preserve stocks. When water tastes different for no apparent reason it can be concerning.

In recognition of this we are also investigating network operations and how we can provide customers with a more consistent supply, to reduce change to the minimum while still being responsible with resources and maintaining the assets that deliver the service. We are also improving customer communications to explain when changes are being made, and routinely provide letters and texts to customers as a reassurance that the change is deliberate, not accidental and is for a fixed time while operational or maintenance activities are carried out.

OUR PLAN 2020-25: OUR DRINKING WATER IS CLEAN, CLEAR AND TASTES GOOD

Two updated measures will be continue throughout 2020-25:

- Taste and smell contacts
- Discoloured water contacts

Two new measures will be introduced:

- Compliance Risk Index (CRI)
- Event Risk Index (ERI)

WE PROVIDE A SEWERAGE SERVICE THAT DEALS EFFECTIVELY WITH SEWAGE AND HEAVY RAINFALL

This Outcome has seven MoS, some of which are linked to the performance of sewer pipes that transferred into our ownership in 2011 under the transfer of private drains and sewers (TDS), and others which relate to those assets which were already in our ownership (the public network).

These measures relate to sewer flooding performance as well as the condition of our sewer pipes. 'Internal' flooding refers to incidents where sewage has flooded the inside of a customer's house, 'External' flooding refers to incidents where sewage has affected customers' garden or curtilage.

The measures are:

- Properties flooded internally (public network)
- Properties flooded internally (TDS network)
- Properties flooded externally (public network)
- Properties flooded externally (TDS network)
- Repeat sewer flooding (within the past 10 years)
- Sewer collapses (public network)
- Sewer collapses (TDS network)

The repeat sewer flooding (within the past 10 years) and sewer collapses (public network) measures are part of our Asset Health wastewater basket and are also, therefore, measured on a three-year average.

In order to reduce the risk of sewer flooding, we developed a sewer flooding tactical plan to identify and deliver effective near term interventions to help reduce the risk of flooding.

The sewer flooding tactical plan includes interventions around the following core themes:

- **Customer communication.** Focussed interventions to help reduce the risk of sewer blockages as a result of sewer misuse.
- **Focussed teams.** Increasing our technical and operational resources to ensure we have the right people available to respond to incidents, investigate root causes and fix problems identified on the network.
- **Operational plan.** Activities identified following a review of our day-to-day activities to improve the way we work to help reduce the number of incidents occurring within our control. Interventions include improving training materials and reducing the risk of sewer flooding incidents occurring from jetting.
- **Better use of data.** Using information that we collect every day to help improve efficiency in our operational activities.

- **Enhanced Flooding other causes CCTV programme.** Increasing CCTV find and fix activities from 70km to 220 km.

PROPERTIES FLOODED INTERNALLY (PUBLIC NETWORK)

The number of properties flooded internally from our public network slightly increased from 124 properties in 2018/19 to 139 properties in 2019/2020. Despite this small increase we remain ahead of our PC, demonstrating an overall good performance in reducing the risk of internal sewer flooding for our customers in this area.

In accordance with our structure for this measure, an outperformance payment of £611,000 has been earned.

PROPERTIES FLOODED INTERNALLY (TDS NETWORK)

Our performance in this area has improved from last year. Sewerage investigations, surveying and mapping of our TDS network continues to improve each year and this will help us to further improve our sewer flooding performance in this area.

PROPERTIES FLOODED EXTERNALLY (PUBLIC NETWORK)

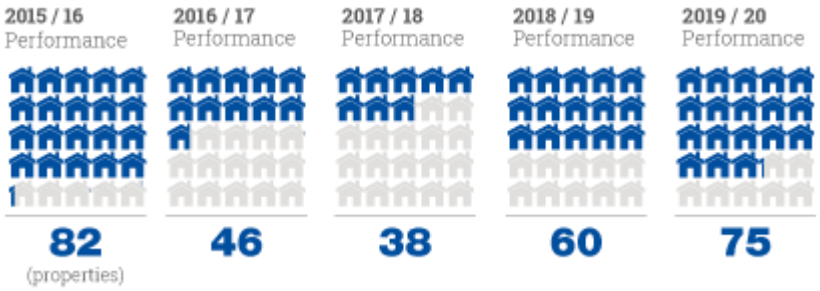
There has been a small increase in the number of properties that have flooded externally from our public sewerage network, from 902 properties in 2018/19 to 1,001 properties in 2019/20. Despite this increase, we remain slightly ahead of our PC for this area.

In accordance with our structure for this measure, an outperformance payment of £276,000 has been earned.

PROPERTIES FLOODED EXTERNALLY (TDS NETWORK)

The number of properties flooded externally from our TDS network has increased from 2,967 in 2018/19 to 3,102 properties in 2019/20.

REPEAT SEWER FLOODING (WITHIN THE PAST 10 YEARS) (ANNUAL PERFORMANCE)

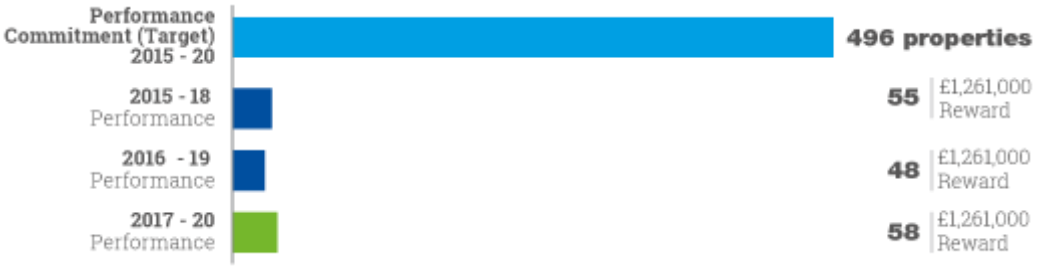


Repeat sewer flooding measures the number of times during the year that properties have experienced sewer flooding, where the property or its garden has flooded previously in the last 10 years.

The number of properties subject to repeat sewer flooding has increased from 60 properties in 2018/19 to 75 properties in 2019/20. Over the past year we have experienced a number of months where we have had sustained periods of wet weather, which has impacted our performance in this area.

We recognise that repeat sewer flooding is one of the worst service failures that our customers can experience, and we have committed to improving our performance in this area in our 2020/2025 business plan.

REPEAT SEWER FLOODING (WITHIN THE PAST 10 YEARS) (THREE YEAR AVERAGE PERFORMANCE)



These figures relate to annual performance. Repeat sewer flooding is one our asset health measures and compliance with our PC is assessed on a three-year average performance.

In accordance with our structure for this measure, an outperformance payment of £1,261,000 has been earned.

SEWER COLLAPSES (PUBLIC NETWORK) (ANNUAL PERFORMANCE)

Occasionally the structure of a sewer pipe fails and the pipe “collapses”. This can be due to a number of reasons including the age and condition of the pipe. Other factors such as ground movement and third party damage can also occur. A collapsed sewer may lead to other problems, such as flooding or pollution.

The number of sewer collapses on the public sewer network slightly increased from 49 in 2018/19 to 50 in 2019/20.

SEWER COLLAPSES (PUBLIC NETWORK) (THREE-YEAR AVERAGE PERFORMANCE)

Sewer collapses on the public network is one of our asset health measures and compliance with our PC is assessed on a three year average performance.

Our three year average performance for sewer collapses on the public network has not resulted in any financial reward.

SEWER COLLAPSES (TDS NETWORK)

The number of sewer collapse has increased slightly from 59 in 2018/19 to 63 in 2019/20.

CASE STUDY: BIN THE WIPE

We have to remove around 15,000 blockages a year from our sewer network, approximately 64% of which are caused by people flushing wipes. Even brands of wipes that have the word “flushable” on the packet can contribute to this problem. These blockages can cause sewage to back up into customers’ homes or to flood into the environment, rivers or even beaches. We want to stop this happening, and encourage everyone to ’Bin the Wipe’.

Historically, we have tried a softer approach encouraging people to put only ‘the three Ps’- toilet paper, pee and poo down the loo. However, as the problem of blockages caused by wipes persists, we are becoming firmer in the way we talk about avoidable blockages, and how we deal with households which we can identify as repeat offenders. Our aim is to create real, sustainable, behavioural change that protects customers, their homes and the environment.

In November 2019 we launched our new customer behaviour change campaign ‘Bin the Wipe’. To date our PR coverage has reached over 35 million customers and our social campaign posts have reached over one million people, drawing more than 70,000 engagements. We have had continued support from a wide range of partners, including local authorities who have re-affirmed their support for #BinTheWipe.

Alongside this overarching campaign, we also launched three targeted pilots in hot spot areas; Newcastle, Stockton and Redcar with the aim of reducing the amount of blockages caused by wipes in our sewer network. The three pilots are:

Pilot One: Redcar – The Big Bin Giveaway

During our research we found that 54% of households did not have a bin in any bathroom. We adopted an ‘ease’ strategy and door knocked all households in this area to explain how flushing wipes can block the sewer network, and how that can contribute to sewer flooding. We also gave each household a bin to put their wipes in rather than flushing them down the toilet and to help them change their behaviour. We chose the TS10 area as we experienced 52 blockages over a 12 month period here. Follow ups with regular communication and surveys are being carried out to see if they think having the bin has changed their behaviour. Our Wastewater team will also be surveying the network to monitor if the number of wipes ending up in our sewer network has reduced. So far we have seen a 43% reduction in wipes within the network.

Pilot two: Stockton – Making blockages a moment of change

In January 2020 we wrote to all the households in this area to let them know we would be monitoring the sewers in the area, using smart technology to pinpoint which houses are flushing wipes. We also shared imagery of houses that have been flooded in the area because of blockages caused by wet wipes, to give a clear, hard hitting message that it's important for this to stop.

The Wastewater team are now carrying out proactive and reactive work to pinpoint offending streets using our porcupine equipment, which when placed on a junction of the sewer network, will catch wipes on its spikes. The team can then identify which direction the wipes have travelled from and will follow that pipeline until we can pinpoint the exact properties that are flushing wipes. There is a five stage process from educating customers with letters and doorstep conversations, through to charges for costs incurred, and even possible prosecution for sewer misuse. This area was selected because in TS19 area we can be called out to clear a blockage at least once every two to three weeks. So far we have seen a 61% reduction in wipes within the network.

Pilot three: NE1-NE7 (Regional/National) – Getting into good make up habits

Research has shown that over 50% of the wet wipe blockages we have to clear, are wipes that have been used for removing make up. We launched a specific make up focused 'Bin the Wipe' campaign in the NE1 – NE7 area, focusing on sharing messages about alternative products people can use to clean their face with rather than wipes. This area was chosen for its high incidence of blockages and its demographics. Our Bin the Wipe advertising had a reach of up to 4 million, and we attended three events where nearly 200 Bin the Wipe pledges were signed. We also employed social media 'Influencers' to communicate this message, and supported this with an integrated communications campaign, which saw an above average Instagram campaign engagement rate.

OUR PLAN 2020-25: OUR SEWERAGE SERVICE DEALS WITH SEWAGE AND HEAVY RAIN EFFECTIVELY

Updated flooding and collapses measures, which cover the entire sewer network, will be used throughout 2020-25. They will cover:

- Internal Sewer Flooding
- External Sewer Flooding
- Repeat Sewer Flooding
- Sewer collapses

New measures introduced will cover:

- Sewer blockages

WE HELP TO IMPROVE THE QUALITY OF RIVERS AND COASTAL WATERS FOR THE BENEFIT OF THE PEOPLE, THE ENVIRONMENT AND WILDLIFE

This Outcome has three Measures of Success:

- Pollution incidents (Category 3)
- Bathing water quality compliance
- Sewage treatment works compliance

POLLUTION INCIDENTS (CATEGORY 3) (ANNUAL PERFORMANCE)

This is an asset health measure.

We occasionally experience problems in our water and wastewater systems that result in environmental harm to watercourses and the sea. This can happen when untreated sewage escapes from our sewers, pumping stations and treatment works as result of blockages, mechanical breakdowns and power outages. They can also occur when we have burst water mains on our supply network with chlorinated water entering the water environment or from discharges at a water treatment works.

We continue to focus our attention on reducing the risk of this happening but a relatively small number of these 'pollution incidents' occur. Incidents are categorised by the EA, with category 1 incidents being the most serious, category 2 incidents having a significant environmental impact and category 3 incidents have minor or minimal environmental impact.

Our aim is to avoid pollution and we have a MoS for all category 3 incidents (2015-2020).

Numbers of Category 3 incidents have been stable since the significant reduction from 156 in 2015 to 58 in 2017, our lowest performance. This was principally due to reduction in wastewater pollution incidents through our transformative pollution management programme that has meant we are industry leading since 2017 by a significant margin in the EA's EPA of water companies. Whilst incidents from wastewater continue to be low, we have seen an increase in those attributable to our water treatment and supply networks. This has resulted in a slight increase in our overall 2019 Category 3 number with 63 incidents.

We are pleased that our number of more serious category 1 and 2 pollution incidents remains low at 3, from 9 in 2016, 4 in 2017 and 2 for 2018. The first was related to a sewer near a watercourse, the second involved a housing developer and the third was from our water distribution network.

We continuously learn and improve on our pollution performance through our company-wide zero-tolerance approach to them. Our focus is to constantly examine all aspects of pollution through our Pollution Best Practice Group and target our efforts to effectively reduce the number of incidents.

The EA's expectation is that we will pro-actively or 'self-report' at least 75% of pollution incidents to them rather than rely on others to point out a problem. We consistently achieve high levels of self-reporting in meeting this requirement with 80% in 2019, compared with 78% in 2017 and 83% for 2018.

The figures above discuss our annual performance. Pollution incidents (category 3) is one of our asset health measures and compliance with our PC is assessed on three-year average performance. The infographic below shows our three-year average performance.

POLLUTION INCIDENTS (CATEGORY 3) (THREE-YEAR AVERAGE)

We have outperformed our three-year average pollution target between 2017-19 and will receive a reward of £272,000.

BATHING WATER QUALITY COMPLIANCE

Our bathing waters (sea water at the regions beaches) continue to be among the cleanest in the country.

Under the bathing water regulations, high amenity beaches are designated as bathing waters and classified every year as either: Excellent, Good, Sufficient or Poor. These classifications are linked to the levels of bacteria measured in sea water during the bathing season (May-September). 'Sufficient' is the minimum acceptable standard.

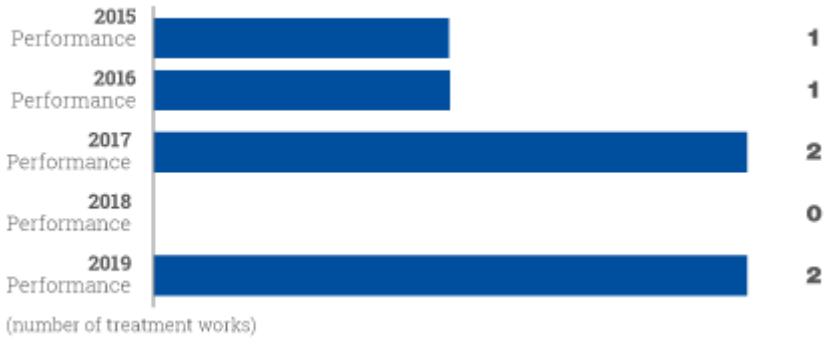
Our MoS for 2015-20 has been to contribute to all the region's bathing water being 'Sufficient or better'. As seawater quality can be affected by a number of sources, such as run-off from agriculture, seabirds and urban pollution, we work in partnership to make improvements and maintain standards.

Cullercoats bathing water in North Tyneside had deteriorated from Good in 2016, to Sufficient in 2017, and has been classified as Poor for 2018 and 2019. However, we again attained a very high percentage of Good (8) and Excellent (25) bathing waters with some of best results in England and Wales.

We continue to work in partnership with the EA and local authority to understand the reasons for the localised decline in bathing water quality at Cullercoats. Since September 2017, an extensive investigation programme has been carried out that has ruled out a number of potential factors. This has included undertaking precautionary measures and remedial works on parts of our network together with the resolution of a number of third party issues. We remain committed to working with our partners to improve the seawater quality at Cullercoats and have included investigatory investment in our WINEP for 2020/21.

We work closely with the EA to understand all bathing water quality compliance issues and identify priority beaches for closer attention. This includes working together along with our local authority partners to share information, plans and best practice. For example, making sure that signage under the EA's Pollution Risk Forecasting system is in place and understand ambitions for more Blue Flag award beaches.

SEWAGE TREATMENT WORKS COMPLIANCE (ANNUAL PERFORMANCE)



Our Sewage Treatment Works (STWs) treat wastewater from homes and businesses so that it can safely be returned to the environment: to rivers or the sea.

Before it can be returned, this wastewater must comply with strict permits. Compliance is assessed by taking regular samples which are analysed for the concentration of chemicals present including phosphorous and ammonia.

Compliance is then reported annually (on a calendar year basis) by the EA, and forms part of its Environmental Performance Assessment (EPA).

We have a very strong discharge compliance record for our numeric STWs which is an area where we have held an excellent industry position. Our performance in 2018 for STW discharge compliance was zero. This has been an extremely stretching target to maintain, and we have experienced a number of challenges including third party influence, and extreme weather events.

During 2019, permitted concentrations were breached at two STWs (out of a total of 159). One of these failures related to an issue with a 3rd party disposing of unauthorised trade effluent into the sewerage network.

Subsequently, in late December 2019, complications were encountered with a batch of samples relating to a further three STWs. In addition to the 'real' samples taken from our STWs, each batch of samples contains a number of quality control samples, of known concentration, which are used to check that the laboratory analysis process is producing accurate results. On this occasion, however, the results for the quality control samples were outside the strict tolerances required by our laboratory accreditation for one parameter, biological oxygen demand (BOD). This meant that the results for the real samples from the three STWs could not be relied upon for this one measure and were null and void (although everything strongly indicated that had the analysis process worked accurately that these samples would have comfortably passed their BOD consent targets). All other parameters were passed comfortably. These occurrences are not uncommon and form an important part of the routine laboratory quality control procedures to ensure strict standards are maintained. Ordinarily, had this occurred earlier in the year, additional samples would then be taken and the analysis repeated, something the EA reporting requirements make allowance for. On this occasion, however, due to the fact that this occurred in late December, there was no time remaining in the reporting year to re-sample, and hence the EA classifies these as 'missing samples' which by default are classified as failures.

As a result, the EA intends to report five failing STWs for NWL for 2019, in the next iteration of its EPA, which will have a detrimental impact on NWL's rating. We are understandably disappointed with this outcome which is not reflective of the impact that our sewage treatment operations have had on the environment.

The reporting definition for the corresponding performance commitment, however, stipulates that 'technical failures' should not be counted. The EA has confirmed that the three additional failures are technical in nature hence we are reporting only two failing works against the performance commitment.

SEWAGE TREATMENT WORKS COMPLIANCE (THREE-YEAR AVERAGE)

Sewage Treatment Works Compliance is one of our wastewater asset health measures. During the period 2017-19 no reward or penalty has been attributed to performance on this measure.

WHITBURN SPILLS REDUCTION

During 2015-20 we had a specific scheme PC to reduce spills at Whitburn in our Northern operating region.

We completed an £8million investment in Sunderland that reduced the amount of times that storm water discharges into the sea at Whitburn Steel sewage pumping station and into the River Wear near to St Peter's Church. The project was

successfully completed on time in December 2017, meeting our NEP and ODI obligations with positive feedback from the EA and Defra.

The overall scheme was developed in collaboration with our framework partners and colleagues. It ultimately resulted in achieving multiple goals and improved the performance and resilience of our sewer network. The creative solution was an optimised combination of existing assets, separation and attenuation of surface water from the sewer network and provision of additional network capacity.

We actively engaged with Sunderland City Council and South Tyneside Council to maximise the scheme benefits. For example, through building strong partnerships with the Local Authority, this had enabled support for Sunderland's Heritage Lottery bid to refurbish Roker Park.

The scheme has successfully delivered the benefits it set out to achieve with a reduction in the amount of spills and has provided sustainable green spaces for people to enjoy and valuable wildlife habitats.

CASE STUDY: DYNAMIC RISK INDEX AND INTERVENTION EFFECTIVENESS - DRIVE

In a business where customer service levels and standards of service delivery performance are becoming increasingly demanding; and looking at ways to be more efficient we need to be much smarter at identifying, predicting and targeting resources towards risks in a much more measured and focused way.

It has always been a strongly held belief that most of the information we need to run our business most efficiently is currently "known" to us. The challenge was to identify its whereabouts, at what point do we need to act upon it, and who has the capacity and capability to carry out those actions.

Systems and processes are often very capable of doing what they were designed to do in isolation and the challenge for our Drive project (Dynamic Risk Index and interVention Effectiveness) was to create a system and business wide process which:

- Identified the key operational measures (from 30,000 data points generated every second across our operational business);
- Combined these to create more useful information about leading indicator at the asset and operational system level;
- Collated these measure across multiple sources into a single system;
- Combined asset health and criticality weightings to these measures allowing us to calculate risk;
- Created a commonly held business wide view of where we need to focus efforts to address these risks before they impact on the bottom line performance measures, and
- Communicated a clear enterprise wide workflow to ensure the right people know their responsibilities and accountabilities to execute action plans to mitigate against these risks.

There are hard benefits and soft benefits associated with this work. It sounds counter-intuitive but the two most important benefits fit into the softer category, these are:

- Creation of a more evidence based decision making culture – our teams now know that they are more likely to communicate their risks effectively if they can describe issues in terms of numbers, for example asset failure rate, deteriorating trend graphs etc. than they are with long narratives with little or no supporting data.
- Formation of a future-proof robust framework within DRIVE which will allow us to bring in new additional business areas which we are currently in the process of doing (water networks, sewer networks and water supply) this will help us create a common measure of risk across the entire business.

We already have real examples of what this change in culture is achieving, these are:

- Evidence in meetings of a more evidence based approach to discussions – our people turning up with data
- More visible and robust action operational action plans to mitigate risk
- 30% reduction in underlying risk score due to improved operational focus on specific issues.
- Less reliance on “technical experts” due to a higher level of operational understanding.
- 15,000 exceedances of triggers in wastewater last year. 14,100 (94%) have documented root cause analyses recorded in the system.

OUR PLAN 2020-25: WE HELP TO IMPROVE THE QUALITY OF RIVERS AND COASTAL WATERS FOR THE BENEFIT OF PEOPLE, THE ENVIRONMENT AND WILDLIFE

The following updated measures will be used throughout 2020-25:

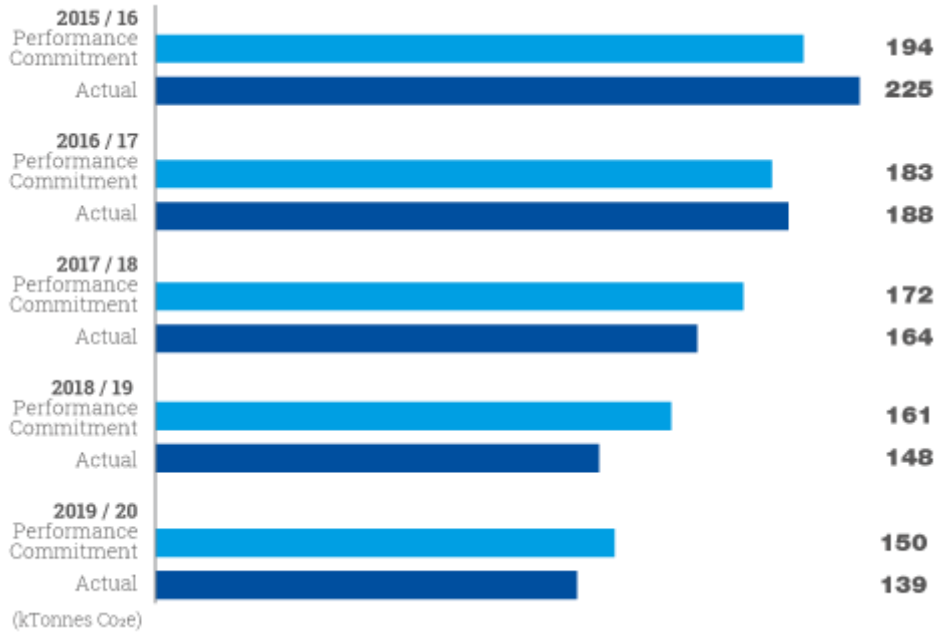
- Pollution incidents
- Bathing water quality
- Treatment works discharge compliance

New measures introduced will cover:

- Abstraction Incentive Mechanism (AIM)

WE PROTECT AND ENHANCE THE ENVIRONMENT IN DELIVERING OUR SERVICES, LEADING BY EXAMPLE

Greenhouse gas emissions



In 2009 we set a carbon management plan which aimed to reduce our greenhouse gas (GHG) emissions by 35% by 2020 against our 2008 baseline figure of 303 ktonnes CO_2e.

In 2019/20 our emissions are 139 ktonnes CO_2e, a 54% reduction against the 2008 baseline. Improved energy efficiency and the development of renewable energy have contributed to the AMP6 reductions along with lower emissions linked to grid electricity.

Our industry-leading energy supply deal and Power Purchase Agreement with supplier Ørsted provides the company with energy from wind farms around the UK and is guaranteed to be emissions free. New protocols on reporting of emissions from electricity means that we can reflect that in our reporting - on this “market-based” emissions reporting methodology our emissions in 2019/20 are just 62 ktonnes CO2e. Moving forward we will report our emissions on the market-based methodology. Note that this year the company has received third party assurance that its greenhouse gas emissions report is in accordance with ISO 14064-1:2006.

Having outperformed our previous commitments, we needed to reset the dial and create a plan for the future. That is why we have committed to achieving net zero emissions by the end of 2027. We are also proud to be one of three water companies leading the programme that will see the water sector in England have net zero emissions by 2030.

The company strategy focuses on energy and resource efficiency. We have implemented a new travel booking process which gives greater insight into the trips we take, and we have installed 500 new smart meters to help monitor energy usage at our treatment works and pumping stations.

We continue to develop opportunities for renewable energy. Our approach is to allow third parties to develop emissions-free energy generation on our land. We then buy this energy at a discount to our existing cost, using a power purchase agreement. The company has outline agreements for the installation of 14MW of solar power at our treatment works.

Collectively these approaches help us to manage the unit cost of energy we use, but we are also looking to use power more efficiently in absolute terms. Data analytics, site energy audits, trigger management and investing in energy efficient assets are all routinely applied to help drive down our underlying consumption. While recognising that external drivers such as weather can have a significant impact on this, we look to ensure that our energy costs are minimised within this overall framework.

CASE STUDY: TAKING THE LEAD TO ACHIEVE NET ZERO BY 2027

In March our Chief Executive, Heidi Mottram opened an industry-wide conference, Water UK's 'Delivering a Net Zero Water Sector conference. Representatives from across the sector came together to discuss the challenges and share their experiences as they work to deliver on a commitment to be net zero carbon by 2030.

We have also gone a step further and have set a challenge of achieving net zero carbon by 2027 ahead of the government 2030 target.

We are in a good position, as the industry leader in Advanced Anaerobic Digestion, through which we use 100% of our sewage sludge to create energy, we have already reduced our carbon emissions by 50% since 2008. Additionally, we have committed to increase the amount we spend in our operating areas to 60p in every pound, as well as supporting local economies we aim to reduce travel and movements, while green fleet plans are set to add to existing sustainable energy purchasing and generation.

We power all 1,858 of our sites using renewable electricity, enabling is eliminate the equivalent of 125,000 tonnes of CO2 emissions every year. The company will create zero avoidable waste by 2025; this will mean eliminating, re-using or recycling 90% of waste from their operations, and working with partners to contribute to the circular economy in their regions. Beyond this our investment in natural solutions such as reed beds has provided environmental benefits in biodiversity and reduction in CO2 emissions, with the use of hydroelectric power and solar continuing to contribute.

Looking ahead, the use of Digital Twins, pilots in the production of hydrogen in hydropower sites that cannot be connected to the grid demonstrates our continued industry leadership in this area.

Opening the conference Heidi said:

> "The environment is something we, as an industry, care about passionately. How could we not? The water cycle starts with us taking water from the environment and the circle closes when we treat customers' wastewater and return it, at the highest standards possible, back to the environment.
>
> Achieving net zero carbon is a challenge we are best placed to tackle if we work together, sharing experience and ideas, so that everyone benefits, and so does the environment. Our passion for the environment doesn't start and finish on the borders of our operating areas, we care deeply on a regional, national and global level.
>
> We have set ourselves a really challenging target of being net zero carbon by 2027, ahead of the industry target, and we are making real progress. We want to help others make similar big steps and also to learn from the

impressive achievements of other water companies, so that we can all do more - because that is what is needed right now, more progress."

OUR PLAN 2020-25: WE TAKE CARE TO PROTECT AND IMPROVE THE ENVIRONMENT IN EVERYTHING WE DO, LEADING BY EXAMPLE

Greenhouse gas emissions

An updated bespoke measure for greenhouse gas emissions will be used for 2020-25.

A new measure will be introduced for bioresources.

WE DELIVER WATER AND SEWERAGE SERVICES THAT MEET THE NEEDS OF CURRENT AND FUTURE GENERATIONS IN A CHANGING WORLD

To monitor asset health we use two groups or baskets of MoS, one for water services and one for wastewater services. All of the individual MoS have been discussed individually earlier in this report.

As the asset health concept is about the long term stewardship of our assets, performance is not assessed annually, but on a three-year rolling average basis. Assessments were made at the end of 2017/18 and 2018/19 periods and we are now making the final assessment at the end of 2019/20.

We have reported on both the annual and three-year average performance for each of the asset health measures within this report. The table below summarises the overall financial impact of asset health performance.

Net impact for Asset Health is a penalty of £3,586,500 over the five year period.

When we take individual financial ODIs into account the het impact for all ODIs is £9,933,000.

ASSET HEALTH SUMMARY

WATER BASKET	DISCOLOURED WATER COMPLAINTS	OVERAL DRINKING WATER QUALITY COMPLIANCE	PROPERTIES EXPERIENCING POOR PRESSURE	WATER MAINS BURSTS	TOTAL
2017/18 ASSESSMENT	£264,000				£264,000
2018/19 ASSESSMENT		-£3,984,750			-£3,984,750
2019/20 ASSESSMENT		-£3,984,750			-£3,984,750
TOTAL	£264,000	-£7,969,500			**-£7,705,500**

WASTEWATER BASKET	SEWAGE TREATMENT WORKS DISCHARGE COMPLIANCE	POLLUTION INCIDENTS (CATEGORY 3)	SEWER COLLAPSES (PUBLIC NETWORK)	REPEAT SEWER FLOODING	TOTAL
2017/18 ASSESSMENT				£1,261,000	£1,261,000
2018/19 ASSESSMENT		£64,000		£1,261,000	£1,325,000
2019/20 ASSESSMENT		£272,000		£1,261,000	£1,533,000
TOTAL		£336,000		£3,783,000	**£4,119,000**

INDIVIDUAL FINANCIAL OUTCOME DELIVERY INCENTIVES

For completeness, other individual financial ODIs and the penalties or rewards earned are shown in the following tables.

WATER	INTERRUPTIONS TO WATER SUPPLY FOR >3 HOURS	LEAKAGE NW	LEAKAGE ESW	SATISFACTION WITH TASTE AND ODOUR OF TAP WATER	TOTAL
2015-16	£3,780,000				£3,780,000
2016-17	£3,564,000		-£126,500		£3,437,500
2017-18	£594,000			£99,000	£693,000
2018-19				-£1,679,000	-£1,679,000
2019-20				£1,375,000	£1,375,000
TOTAL	£7,938,000		-£126,500	-£205,000	**£7,606,500**

WASTEWATER	INTERNAL SEWER FLOODING (PUBLIC NETWORK)	EXTERNAL SEWER FLOODING (PUBLIC NETWORK)	BATHING WATER QUALITY COMPLIANCE	TDS INTERNAL SEWER FLOODING	TDS EXTERNALSE WER FLOODING	TOTAL
2015-16	£559,000	£156,000				£715,000
2016-17	£871,000	£600,000				£1,471,000
2017-18	£1,170,000	£390,000				£1,560,000
2018-19	£806,000	£474,000				£1,280,000
2019-20	£611,000	£276,000				£887,000
TOTAL	£4,017,000	£1,896,000				**£5,913,000**

OUR RESILIENCE FRAMEWORK

Over the longer term, climate change could impact on water resources resilience and the integrity of our assets. Our Resilience Framework provides a structure for us to achieve resilience in the round by taking an integrated and systematic approach to understanding risk and resilience challenges across all of our business areas and how they interact. Resilience was a key element of our PR19 Business Plan.

Our Water Resource Management Plan has demonstrated that we have 100% security of supply index in all of our water resource zones across the full 40-year planning period. We have also demonstrated our resilience to a 1 in 200-year drought scenario.

In our southern operating area the completed expansion of Abberton Reservoir in 2014 provides further security in Essex. However, although our Essex region has robust water resource availability there are constraints, under certain circumstances, on our ability to move water to where it is required for treatment and distribution. In our PR19 Plan we proposed a new Essex transfer scheme that would provide additional flexibility and allow our two key reservoirs to be kept in balance. There was strong customer support for investing to enhance the resilience of supplies in this way and this scheme forms a key part of our case at CMA.

The security of supplies for customers in our North East operating area is largely due to the reserves available from Kielder Reservoir, and the flexibility provided by the Kielder Transfer System – a giant pipeline that can feed into the rivers Tyne, Wear and Tees.

We recognise that this puts us in a position to contribute to resilience in neighbouring operating areas as well. We play a full part in both Water Resource East, which is pioneering a collaborative approach to water resources planning across Eastern England, and Water Resources North, protecting resilience and supporting sustainable growth in the Northern Powerhouse.

On the wastewater side, we are also using industry-leading approaches to reduce the risk of flooding. Our award-winning Northumbria Integrated Drainage Partnership brings 13 Lead Local Flood Authorities across the North East together with the Environment Agency to promote sustainable drainage.

We are using innovation to manage flood risk, including utilising Digital Twin technology to assess how our assets will respond to extreme weather events, and deploying fibre-optic sensor technology enabling us to measure depth flow and temperature in our sewers, helping us to predict and resolve incidents before they occur.

We included in our PR19 business plan a programme to address properties which are at increased risk of sewer flooding for the first time due to climate change and the effect of urban creep. This is distinct from our base programme which is focused on preventing repeat flooding at properties which have experienced flooding previously and reflects strong customer support for a more proactive approach. This sewer flooding enhancement scheme forms another key part of our case at CMA.

In respect of financial resilience, our viability statement highlights our concerns that the PR19 Final Determination has resulted in a lower cost of capital, significant totex challenge, stretching PC targets and an asymmetric penalties and incentives mechanism which represents a significant challenge to financeability in AMP7. There is also lower financial headroom available for management of downside shocks and these impacts underpinned the Board's decision to appeal the FD to the CMA.

OUR PLAN 2020-25: WE ARE RESILIENT AND PROVIDE CLEAN DRINKING WATER AND EFFECTIVE SEWERAGE SERVICES, NOW AND FOR FUTURE GENERATIONS

A number of new measures will be introduced for 2020-25. They are:

- Risk of severe restrictions in a drought
- Risk of sewer flooding in a storm
- Sewer flooding risk reduction

There will also be a series of measures relating to delivery of enhancement programmes of work.

WE ARE A COMPANY THAT CUSTOMERS TRUST

All year round we work in partnership with customers to ensure that their best interests are at the heart of everything we do and so that they can place their trust in what we do. It is important we have conversations with our customers and work in partnership with them to co-create the services they want and need from us.

In order for us to understand how our customers feel about us and if they trust us we use both internal and external measurement.

CCW annually assess how well water companies are performing in a number of areas that matter the most to customers, including trust in their water company. Over the years we have had a strong track record in this area and have been names Most Trusted Water Company seven times previously in CCW's Water Matters report. In CCW's most recent "Water Matters" report, our trust score in Essex and Suffolk has improved again but is just below industry average. In our Northumbrian region our score is above average.

They have now introduced their "Water Mark" assessment, that uses previously published information on customers' views in 'Water Matters', complaint numbers and operational performance to highlight how companies are performing in a simple table. Every area of performance, including trust, has been assessed and graded and companies have been ranked to show overall performance. In our Northumbrian region we were 1st of the 11 WaSCs and our Essex and Suffolk regions we were 8th for WoCs. We will look at the previous reports that were combined in this assessment so we can better understand the scoring and see where the differences are between the two areas.

We also refer to research and assessments that covers all companies not just those in the water industry to assess our position. Our track record for trust is further supported by our continued presence (and being the only water company in the world) on the Ethisphere's Most Ethical Companies list.

In January 2020 we received the results from the Institute of Customer Service's UK Customer Satisfaction Index (UKCSI). This is the national measure of customer satisfaction and looks at many areas including NPS, customer ethos and emotional connection. It gives a unique insight into the quality of customer service in the UK and is based on a six-monthly online survey of consumers which is demographically representative of the UK population. Key areas of the research that help us understand how our customers feel about us and that they have an emotional connection with us are:

- Emotional Connection, the sector average was 70.23, Northumbrian Water took 2nd place, scoring 76.84 with Essex & Suffolk Water scoring 75, moving from 15th to 6th.
- NPS, the sector average was -11.1 with Northumbrian Water placed 2nd in sector with an NPS of +22.5 and Essex & Suffolk Water placed 3rd with an NPS of +21.9; and
- Customer ethos, the sector average was 71.41, down 6.09 points from this time last year. Northumbrian Water ranked 2nd scoring 78.09 (+2.21), and Essex & Suffolk Water scored 73.89,ranking 11th.

Internally we continuously carry out customer research to understand trends in customer satisfaction, including quarterly tracking surveys with our customers and stakeholders. We engage with more than 6,000 household, non-household customers and stakeholders each year. We measure our customers' perceptions of service, satisfaction with value for money, experience of our campaigns as well as general 'brand' perceptions. This research helps us to understand our customers' perspective of our performance and helps us make improvements to meet any changes in their expectations.

We also use Net Promoter Score (NPS) to as a measure of the trust customers' place in us. In general we compare well against other companies in our sector but also against recognised brands, however we are seeing a decrease in this and we are looking at the causes behind this (we know this because of information published by Satmetrix, the independent company who benchmark NPS results).

At the end of March 2020 our domestic NPS score was +43 and Stakeholder was +36.

We have worked hard to give Ofwat and our customers a high level of trust and confidence in our governance and assurance arrangements. Assessments are made around a number of categories including our assurance plan and data assurance summary.

Our assurance framework builds upon our company-wide accreditation to: ISO 14001 Environmental Management, ISO 55001 Asset Management and our sampling and laboratory analysis are accredited to the demanding ISO 17025.

OUR PLAN 2020-25: OUR CUSTOMERS SAY WE ARE A COMPANY THEY TRUST

A new bespoke measure, customers' perception of trust, will be measured in 2020-25.

WE ARE AN EFFICIENT AND INNOVATIVE COMPANY

INNOVATION CULTURE

Innovation at NWG is going from strength to strength. This year has seen the creation of a robust innovation pipeline and process which is enabling focus on the big challenges laid out in our business plan. Central to this are our innovation ambassadors who are enabling and spreading an innovative culture across our business and driving the implementation of innovative new ideas so it becomes business as usual.

INNOVATION EVENTS

We drive innovation all year round, but our Innovation Festivals are our focal point. The events have become firmly-established as industry-wide and attract participants from across the globe. They are widely anticipated within our regions and across our supply chain. This year, we had more than 3,000 people join us from 734 organisations. This diversity represents a huge breadth and depth of experience that we would not be able to tap into in business as usual activities. The professional services cost of this contribution is estimated to be in the range of £5m - £6m.

Clearly the main purpose of the event is to create new ideas to improve our business. We also now use it to rapidly progress existing ideas – aka “a year’s worth of work in a week”. We have used this technique to great effect to drive forward ideas that require collaboration across organisational boundaries, e.g. The Common Underground Map.

The festival places us firmly at the epicentre of an innovation ecosystem. There are lots of spin offs from the event, many of which we get involved in, some of which happen without us. Our reputation for being innovative is enhanced either way. In terms of numbers, here are some of the takeaways from our three festivals:

- 132 ideas generated that we have taken back into the business – we have subsequently dismissed some of these, but circa a third have or are near to delivering value.
- 6,000 participants. Approximately 25% of these are our employees, which helps to spread method and confidence when it comes to be innovative.
- More than £1.5m back into the local economy, which amplifies our convening power in the region.
- In 2019 we reached more people than ever with Twitter messaging, thanks to better content and more engaged attendees, achieving a reach of 3.6m people and had 3,516 mentions of the festival using the hashtag #InnovationFestival19 on Twitter.

In September 2019 we held a joint event (Innovate East) with Anglian Water over three days in Ipswich. This was a first of its kind for the industry. The event had its own character, but was broadly based on our Innovation Festival format. We embraced open innovation, attracting participants from more than 250 organisations. We held nine sprints and three hacks within the context of four themes: Leakage, Social Purpose, the Environment (Natural Capital) and Digital Twins. We combined forces with Anglian Water to invest £100k in ideas that we felt could take our businesses and the industry forward.

OPEN INNOVATION

In 2019 we launched Amplify which is an idea management platform that is harnessing the creativity and expertise of NWG/ESW employees, our supply chain, eco-system and beyond. This is a challenge based approach so focus is on

solving big challenges like reducing the use of single use plastics when there is an interruption to supply, increasing the number of customers on the priority register and how to reduce flooding by changing customer behaviours.

DROP ZONES

We will set up challenge and demonstration areas across NWL where a range of innovative technologies and ideas can be piloted, and then rapidly scaled up across the business if successful. The locations will be based on the area of operation (water & wastewater network, water & wastewater treatment, digital and customer) and each location will have a defined set of goals. Today many trials are conducted across the water sector with low level implementation, our approach aims to raise the standard and trial technologies in a robust manner allowing them to be confidently shared across the sector and beyond. We will implement a clear and robust process which defines the project, its goals, the responsibility, accountability, budget and timescales. This will facilitate wider involvement in innovation from all parts of the business.

CASE STUDY: GLOBAL INNOVATION PLATFORM LAUNCHED

Being the only water company in the world on the Ethisphere 'World's Most Ethical Companies' list is something we are very proud of.

It is very important to us to work with and share best practise where we can – a lot of problems are better solved together and our Innovation Festival is a great example of how we bring many people, companies, industries together to look at big problems.

As part of this we have launched a new ideas sharing platform 'Amplify', opening our innovation floodgates to the whole world.

Amplify is a shared space where anybody from across the globe can come together to help solve big problems, pitch new ideas and innovate together. We post a series of big real life challenges and then open them up to the rest of the world to try and help solve them.

As well as work on these problems, people can suggest ideas, pitch their products, ask questions and interact with other innovators and creators all within the Amplify website.

Each challenge is owned by an expert from the company and they monitor responses, engage with users and pick up and run with the most promising ones.

There is potential financial backing and funding to develop and trial the best ideas and anyone can register and take part in the challenges.

At the launch our Head of Innovation, Angela MacOscar, said:

> "We believe whole-heartedly in open innovation. We love new ideas that will make a difference to our customers' lives and when we find them, we will back them completely.
>
> We've seen the benefits of breaking the rules, doing things differently and innovating outside of the box…we even have our own festival dedicated entirely to innovation, so we know our stuff.
>
> That's why we're so excited about Amplify. The newest tool that will allow us to connect with every innovator and creative mind from across the world and to work together to solve BIG problems.

> Over the years we've heard from lots of SMEs and inventors who say they struggle to get their ideas off the ground or in front of big companies like ours. This is the perfect opportunity.
>
> I'm calling on all SMEs, inventors, creative thinkers and innovators to get registered for amplify and get involved, now is your chance to help us change the world."

Our first challenge was based around reducing single use plastics. Specifically, how we can eliminate the use of plastic bottles when providing emergency water supplies to our customers during an interruption.

Anyone interested in taking part in one of the challenges should visit **amplifynwg.co.uk** and register on the website to join the discussion.

WE ARE PROUD TO CONTRIBUTE TO THE SUCCESS OF LOCAL COMMUNITIES

Our customers want us to support local communities.

Utilising the skills of our people, our resources and partnerships, we can have a positive impact on our communities and their success. It is important to us to contribute to the economic wellbeing of the areas we serve and essential we make a wider contribution to life within our regions to support this.

Our activities have a 'ripple effect' that go far beyond direct investment through working with local supplies. We see ourselves as part of the communities we serve and over the years we have developed an extensive community programme.

BUSINESS IN THE COMMUNITY'S RESPONSIBLE BUSINESS TRACKER®

The BITC Responsible Business Tracker is a measurement tool that allows organisations to fairly assess and benchmark their responsible business performance within communities and the environment.

Last year we were one of the first companies to take part in the Tracker in its pilot year. This year we were one of 94 companies across all 24 different sectors taking part. We are delighted to report that we scored 81% overall; meaning that we are leading our Energy and Utilities benchmark group and the cohort as a whole in responsible business practice, including healthy ecosystems and net zero carbon.

The national insights report has been published which summarises the key findings and best practice examples from the 2019/20 Tracker cycle and what they could mean in the context of the COVID-19 pandemic:

https://www.bitc.org.uk/report/2019-20-responsible-business-tracker-insights-report/

EMPLOYEE VOLUNTEERING

Our 'Just an Hour' employee volunteering scheme is a cornerstone of how we support our communities and is something we are immensely proud of. Every year all our employees are encouraged to give a minimum of 15 working hours to support community initiatives.

We understand that our communities can benefit from the wealth of knowledge, skills and expertise our employees have to give. The programme is designed to have an impact on education, the environment and the general wellbeing of the community. In our recent employee survey 76% of our people told that this is important to them and one that they are proud of.

In 2019 42% of our people volunteered their time supporting 9901 organisations across our communities.

In December alone, across our business we supported many people less fortunate than ourselves.

Our Water team who represent our biggest directorate, were stood down for a few hours from their duties to get involved in planned activities across our Northumbrian, Essex and Suffolk areas. They got involved in the Mission Christmas toy appeal, tree planting, litter picking, beach clean ups, river bank clearing and much more.

Annually the Customer team get involved in the Christmas shoe box appeal sending Christmas parcels off to children in need overseas and again in 2019 they supported over 250 children with gifts.

Employees across several teams in the north, provided Christmas hampers for over 50 families and 12 individuals in the north east who are dealing with cancer. For five years we have worked with FACT – Fighting All Cancers Together, to identify those families and individuals who need this extra support.

Mission Christmas became a tag-team effort to support Cash for Kids in Newcastle and Teesside. Those in our team who drive company vans, collected donated toys from around the region and delivered to Mission Christmas HQ with others members of our team helping in the warehouse to sort and allocate toys to be donated to children across the region. Many more turned out to help collect gifts at the Cash for Kids comedy night - Laffs for Kids – which we have also sponsored for the last three years.

COMMUNITY FOUNDATIONS

We have four community foundations funds across our two supply areas; Tyne & Wear, County Durham, Tees Valley and Essex. In 2019 we donated £18,486.54 supporting 15 organisations.

They include:

Little Heroes ASD Support Group, Westcliff

Among the eight voluntary organisations to benefit from the latest round of grants awarded from the Essex & Suffolk Water Community Fund is Little Heroes ASD Support Group, based in Westcliff, who supports families who have children with autism. The funding went towards the redevelopment of a storage room to become a safe play area for a support group for families with autistic children.

The funded projects are based in Essex & Suffolk Water supply areas in Essex, Suffolk and East London.

The Bostey in Walker, Newcastle

In August 2019, the Tyne & Wear Community Fund Panel chose to part-fund St Anthony's Youth and Education Support (known locally as the Bostey), with a £750 contribution towards a young people's creative project transforming the garden area at their centre in Walker, Newcastle.

The project was to engage 50 children aged 8 to 14 in the Light up your dream (vision of yourself) project to transform an underdeveloped area at the Bostey into a new garden within the grounds. The project involved the young people coming up with some unique lighting designs to give their new space its own identity and allow them to be part of the building process.

Most of the children and young people accessing this provision have very little opportunity to be involved in any type of outdoor gardening or creative project and this project allows them to learn new creative skills as well as develop a space to enjoy and maintain.

BRANCH OUT

Our Branch Out fund helps deliver projects that benefit the natural environment and their local communities. A healthy natural environment is essential for us today and to make sure we can continue to supply top quality drinking water and safely remove wastewater in the future. It reconnects people and wildlife, and supports our communities to build resilience and adapt to climate change.

Since 2013 Our Branch Out fund has supported 126 project and invested over £470,000 which has been used to lever in 12 times that amount in funding into our regions. This has resulted in us being part of, and helping to enable, an amazing £8.1million investment in wildlife and people across our communities.

In 2019/20 we supported 21 Branch Out projects providing £60,060 in funding.

Carlton Marshes, Suffolk

Year two of a five year project we are supporting with an annual donation of £10,000. The project will create a 1,000 acre wetland on the edge of Lowestoft with a Suffolk Wildlife Trust Visitor Centre. The project is a great opportunity to connect people with nature, create further broadland habitat, reconnecting and giving resilience to the landscape of European designated habitat, and flood protection to Oulton Broad. Vast new reed beds and grazing marsh will boost populations of the UKs rarest wetland species, and Suffolk Wildlife Trust expect Carlton Marshes to be recognised as a National Nature Reserve within five years.

Bishop Auckland Riverside Trees, County Durham

We donated £3,000 to British Auckland River Trust's project to increase the amount of riverside woodland cover on the River Wear. They aim to plant over 4,500 native trees in two areas along the River Wear totalling 1.8 hectares. This will provide valuable shade to the river, stabilise eroding banks and to act as a buffer between the river and arable land, while also providing valuable wildlife habitat.

WATER RANGERS

Our award-winning Water Rangers initiative, set up in 2014, consists of trained customer volunteers who act as our 'eyes and ears' on the ground in the community, and raise awareness of any issues spotted on regular patrols along our waterways. River Guardians and catchment partners also report any issues they see when working in the water environment.

Our volunteer Water Rangers over the last six years have carried out 8,473 patrols with 530 issues reported and 34 referred to the EA.

Annually we hold a 'Thank you' event with the Water Rangers for their ongoing support and commitment to the community initiative. The scheme has been hugely successful and we are proud of the joint commitment to look after our environment. On a number of occasions, our volunteers have helped us spot and deal with pollution threats at the earliest possible opportunity, often helping to avoid potential incidents from happening in the first place.

POWERED BY WATER

Our Powered by Water campaign has been running since 2017, and was designed to teach young people the importance of staying well hydrated and avoiding sugary drinks in an engaging and fun way through our sporting partnerships.

Thousands of young people across our Northumbrian and Essex and Suffolk supply areas, have benefited from the interactive educational workshop delivered with our partners Newcastle Eagles Community Foundation, MFC Foundation in Teesside, Foundation of Light in Sunderland, Essex Cricket Foundation and Mowden Park Rugby Club in Darlington.

In 2019 over 27,500 young people participated in a Powered by Water workshop, with many more taking part in 2020.

OUR PLAN 2020-25: WE ARE PROUD TO CONTRIBUTE TO THE SUCCESS OF LOCAL COMMUNITIES

In Our Plan 2020-25 we have committed to continue to support our communities by giving time and resources to their important causes.

We are an integral part of the communities in which we operate. The health of our customers, their economic prosperity, and the surrounding environment all depend on how we deliver our services. Our reach into communities is extensive, and we benefit from being one of the few organisations to have a relationship with all of the households and businesses in our operating areas. We take this responsibility seriously, and our customers agree that we are an important part of the community. Our activities in our communities are also an important aspect of maintaining trust.

We have worked hard to develop strong relationships with the diverse communities that we serve, and will build on this during 2020-25. Our support for communities contributes to making the areas we serve better places in which to live, work and invest.

We also reinvest at least 1% of our pre-tax profits into our communities through dedicating expertise, employee time, money and facilities. This includes the contributions employees make through our highly successful employee volunteering scheme, Just an Hour.

In order to meet our ambitious goal to be the most socially responsible water company, we will measure our activity as a responsible business across all areas of our operations: our people, customers, suppliers, finances, partnerships, communities and environment, and will achieve a leading position in recognised benchmarks.

Our community work supports this, and has five main strands:

- Supporting communities through our employees;
- Developing collaborative communities for water management;
- Supporting communities through local spend and our work with supply chain organisations;
- Supporting communities through project legacy; and
- Supporting communities through local leadership.

WE WORK IN PARTNERSHIP TOWARDS COMMON GOALS

It is essential we work with partners across our region. Through partnership working we can deliver common objectives, deliver efficiencies and benefits while able to support others to achieve their goals.

Over this AMP we have formed a number of new innovative partnerships as well as continuing with long term successful partnerships. Our approach to partnership working achieves mutual goals across all areas of our business.

We look beyond our annual finance and performance reporting and have in the last year again reported on our influence and impact in the wider economy, the environment and society – **Our Contribution report**.

INNOVATION PARTNERSHIPS

We are at our best and most innovative when we combine our people and ideas with those from the outside world. Accordingly, we have built strong relationships with organisations and individuals to support our innovation initiatives. These innovation partnerships have given us early sight of latest thinking and product developments.

- We regularly work with inventor in residence, Andrew Turner Innovation Limited, on a number of early stage proof of concept projects including Andrew's smart drain pipe, which slows down the flow of rain water from roofs into sewers, helping reduce the risk of flooding.
- We are collaborating with Wordnerds, a North East SME that has applied artificial intelligence to linguistics to help improve our understanding of language and meaning. We are working with them to help us to interpret how our customers feel about their experience of NWG, particularly when we are reading written comments and feedback on social media.
- Our partnership with Durham University continues with our Innovate UK-funded Knowledge Transfer Partnership which is seeking to work with affected people to increase flood resilience in their communities, and with to work with the University, the NE Environment Agency and Durham County Council to support local Small and Medium Enterprises (SMEs) and regional growth through the European Regional Development Fund (ERDF) funded NE Water Hub. Encouraged by the initial assessment that the NE Water Hub has delivered in excess of £1.7m of economic value to the NE, we are continuing and widening this collaboration as we embark on an NE Local Enterprise Partnership-funded project, led by the Environment Agency to develop the business case for a follow-up project to the NE Water Hub.
- Our partnership with Newcastle University continues with the appointment of a post graduate research engineer investigating the role of green infrastructure in reducing urban flood risk, and the expansion of the BE:WISE wastewater research facility at our Birtley sewage treatment works; the facility now includes process units for all the key wastewater treatment processes. Our work on Digital Twins has also continued apace, focussing on developing digital twins of water supply systems and biogas production.
- NWG is a founder member of the national Digital Twin Hub. We are pleased to work with this group of developers, owners and users of digital twins to shape the national landscape and ensure that digital twins create value for our customers and stakeholders.

- We are a headline sponsor of the Innovation SuperNetwork, a north east not for profit SME that is a cross sector network of businesses and organisation. We have continued to grow our SME network through this partnership, including participating in VentureFest 2019, and drawing on the skills and experience of the Innovation SuperNetwork team to facilitate design sprints at our 2019 Innovation Festival.
- We work closely with North East Local Enterprise Partnership (NELEP) both to help in the development of the Local Industrial Strategy and through the joint sponsorship of SMEs to participate in our 2019 Innovation Festival design sprints.
- We work closely in partnership with colleagues across the water and utilities sector: including playing an active role in UK Water Industry Research, which is chaired by our Wastewater Director, Richard Warneford; Through our membership of the Cross Utility Innovation Group (with NGN, Northern Powergrid and Yorkshire Water) we share knowledge and look for opportunities for collaboration to tackle shared needs; through active participation in a number of special interest technical groups, including Isle Utilities' European Technology Approval Group (TAG); and most recently partnering with the Energy Innovation Centre to run a series of open innovation challenges in collaboration with their other members.

AFFORDABILITY PARTNERSHIPS

Water and sewerage services should be affordable for all of our customers whatever their circumstances. Our goal is to eradicate water poverty, a customers' ability to pay their water bill, across our operating areas by 2030.

Operating in some of the most income deprived areas of England we have a long history of leading the industry in affordability and supporting vulnerable customers. In our areas, 18.4% of households (around 370,000) spend more than 3% of their disposable income on water and sewerage services. Our commitment is to reduce this to 6.8% households by 2025 and with no one in water poverty by 2030.

Two of our newly launched initiatives (Water without the Worry and Water Poverty Eradication Modelling) both won awards at the Water Industry Awards in May 2019, demonstrating our industry leading approach on tackling affordability.

We are developing accredited industry-wide training programmes on affordability; have partnered with the New Statesman to increase the understanding of water poverty in Parliament; and are backwards engineering water efficiency tools to create new platforms for customers to make their bills affordable.

We work with National Energy Action (NEA) and StepChange to provide our customers independent help when they need it the most.

The scale of our commitment can also be evidenced through our funding of research from respected charities which are already engaging with Ofwat and CCW, to move the national policy agenda to eliminate water poverty for all.

NATIONAL ENERGY ACTION

Our partnership with National Energy Action (NEA) continued to develop with the headline publication of a new discussion paper and major stakeholder event in London that considered the development of a common measurement of water poverty. This work, part of NEA's Water Poverty Unit, was expanded with the development of a cross-industry advisory panel that includes representatives from Defra, Citizens Advice, CCW, Ofwat, Sustainability First and Water UK, to direct a wide programme. This programme included research, the launch of training programmes, political engagement and pilots

of consumer initiatives to test the most effective ways to challenge water poverty – from design of social tariffs, to the policy landscaper, water efficiency and cross-sector working with energy. Their contribution has been noted in the research work of UKWIR, highlighted in Parliament and featured in media coverage.

STEPCHANGE

We were the first water company to partner with the debt charity, StepChange in order to provide additional support to our customers who may be struggling to pay their water bills and first to recognise and commit to eradicate water poverty. Our partnership has helped create a positive social impact, through potential for improved physical and mental wellbeing, employment and productivity, repayments to creditors, and improved financial management.

SUPPLIERS

Our activities have a 'ripple effect', going far beyond our direct investment through trade with local suppliers which benefits our regional economies. Our supply network is essential to us in order for us to provide the service our customers expect from us.

Since 2009 we have been working with our suppliers on a sustainable procurement approach that balances the long-term needs of local communities and suppliers with the challenges of effective buying. We work closely with suppliers to achieve sustainable results including reductions in waste, CO2 emissions and water and material usage. We actively encourage our suppliers to work with their local communities promoting apprenticeships, back-to-work schemes and have volunteers working with communities and charities.

As a result of our proactive supply chain engagement NWL has topped the British Water annual performance survey league table seven times since 2010.

REFILL

We continue to work with City to Sea on the national Refill campaign which started in 2017 to reduce single use plastic water bottle pollution, and promote a healthy lifestyle in towns and cities across the UK, by improving access to free drinking water, on the go.

Refill works by promoting free tap-water refill points ('Refill Stations') in cafes, shops, businesses and transport hubs. As such we are presently asking businesses to agree to be added to the free 'Refill' app as a 'Refill Station', and display a small Refill window sticker to alert passers-by that they're welcome to come and fill up their water bottle for free.

Refill's core appeal varies across different groups and communities within our towns and cities. People's main motivations range from wanting to be healthy, through to reducing ugly litter, to saving our oceans and the life within them for future generations. Refill can bring people from diverse backgrounds together and also aims to boost the local economy and bring more environmental awareness to local businesses.

EDUCATION PARTNERS

We work closely with our five Sporting Partners who deliver our hydration, Powered by Water, campaign to over 27,500 young people annually – see page 77 for details.

HISTORIC MUSEUMS

We are proud to host a number of partners on our sites; enabling these special places to be enjoyed by the community. In 2019 we welcomed over 30,000 visitors to these sites.

Our historic sites are:

- Ryhope Engines Museum, Sunderland
- Tees Cottage Pumping Station, Darlington
- Museum of Power, Langford

CATCHMENT PARTNERSHIPS

Since the Launch of the Catchment Based Approach (CaBA) in 2013, Catchment Partnerships have become an essential mechanism for us to work with others to improve the water environment. By collaborating with partners (including environmental charities, Local Authorities, the Environment Agency and universities), we can work towards a common vison for our catchments and deliver shared objectives through coordinating our activity and matching our funding. In 2019/20, we have continued to develop our engagement with the nine Catchment Partnerships in our NW and ESW regions, and to strengthen our partner relationships further in anticipation of AMP7 activities, which include managing holistic catchment projects in the South Tyne in the North East and the Blackwater in Essex, and our new Water Environment Improvements PC and ODI, as part of our step-change in environmental activity from 2020. The new ODI is a completely new approach to investing in the water environment for AMP7, which will see us supporting, driving or delivering above and beyond improvements to accessible areas of lakes and reservoirs, rivers and streams, wetlands, beaches and coastline, together with our partners through a shared scheme for the benefit of customers and communities in our regions.

We continue our commitment to Catchment Partnerships, with representatives from across the business attending and supporting steering groups and sub-groups, and have continued to invest in catchment projects through our investment in peat restoration through Pennine-PeatLIFE, our core conservation activities and our Branch Out scheme, and through our catchment management team activities working with farmers and the agricultural sector to protect drinking water. We have continued our work to link our Water Rangers approach and our River Guardians scheme and training to the work of the partnerships. In 2019/20 we have also been engaging with Catchment Partnerships over the Drainage and Wastewater Management Plan (DWMP) process, as these groups include important stakeholders and represent links into key sectors which will be impacted by and able to contribute to our plans.

We also lead national CaBA activity to support all catchment partnerships - NWG represents the Water Industry on the CaBA National Support Group and established a Water UK CaBA network in 2019. As a major regional player in the North East water environment, Northumbrian Water Group plays a key role in regional groups, including the North East Natural Environment Leaders Network, the Local Nature Partnerships (North East England Nature Partnership, Tees Valley Nature Partnership and Northern Upland Chain Local Nature Partnership), and leads the CaBA North East Urban Water Group.

NORTHUMBRIAN INTEGRATED DRAINAGE PARTNERSHIP

The Northumbrian Integrated Drainage Partnership (NIDP) was formed in 2014, consisting of Northumbrian Water, the Environment Agency and the thirteen Lead Local Flood Authorities (LLFA) in our north east operational area. The purpose of this partnership is to reduce the risk of flooding from multiple sources to homes and businesses and to identify and promote wider catchment benefits, which otherwise no single risk management authority could address on its own. This is being accomplished through strategic prioritization, overseeing detailed flooding studies in high risk communities, and delivery of integrated schemes to address flooding holistically.

We have committed to a 10-year programme of jointly-funded strategic studies through the NIDP, which are currently active within 29 high risk catchments. This information is being used to populate the EA's medium-term-plan, which includes over 50 projects identified through strategic studies. This collaborative approach is able to generate and promote cost-beneficial schemes, which are frequently characterized by the use of sustainable urban drainage solutions. This delivers multiple benefits to the environment, society and economy, alongside the ability to address integrated flood risk which is otherwise segregated across multiple flood risk management authorities. This programme has also provided a mechanism to assist our LLFA partners to deliver enhanced flood risk mapping, which received additional funding nationally this year.

Our approach with the NIDP has been the foundation to our approach to the DWMPs, as we have existing relationships and methodologies in place for sharing data, knowledge and expertise. The outputs from the NIDP provide important risk-based evidence, which is jointly utilized so that the partners remain aligned and can provide a "one-fix, one-time" service to the community. The result of this integrated approach will be a DWMP prioritization and implementation methodology which will help target prioritised investment into the most needed areas. Recognizing these benefits, the UK Water Industry Research project described the NIPD as national best practice in 2017.

WATERAID

As one of the founding organisations of WaterAid we are very proud of the work we have done over the years to raise money to help provide access to safe water and suitable sanitation to all. In 2015 we made a commitment we would raise £1 million for Madagascar and we are well on our way.

4,000 children die every year in Madagascar, from drinking unsafe water and poor sanitation. WaterAid provide taps and toilets, enables children to go to school, and helps communities grow, teaching them the building skills, empowering them and giving them hope for the future."

OUR PLAN 2020-25: WE WORK IN PARTNERSHIP TOWARDS COMMON GOALS

In Our Plan 2020-25 we have set a commitment to build successful economies in our regions. Across our regions we work in partnership with companies and organisations to achieve the goals that are most important to our customers.

Partnership working is an essential aspect of our approach as a water and wastewater provider. By working in partnership with other stakeholders, we are able to share the costs, risks and benefits of addressing the challenges and opportunities faced by our business, and together make a difference to our customers' lives.

Our partnership strategy sets out how we work with those whose values align with ours to achieve the shared goals that are important to our customers. Our partnerships are governed through joint steering groups, codes of practice and

charters. We are a trusted partner of local, national and global strategic partnerships, influencing water policy and regulation to be progressive and sustainable.

Partnerships that have been recognised as leading, and are used as exemplars of collaboration best practice, include our award winning NIDP and our Chelmer and Blackwater Partnership.

In addition to our in-kind support, we invest more than £1m in direct financial contributions each year to support these partnerships. This investment leverages at least five times more into partnership activities for the benefit of our customers and communities. For 2020-25, we will maintain this investment and seek to maximise the leveraged resources our investment attracts.

One of the principles within our Integrated Approach is to seek opportunities to work with others to deliver multiple benefits.

Our ambition is to undertake brilliant partnership working across all of our business areas in order to deliver the outcomes that are important for customers. This ambition was developed with more than 90 partners in our regions through our Thinking Ahead workshops.

During 2020-25, we will build on our excellent foundations, supporting and developing existing partnerships and creating new ones where beneficial for customers, communities and the environment.

Our activity covers three areas:

- Community partnerships
- Enabling partnerships
- Environmental partnerships.

OUR PEOPLE

OUR PEOPLE ARE TALENTED, COMMITTED AND INSPIRED TO DELIVER GREAT SERVICE TO CUSTOMERS

We recognise that our people are our greatest asset and we are committed to making sure they all have the opportunity to develop, have the chance to achieve their potential and make a difference.

Apprenticeship programmes have given 110 of our existing employees the opportunity to learn and grow during 2019. Some have been learning about data intelligence to help maximise the strategic and operational benefits from the increasing data that technology gives us access to and use their new skills on business improvement projects. Others have focused on management or water engineering.

For some of our Water production team, their personal development has resulted in NWG being the first in the water industry to achieve the Licence to Operate Standards for competence. Standards recognised by our regulator the DWI that demonstrate our people are competent to provide clean, clear water to our customers every day. Many of the people involved in the programme have been working in their roles for many years and after completing the programme their understanding of the science and engineering behind why they do what they do has equipped them to take their contribution in the business to another level and their hard work has resulted in a qualification they can all be proud of.

The Young Persons' Network by its very nature gives people, 30 years and younger, from right across the business, contacts in different teams, a greater understanding of how the business works and the opportunity to learn from other people and organisations. Some of them also took up the challenge of learning to facilitate design sprints to play an active role in the 2019 Innovation Festival.

106 people have been working in the business in 2019 as apprentices or on undergraduate placements and brought opportunities for others to develop as they mentor, share their knowledge effectively, answer questions and see new perspectives themselves. These apprentices form part of our plans to ensure we can provide great service to customers for many years. We have also made sure to use 100% of the apprenticeship funding available to us from our contribution to the Apprenticeship Levy.

Major change programmes incorporating new technologies in our customer service and operational teams have shown people that they can learn new approaches, processes and how to use different software effectively. The digital world is increasingly important in many of our roles and a programme to build digital confidence around the business has been developed to roll out in 2020.

A third qualification option for young people is in the final stages of piloting and development. T-levels will offer a combination of classroom based study and extended vocational experience of work as an alternative to A-levels or apprenticeships. We've been working with digital students from a local college, having them with us for two days a week over an extended period gives them an opportunity to get involved in valuable project work and we benefit from their fresh ideas and learning.

Our involvement with other utility sector organisations in a Procurement Skills Accord ensures that we look wider than just our own people and help address sector-wide skills gaps and shortages to improve the future as well as the present. Our contribution is audited each year, including how we promote relevant skills development across our supply chain through our procurement process.

Diversity and inclusion

With a female Chief Executive Officer, who in 2019 joined the Top 100 influential women in the Northern Power Women list for championing gender diversity both regionally and nationally, we understand the importance of a truly inclusive culture and the business benefits that brings.

Our customers come from a wide range of backgrounds. To understand their needs and provide unrivalled service, our workforce needs to reflect that diversity.

We operate in an environment where traditional perceptions of careers and roles persist and whilst we work hard to attract people from diverse backgrounds to come and work for us in all our roles, our greatest success is with recruitment to our development programmes – 67% of our undergraduates in 2019, the majority involved in science, technology, engineering and maths roles, were female and 33% of apprentices, despite most of their roles being operational.

To encourage more applications from people with different personal characteristics and to make sure they are comfortable to be themselves at work with us, we have partnered with Vercida to develop an attraction strategy to raise our profile amongst ethnic minorities and with Stonewall to better access and support the LGBT community. With Stonewall's support we have just launched an Allies Network for those who identify as LGBT.

Work with the North East Local Enterprise Partnership's Special Educational Needs and Disabilities group and our involvement with Disability Confident is building our network and understanding to do more to find ways to offer work experience and create a pathway into employment.

We've played our part to drive change in the utility sector taking an active role in a diversity and inclusion collaboration, working as part of the group developing Energy and Utility Jobs a talent pool, job portal and plan to raise awareness of the great careers in the sector and actively encourage under-represented groups to consider a career. Energy and Utility Jobs have seen a significant increase in female engagement, with circa 50% of visitors to the site in the past 12 months now female.

We've used social media, our careers website, speaking and other opportunities to demonstrate with some of our female role models that the water industry is a place where females can add real value across all roles. Our #waterwomen campaign focuses on the themes we know from research are important to women such as the opportunity to make a difference, flexibility and the potential for personal growth.

To drive real change our relationships with external partners are really important to us. We work closely with the WISE (Women in Science and Engineering) campaign and the Energy and Utility Skills Partnership. Being regional lead on the WISE North East Hub enables us to promote networking opportunities and highlight female role models, through collaboration with other local businesses.

We have introduced a new selection tool for recruitment to our development programmes, a psychometric assessment incorporated into a computer game. This tool enables assessment of potential, helping to reduce bias. The data generated also allows us to check for bias in the subsequent interview and selection process. Our annual review with Arctic Shores, the test publisher, recently confirmed the fairness of our selection processes for these programmes in 2019.

The objective of our Science, Technology, Engineering, Arts and Maths (STEAM) activities at the 2019 NWG Innovation Festival - the culmination of a year of outreach activity with schools, colleges and universities – was to encourage young people to seriously consider a STEAM career. Circa 1,300 young people with teachers and some mothers joined in the fun and educational activities. Women working in science, technology, engineering and maths careers in the region came to support and share their stories.

The 2019 Great Place to Work survey asked our employees' views on diversity and inclusion. 84% of our people took time to share their views. 76% feel they are treated fairly regardless of their age; 74% feel they can be themselves at work; 89% feel they are treated fairly regardless of their ethnic origin or race and 83% feel that they are treated fairly regardless of their gender.

We were delighted to be awarded Employer of the Year at the 2019 North East Business Women of the Year Awards.

CASE STUDY: APPRENTICESHIPS AREN'T JUST FOR SCHOOL LEAVERS

More than 130 of our team have developed their skills using apprenticeship programmes.

As well as taking on our largest ever group of apprentices last year, which included 23 new apprentices into our Water Team, our people are proving that apprenticeship programmes aren't just for school leavers and young people, this included 23 new apprentices into our Water Team.

A total of 132 existing employees, including some who have been in the company for decades, are working towards a qualification and furthering their skills via an apprenticeship programme alongside their day to day role.

In 2019 we offered opportunities for people to develop or retrain through apprenticeship programmes in many other varying aspects of the business such as Water Network/Distribution, Water Supply, Wastewater, Intelligence Operations and Customer Service, just to name a few.

Our Workforce Development Manager, Tracey Greener, said:

> "Apprenticeships are a fantastic way to take a first step into a career, but it's a myth that they are just for young people getting started.
>
> Increasingly, we are using Apprenticeship programmes to help our people make exciting career changes, either updating or enhancing their skills and experience within their existing roles, or changing direction entirely.
>
> We embrace all of these opportunities and have hundreds of our people taking advantage of what they have to offer, ranging from school leavers to those who have been with us for decades."

In 2019 we worked with the Energy & Utilities Independent Assessment Service and Water Train to build skills and develop knowledge in our operational areas.

88 of our people achieved the Water Process Technician Standard to level 3, with many achieving Distinction grades.

The Level 3 Standard is what we have committed to as a base line qualification for our operators and our commitment for our Licence to Operate through Energy and Utilities Independent Assessment Service.

Bernard Zakary, Head of EUIAS comments: “The EUIAS specialises in providing assessment services for technical and safety-critical apprenticeship standards. For Water Process Technician we have done this through trusted partnerships with employers like Northumbrian Water who provide valuable access to expertise to support the assessment plan.”

OUR PEOPLE ACT IN LINE WITH OUR VALUES

Our employee awards scheme, known as ViVa (Vision and Values), is our way of saying thank you to our employees for doing a great job or going the extra mile. Now in its ninth year it is still as popular as ever with circa 1700 employees in 2019 nominating teams and colleagues for demonstrating our values and behaviours.

Any employee can nominate anyone in the business that they feel have done a particularly great job or have gone the extra mile. There are two options, they may decide to send a simple thank you card, or to complete a ViVa nomination. Nominations are a more detailed submission, anyone nominated has a chance to win an award.

Each month, a ViVa steering group awards the top five scoring ViVa nominations with a prize of £50 each or £150 for a team. Every year we hold a ViVa awards ceremony, and nominations throughout the year are shortlisted down to five per category, with a judging panel (made up of directors, union reps and a regulator) picking a winner from the anonymous nominations.

There are also five categories – one for each of our values (with winners receiving £300 or £2,000 for a team), and an overall ViVa winner who receives £3,000.

A great deal of work goes into making the evening one to remember. The theme of the event is kept under wraps until the winners arrive at the venue and each table is hosted by a director or senior manager to ensure a sense of occasion. Yammer and Facebook group are used so others in the business can feel involved, and after the event, winners are announced through our intranet, in our digital newsletter and on DVD through our face to face Teamtalk sessions.

This year the finalists included

- A team who rallied around to an extraordinary extent providing practical and emotional support throughout their recovery to two of their colleagues who were involved in an accident.
- Two teams who took the initiative to develop new approaches to understand what their customers wanted and to find ways to deliver unrivalled service.
- A team who saved significant time and money by taking a different approach. A team who developed an app and upgraded their equipment and supported their colleagues to learn how to use it.

WE ARE SEEN AS A GREAT PLACE TO WORK

In 2019 our people had a chance to share their thoughts and feelings about working at NWG as we got involved in the Great Place to Work employee survey for the first time. At a time of much change and transition in the business with the embedding of new working practices and technology, of the 84% of employees that took part 72% of people feel proud to work here. Our aspiration is still for all of our people, current and future, to have a great experience at work and to understand the part they play to achieve our Vision, Outcomes and to deliver an unrivalled customer experience. We aspire to have an inclusive and diverse culture where our people are supported by their managers, feel confident that their voice is heard and NWG is a workplace where everyone can thrive and feel empowered to be the best they can be.

In December 2019 we asked the Great Place to Work Institute to undertake a Best Workplaces comprehensive culture audit of the business. We wanted to explore what else we can do to ensure that NWG is a great place to work. Their analysis focuses on the following areas:

- General Experiences
- Hiring and Welcome
- Inspiring
- Speaking
- Listening
- Thanking
- Developing
- Caring
- Celebrating
- Sharing

- Leaving

And their evaluation criteria include – originality; are programmes, policies and practices for everyone? Do policies and programmes demonstrate appreciation, generosity and warmth – the human touch? Are the policies and programmes integrated into an overarching framework? Is there a variety of programmes, policies and implementation methods?

Their conclusions were “It is evident that NWG is an employee, customer and environmentally centric employer.” Two areas identified as being a particular strength when compared with other companies of our size included how we recruit and welcome new people into the business and the way we listen and collaborate. The audit has given us what we wanted, areas to focus on and different ideas to consider.

Our Great Place to Work journey has continued in 2019 based on the four themes in our Great Place to Work model: Our Shared Story, Our Values, My Voice and My Manager.

Our shared story

It’s important that people understand the part they play to achieve our Vision and Outcomes. Our bi-monthly Teamtalk events ensure everyone comes together to discuss performance and key areas of focus. After a session with our CEO, our leaders cascade to their teams with the support of a pack including videos and interactive activities to bring the messages to life.

Our annual employee roadshows are another opportunity for our people to understand our vision and progress towards this and have open discussions. Heidi led each one with a relevant director.

Our values

Our Values are about everything we think, feel, say and do.

We have continued to embed ‘Our Behaviours’, through our annual appraisal process and midyear reviews and using our Leadership behaviours to inform our recruitment and selection process including shortlisting and interviews.

My voice

It's important that everyone feels comfortable sharing their ideas and opinions. Our annual employee survey and six-monthly pulse surveys are opportunities for employees to tell us how they feel about working here. In October 2019 we took part in the Great Places to Work survey where 84% of our people responded.

Managers have received results for their teams and are involving employees in creating local action plans.

Innovation is important to the business and an opportunity for people to have their ideas listened to. Our own 'Dragon's Den', Invest Quest, aims to stimulate and nurture creativity and encourages employees to pitch their working smarter initiative to our panel to be in with the chance of winning a £3,000 cash prize. Employees submit their ideas along with details of the amount of investment needed, the money their project would save and the payback period. The ideas are then examined by a shortlisting panel of directors. At our 2019 Innovation Festival, five ideas made it to the final with diverse ideas including a different approach to handling customer complaints, an automatic flushing and probe system, making more of the methane from our anaerobic digesters, bringing hydraulic modelling in-house and a mobile unit to give real time analysis data. The mobile analysis unit won and the team will now turn their idea into reality.

A new online innovation platform was introduced during 2019, Amplify. This gives anyone in the business, using any device, the opportunity to like and comment on ideas that have come out from the 2019 Innovation Festival sprints, daily dashes and hacks. All the ideas are focused on achieving our published business plan goals.

My manager

We continue to look for ways we can develop and support our managers to be the best they can be and build trusted relationships with their teams.

Our Leadership and Management Development Programme (LMDP) for all new people managers within the Company has continued to evolve to meet business needs. The LMDP has been designed to provide our managers with a foundation of excellence in their leadership roles and aims to enable our managers to lead and manage their people with confidence whilst delivering a great place to work and unrivalled customer experiences for our internal and external customers.

Bespoke leadership and management programmes including coaching, workshops and other learning interventions have been developed in house to meet the specific needs of all levels of people managers in some of the larger teams. These programmes have been designed to build confidence, help with clarifying their purpose and how they contribute to the success of their team, directorate and business.

OUR WORKPLACES ARE HEALTHY AND SAFE

To have a truly safe organisation we need to get four fundamental things right, we need safe people, a safe way of doing things, safe places and we need to keep on learning.

Our safety performance during 2019/20 significantly improved on the previous year and we experienced our longest period of time (almost 100 days) without having a lost time accident.

We continued to work on our safety awareness within the business and our people carried out 29,784 60 second checks an increase of over 23,000 compared to the previous year. We are really proud of this improvement as employees do these because they see the benefit in doing them not because it is a target.

We also introduced two new indicators for improving our safety performance, these were Safety Conversations and Managers Safety Visits.

We completed 3,221 safety conversations last year. We encourage employees to have safety conversations to not only stop unsafe behaviour but also as a positive indicator when someone is doing something right.

Our managers have completed 1,084 visits with their teams, which shows that they visible and they are looking at what's working well and finding out what we can do better on our sites. It also encourages employees to talk about safety and discuss any issues, concerns or ideas on how to improve safety on sites.

These are all vital components of our safety plan, encourage safe behaviour and will help us achieve our aspiration of Everyone Home Safe Every Day.

(Figures quoted in relation to Our Workplaces are Healthy and Safe are April 2019-March 2020.)

CASE STUDY: THE POWER OF Z

A simple but innovative tool which helps measures the depth of underground water pipes, has been invented to keep our workers safe and speed up the regions' roadworks in future.

The ‘Z stick' idea was first discussed at our Innovation Festival back in July 2019, to help workers capture and record the depth of underground water and sewer pipes across our networks.

While our records, which have been built up over hundreds of years, show the location of these types of assets, they don't always contain information about how far down they're buried. Knowing the depth of the infrastructure beneath our feet is important to help speed up the job, it helps avoid pipes being struck by mistake and can reduce disruption to customers' water supplies.

The Z stick, a colour-coded stick which is now being placed into open excavations, is helping to indicate to our teams how deep underground a pipe is buried.

The blue, green and red coloured bands on the tool categorise the excavation as either shallow, normal or deep and this information is being measured and recorded from over 2,000 locations as part of a pilot project.

This information will help us despatch teams to jobs knowing in advance of any specialist equipment they may need to help dig and locate the pipe safely and quickly, and complete the work faster and potentially with less disruption for our customers.

The data is fed back into a computer programme, to help recalibrate a 3D model of the entire 15,000km long network of water pipes. At a cost of £20,000 this system will help us save an estimated amount of over £400,000 over three years, with efficiencies coming from the likes of reduced roadwork delays and less damages to pipework.

Paddy Garrett our Asset Systems Team Leader, said:

> "It's more important than ever that we know the depth of our pipes, underneath our pavements and roads the space is being over crowded with the ever-increasing number of fibres and cables.
>
> We already know the width and the height, otherwise known as the X and Y position, of our assets, but this will help us measure the Z position, and that's how the Z stick was born.
>
> Not only will the Z stick help keep our people safe by helping them to avoid accidental strikes to live cables, but it also means they can complete jobs much faster and with minimal disruption because they know where the pipes are located and what equipment is needed to get to them.
>
> It shows that innovation comes in all different shapes and sizes and it's not just about utilising the latest new technology. Thanks to the Z stick, our aim is that in future, any field worker or planner about to dig, would be able to know accurately how deep the network is at any one point."

The Z stick is just one of a number of different initiatives we are carrying out to help give our teams a more accurate idea of the water and sewer pipes beneath their feet.

Other projects include development of the country's first common underground map of water, gas and electricity pipes and cables, which we are developing in partnership with Ordnance Survey and the Government's Geospatial Commission.

To watch a video of the Z stick in action, please see: https://youtu.be/ZKqXXGS7RCQ

APPENDIX 1

REGULATORY TABLES AND COMMENTARY FOR THE YEAR ENDED 31 MARCH 2020

DIRECTORS' RESPONSIBILITIES AND DECLARATIONS
for the year ended 31 March 2020

DIRECTORS' RESPONSIBILITIES STATEMENT

The Directors are responsible under Condition F of the Instrument of Appointment granted by the Secretary of State for the Environment to the Company as a water and sewerage undertaker under the Water Industry Act 1991 for:

- ensuring that proper accounting records are maintained by the Appointee to enable compliance with the requirements of Condition F and having regard also to the terms of guidelines notified by the Water Services Regulation Authority ('the Authority') to the Appointee from time to time;
- preparing on a consistent basis for each financial year regulatory accounts in accordance with Condition F, having regard also to the terms of guidelines notified by the Authority from time to time, which so far as is reasonably practicable have the same content as the annual Financial Statements of the Appointee prepared under the Companies Act 2006 and which are prepared in accordance with the formats, accounting policies and principles which apply to those Financial Statements; and
- preparing such other financial and related information as is required by Condition F having regard also to the terms of guidelines issued by the Authority from time to time.

RISK AND COMPLIANCE STATEMENT

The Board confirms that:

- it considers the Company has full understanding of, and is meeting, all its relevant statutory, licence and regulatory obligations and has taken steps to understand and meet customer expectations;
- it has satisfied itself that the Company has sufficient processes and internal systems of control to fully meet its obligations; and
- the Company has appropriate systems and processes in place to allow it to identify, manage, mitigate and review its risks.

DISCLOSURE OF INFORMATION TO AUDITORS

So far as each current Director is aware, there is no relevant audit information of which the Company's auditor is unaware and each Director has taken all the steps that he or she ought to have taken as a Director in order to make himself or herself aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

CONDITION K (RING FENCING)

The Directors confirm that, as at 31 March 2020, the Company was in compliance with paragraph 3.1 of Condition K of the Instrument of Appointment in that the Appointee had available to it sufficient rights and assets to enable a special administrator to manage the affairs, business and property of the Appointee, should a special administration order be made.

CONDITION I17 CERTIFICATE (Sufficiency of resources to carry out the Regulated Activities)

The Directors certify that, in their opinion:

- the Appointee will have available to it sufficient financial resources and facilities to enable it to carry out, for at least the next 12 months, the Regulated Activities (including the investment programme necessary to fulfil the Appointee's obligations under the Appointment);
- the Appointee will, for at least the next 12 months, have available to it management resources and systems of planning and internal control which are sufficient to enable it to carry out those functions as required by paragraph I13 of the Instrument of Appointment; and
- all contracts entered into with any Associated Company include all necessary provisions and requirements concerning the standard of service to be supplied to the Appointee, to ensure that it is able to meet all its obligations as a water and sewerage undertaker.

In providing this certificate, the Directors have taken into account:

- the financial strength of the Company at the balance sheet date and financial performance, which is in line with expectations and reviewed at each Board meeting, most recently in July 2020;
- the key financial ratios over the next 12 month planning horizon, as reflected in investment grade credit ratings;
- the fact that the Company has in place £450m of five year committed bank facilities as back up liquidity, maturing in December 2024, which was undrawn at 31 March 2020;
- the work of the Board and its Committees monitoring the Company's purpose, strategy, values and culture, considering succession planning and senior management performance and reviewing the effectiveness of risk management and internal control systems;
- the approval by the Board of all significant contracts and full disclosure of all transactions with associated companies, of which no new arrangements were entered into during the year; and
- the monitoring and review throughout the year of the principal risks and uncertainties facing the business by the Risk & Compliance Sub-committee.

CONDITION I30 (Credit Rating)

The Directors also confirm that throughout 2019/20 the Appointee has ensured that it, and an Associated Company as issuer of debt on its behalf, has maintained at all times an issuer credit rating which is a strong investment grade rating.

VIABILITY STATEMENT

When considering longer-term viability, the Directors note that, in their opinion, the PR19 FD has resulted in a lower cost of capital, significant totex challenge, stretching PC targets and an asymmetric penalties and incentives mechanism which represents a significant challenge to financeability in AMP7. There is also lower financial headroom available for management of downside shocks and there is likely to be pressure on projected credit ratings, as reflected in the current negative outlooks and additional financial mitigations required in downside scenarios to support long-term viability. This impact underpins the Board's decision to appeal the FD to the CMA, and while the Board are confident in the company's case, uncertainty around the CMA redetermination has been considered in the assessment of financial resilience.

There is also additional uncertainty on the economic impact of the current Covid-19 pandemic. In addition to the short-term impacts of the Covid-19 pandemic being considered in the going concern assessment, the Directors note that the longer-term impacts remain uncertain and work to assess the Company's financial exposure is ongoing. Estimates have been included in the scenario analysis to reflect the observed impacts to date.

Financial forecasts over longer-term timeframes are inherently subject to more risk that the assumptions adopted will not be realised. The Directors have confirmed that the business remains a going concern. In considering the longer-term viability, the Directors note (1) the uncertainties referred to above and that the downside stress test scenarios would place pressure on projected credit ratings in the next five years and (2) the longer-term view beyond five years assumes that the 2024 price review will provide a sufficient rate of return to enable the Appointed Business to finance its functions for the period 2025-30. The Directors have assessed the future prospects of the Appointed Business and consider that the Appointed Business should be able to manage its business risks, continue to operate and meet its liabilities as they fall due over the ten years to March 2030 given the long-term nature of the business.

Further information in respect of this statement is provided in the Company's Financial Statements for the year ended 31 March 2020, on **page 102 and 103** of the Governance Report. The Financial Statements are available on the Company's websites.

By order of the Board

Andrew J Hunter
Chairman

15 July 2020

Heidi Mottram
CEO

15 July 2020

Paul Rew
Senior Independent
Non-Executive Director

15 July 2020

REGULATORY ACCOUNTING POLICIES AND DISCLOSURES

for the year ended 31 March 2020

(a) Regulatory Accounts - Basis of Accounting

The Regulatory Accounting Statements, on pages [*] to [*] of the APR, have been prepared in accordance with the Regulatory Accounting Guidelines (RAGs) issued by Ofwat. They have been prepared on a consistent basis to the Company's Financial Statements, with the following exceptions:

- income relating to energy generation and meter reading, which is recorded as revenue in the statutory accounts, has been recorded as negative operating expenditure;
- rental income and amortisation of deferred capital income, which are recorded as revenue in the statutory accounts, have been recorded as other income below operating profit;
- profit on disposal of fixed assets, which is recorded as operating costs in the statutory accounts, has been recorded as other operating income; and
- borrowing costs that are directly attributable to the acquisition or construction of an asset, which are capitalised in the statutory accounts, are charged to the income statement.

The information reported in the Regulatory Accounting Statements relates to NWL's Appointed business only, except where stated. The Appointed business comprises Regulated Activities, defined in Condition A of the Licence to be 'functions of' and the 'duties imposed on' a water and sewerage undertaker by the Water Industry Act 1991. Such duties are consequently those necessary for the Company to fulfil its duty as a water and sewerage undertaker.

The accounts have been prepared on a going concern basis which assumes that the Company will have adequate funding to meet its liabilities as they fall due in the foreseeable future.

(b) Revenue recognition

The revenue recognition policy is the same in the regulatory and statutory accounts, other than the exceptions related to income from energy generation, meter reading, rental income and deferred capital income, as explained above.

RAG 3.11 states that "companies should not de-recognise turnover for amounts billed which they deem to be uncollectable", and requires IFRS 15 to be disapplied in this respect. NWL complies with this requirement.

Revenue from water and sewerage charges billed to customers is recognised pro-rata over the period to which it related. For consumption by measured customers which has not yet been billed, revenue is estimated and accrued using a defined methodology based upon historical usage and the relevant tariff per customer. Invoices raised or payments received where the service has not been provided are not recognised in revenue in the year but are treated as receipts in advance.

Additional charges added to a customer's account as a result of debt recovery activity, such as court costs or solicitors fees, are recognised as negative operating costs when payment is received in both the statutory and regulatory accounts. They are not recognised in revenue.

Charges for water and sewerage services remain due in full whilst a property contains furnishings and fittings or when a property is unfurnished and water is being used for any purpose including refurbishment. If the Company has turned off the supply of water at the mains to a property at a customer's request then water supply charges are not payable.

If the supply of water is turned off and the property is unfurnished the property is considered unoccupied and charges are not payable. If, however, the supply of water is turned off and the property remains furnished it is considered ready for occupation and in this case sewerage charges in respect of the drainage of surface water and contribution to highway drainage continue to be payable.

If a property is recorded as empty in the billing system an empty property process is followed. The purpose of this process is to verify whether the property is occupied or not and, if occupied, to identify the chargeable person and raise a bill. No bills are raised in the name of 'the occupier'.

The empty property process comprises a number of steps including an initial letter asking the occupier to either contact the Company or return a completed registration form, a check of the property record against Land Registry information and visits to the property by Company representatives. If these steps confirm that a property appears to be empty then the supply may be turned off.

New properties are charged from the date a meter is installed, if consumption is being recorded on the meter. If the property is unoccupied but water is being registered, the developer will be charged. Once the developer is no longer responsible for a property, if no new occupier has been identified the property will be treated as unoccupied and the empty property process followed, as outlined above.

A retrospective review has confirmed that the measured household income accrual at 31 March 2019 of £62.4m was marginally higher than the amounts subsequently billed to customers of £60.1m, the increase reflecting lower usage than estimated.

(c) Bad debt policy

The policy for bad and doubtful debts is applied consistently between the statutory and regulatory accounts.

(i) Bad debt write offs

Debt is only written off after all available economic options for collecting the debt have been exhausted and the debt has been deemed to be uncollectable. This may be because the debt is considered to be impossible, impractical, inefficient or uneconomic to collect.

Situations where this may arise and where debt may be written off are as follows:

- where the customer has absconded without paying and strategies to trace their whereabouts and collect outstanding monies have been fully exhausted;
- where the customer has died without leaving an estate or has left an insufficient estate on which to levy execution;
- where the customer does not have any assets or has insufficient assets on which to levy execution;
- where the value of the debt makes it uneconomic to pursue;
- where county court proceedings and attempts to recover the debt by debt collection agencies have proved unsuccessful; and
- where the customer has been declared bankrupt, is in liquidation or is subject to insolvency proceedings or a debt relief order and no dividend has been or is likely to be received.

For debt to be written off there must be a legitimate charge against the debtor. If it is considered that part or all of the debt is incorrect or unsubstantiated, then such elements are dealt with through the issue of a credit note.

(ii) Bad debt provisioning

The Company's detailed bad and doubtful debts provision policy has remained unchanged during the year and has been consistently applied in the current and prior periods. The bad debt provision is charged to operating costs to reflect the Company's assessment of the risk of non recoverability of debtors. It is calculated by applying expected recovery rates to debts outstanding at the end of the accounting period. These recovery rates take into account the age of the debt, payment history and type of debt.

Higher provisioning percentages are applied to categories of debt which are considered to be of greater risk, including those with a poor payment history as well as to those of greater age. Bad debt provisioning rates are reviewed annually to reflect the latest collection performance data from the Company's billing system. Actual amounts recovered may differ from the estimated levels of recovery which could impact on operating results.

A comparison of the provision against historical collection rates is carried out at the end of each year. This indicated a slight deterioration in the longer term recovery of debt. In addition, an assessment has been made of the potential impact of Covid-19 on the economic circumstances of our household customers, in relation to outstanding debt at the balance sheet date. This assessment was based on cash flow trends observed after the balance sheet date and third party modelling of the potential economic impacts of Covid-19. Based on this assessment, an additional provision of £6.5m has been made.

Accordingly, the provision has increased from £85.6m at 31 March 2019 to £104.4m at 31 March 2020. As well as the additional Covid-19 provision and adjustment for historical collection rates, this reflects aging of outstanding debt less debt written off.

(d) Capitalisation policy

The policy for the capitalisation of costs as items of property, plant and equipment and intangible assets is applied consistently between the statutory and regulatory accounts, in accordance with IAS16 Property, Plant and Equipment and IAS38 Intangible Assets.

The application of this policy is summarised below. Further detail is provided in the accounting separation methodology statement published on our websites.

The cost of construction or purchase of new or replacement infrastructure and non-infrastructure assets is capitalised. Cost includes any costs directly attributable to bringing the asset into condition for use in the business, including directly attributable overhead costs but excluding general overhead costs. The costs of infrastructure and non-infrastructure assets are depreciated over their useful economic lives.

On the infrastructure network, capital replacement of assets includes any renewal of a full pipe length of main or sewer and replacement of ancillaries such as stop taps, valves, meter chambers and manhole covers.

Subsequent maintenance expenditure is treated as an operating cost unless it provides an enhancement of economic benefits in excess of the expected standard of performance such as an extension in the estimated useful life or an increase in capacity, in which case it is capitalised. Examples of maintenance costs charged as operating costs include pipe and tank cleaning, inspections, surveys and zonal studies.

(e) Accounting separation policy

Cost allocations have been prepared in accordance with RAG 2.07 and RAG 4.08 for the definitions for the regulatory accounting tables. All costs are recorded in the accounting records by cost centre. Cost centres are defined either as a direct department, comprising operational and customer functions, or a support department. Direct departments are mostly directly allocated to service activities based on the nature of the function, although some costs require apportionment on an appropriate basis. Support departments are apportioned across the price controls either based upon a specific analysis of the costs or by apportionment by an appropriate cost driver. Once allocated to the appropriate price control the costs are then allocated to service activities pro-rata to full time equivalent staff numbers of the direct departments.

Fixed assets directly involved in the activities within each business unit are recorded against that business unit using direct allocation per the location or asset type. Where an asset is utilised in more than one business unit, the asset is allocated to the business unit of principal use and costs are recharged to other different business units on the same basis used to allocate operating expenditure.

Further detail is provided in the accounting separation methodology statement published on our websites.

(f) Statement of Directors' remuneration and standards of performance

Directors' remuneration is fully disclosed in the NWL Annual Report and Financial Statements for the year ended 31 March 2020, in the Remuneration Committee Report on pages 88 to 99. This is published on our websites. To avoid duplication, this information has not been replicated within the APR.

The Remuneration Committee Report has been produced in accordance with section 35A of the Water Industry Act 1991. It also has regard to the requirements of the Large and Medium-sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2013 in respect of Directors' remuneration reporting for quoted companies, albeit in the context of a company which is not a listed public limited company.

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1A INCOME STATEMENT
financial performance for the 12 months ended 31 March 2020

		Adjustments			
	Statutory	Differences between statutory and RAG definitions	Non-appointed	Total adjustments	Total appointed activities
	£'m	£'m	£'m	£'m	£'m
Revenue	900.4	(26.9)	(36.8)	(63.7)	836.7
Operating costs	(541.6)	10.8	29.8	40.6	(501.0)
Other operating income	-	1.0	-	1.0	1.0
Operating profit	358.8	(15.1)	(7.0)	(22.1)	336.7
Other income	-	16.9	(5.9)	11.0	11.0
Interest income	3.2	0.3	(3.0)	(2.7)	0.5
Interest expense	(112.6)	(10.9)	0.3	(10.6)	(123.2)
Other interest expense	(2.3)	-	0.1	0.1	(2.2)
Profit before tax and fair value movements	247.1	(8.8)	(15.5)	(24.3)	222.8
Fair value gains/(losses) on financial instruments	(0.7)	-	-	-	(0.7)
Profit before tax	246.4	(8.8)	(15.5)	(24.3)	222.1
UK Corporation tax	(38.9)	-	0.9	0.9	(38.0)
Deferred tax	(58.9)	2.5	1.1	3.6	(55.3)
Profit for the year	148.6	(6.3)	(13.5)	(19.8)	128.8
Dividends	(65.0)	-	-	-	(65.0)
Tax analysis					
Current year	41.9	-	(0.9)	(0.9)	41.0
Adjustments in respect of prior years	(3.0)	-	-	-	(3.0)
UK Corporation tax	38.9	-	(0.9)	(0.9)	38.0

Analysis of non-appointed revenue

Imported sludge	-
Tankered waste	1.9
Other non-appointed revenue	34.9
Revenue	36.8

Differences between statutory and RAG definitions are explained in note (a) of the Regulatory Accounting Policies and Disclosures.

The change to profit for the year reflects the different treatment of borrowing costs, which are capitalised in the Statutory Financial Statements but charged to the Income Statement in the Regulatory Accounting Statements, and the associated depreciation and deferred tax. Other changes are presentational in nature:

- income relating to energy generation and meter reading has been reclassified from revenue in the statutory accounts to negative operating costs;
- rental income, amortisation of deferred income and other contributions to capital investment have been reclassified from revenue in the statutory accounts to other income; and
- profit on disposal of fixed assets has been reclassified from operating costs in the statutory accounts to other operating income.

1B STATEMENT OF COMPREHENSIVE INCOME

financial performance for the 12 months ended 31 March 2020

		Adjustments			
	Statutory	Differences between statutory and RAG definitions	Non-appointed	Total adjustments	Total appointed activities
	£'m	£'m	£'m	£'m	£'m
Profit for the year	148.6	(6.3)	(13.5)	(19.8)	128.8
Actuarial gains/(losses) on post employment plans	17.5	-	(0.4)	(0.4)	17.1
Other comprehensive income	(0.6)	-	-	-	(0.6)
Total Comprehensive income for the year	165.5	(6.3)	(13.9)	(20.2)	145.3

1C STATEMENT OF FINANCIAL POSITION

financial performance for the 12 months ended 31 March 2020
(Registered number 02366703)

		Adjustments			
	Statutory	Differences between statutory and RAG definitions	Non-appointed	Total adjustments	Total appointed activities
	£'m	£'m	£'m	£'m	£'m
Non-current assets					
Fixed assets	4,573.4	(46.8)	(104.6)	(151.4)	4,422.0
Intangible assets	90.6	(4.6)	(0.1)	(4.7)	85.9
Investments - loans to group companies	160.9	-	(160.9)	(160.9)	-
Investments - other	-	-	-	-	-
Total non-current assets	4,824.9	(51.4)	(265.6)	(317.0)	4,507.9
Current assets					
Inventories	4.2	-	(0.5)	(0.5)	3.7
Trade & other receivables	244.4	2.0	(21.7)	(19.7)	224.7
Cash & cash equivalents	31.7	27.1	-	27.1	58.8
Total current assets	280.3	29.1	(22.2)	6.9	287.2
Current liabilities					
Trade & other payables	(143.5)	(2.1)	5.8	3.7	(139.8)
Capex creditor	(26.5)	-	0.6	0.6	(25.9)
Borrowings	(41.3)	(27.1)	27.1	-	(41.3)
Current tax liabilities	-	-	-	-	-
Provisions	(0.1)	-	-	-	(0.1)
Total current liabilities	(211.4)	(29.2)	33.5	4.3	(207.1)
Net current assets / (liabilities)	68.9	(0.1)	11.3	11.2	80.1
Non-Current liabilities					
Trade & other payables	-	-	-	-	-
Borrowings	(2,916.0)	-	-	-	(2,916.0)
Financial instruments	(44.1)	-	-	-	(44.1)
Retirement benefit obligations	(84.1)	-	1.5	1.5	(82.6)
Provisions	(0.9)	-	-	-	(0.9)
Deferred income - G&C's	(390.3)	-	100.1	100.1	(290.2)
Deferred income - adopted assets	(115.8)	-	-	-	(115.8)
Deferred tax	(467.0)	9.8	3.3	13.1	(453.9)
Total non-current liabilities	(4,018.2)	9.8	104.9	114.7	(3,903.5)
Net assets	875.6	(41.7)	(149.4)	(191.1)	684.5

1C STATEMENT OF FINANCIAL POSITION (continued)
financial performance for the 12 months ended 31 March 2020

		Adjustments			
	Statutory	Differences between statutory and RAG definitions	Non-appointed	Total adjustments	Total appointed activities
	£'m	£'m	£'m	£'m	£'m
Equity					
Called up share capital	122.7	-	(30.6)	(30.6)	92.1
Retained earnings & other reserves	752.9	(41.7)	(118.8)	(160.5)	592.4
Total Equity	875.6	(41.7)	(149.4)	(191.1)	684.5

Approved by the Board of Directors on 15 July 2020 and signed on their behalf by:

H Mottram

Differences between statutory and RAG definitions are explained in note (a) of the Regulatory Accounting Policies and Disclosures.

The change in net assets and total equity reflects the different treatment of borrowing costs, which are capitalised in the Statutory Financial Statements but charged to the income statement in the Regulatory Accounting Statements, and the associated depreciation and deferred tax. Other changes reflect the disaggregation of cash balances and trading balances between the appointed and non-appointed businesses.

1D STATEMENT OF CASH FLOWS

financial performance for the 12 months ended 31 March 2020

		Adjustments			
	Statutory	Differences between statutory and RAG definitions	Non-appointed	Total adjustments	Total appointed activities
					£'m
Operating profit	358.8	(15.1)	(7.0)	(22.1)	336.7
Other income	-	16.9	(5.9)	11.0	11.0
Depreciation	143.3	(1.8)	(2.2)	(4.0)	139.3
Amortisation - G&C's	(5.5)	-	-	-	(5.5)
Changes in working capital	(76.1)	-	12.7	12.7	(63.4)
Pension contributions	(26.6)	-	0.2	0.2	(26.4)
Movement in provisions	36.4	-	6.6	6.6	43.0
Profit on sale of fixed assets	(1.0)	-	-	-	(1.0)
Cash generated from	429.3	-	4.4	4.4	433.7
Net interest paid	(93.6)	-	(2.8)	(2.8)	(96.4)
Tax paid	(61.0)	-	1.5	1.5	(59.5)
Net cash generated from operating activities	274.7	-	3.1	3.1	277.8
Investing activities					
Capital expenditure	(247.6)	-	6.8	6.8	(240.8)
Grants & Contributions	14.9	-	-	-	14.9
Disposal of fixed assets	1.1	-	-	-	1.1
Other	-	-	-	-	-
Net cash used in investing activities	(231.6)	-	6.8	6.8	(224.8)
Net cash generated before financing activities	43.1	-	9.9	9.9	53.0
Cashflows from financing activities					
Equity dividends paid	(65.0)	-	-	-	(65.0)
Net loans received	27.1	-	-	-	27.1
Cash inflow from equity financing	-	-	-	-	-
Net cash generated from financing activities	(37.9)	-	-	-	(37.9)
Increase / (decrease) in net cash	5.2	-	9.9	9.9	15.1

1E NET DEBT ANALYSIS as at 31 March 2020
Appointed Business only

	Interest rate risk profile			
	Fixed rate	Floating rate	Index linked	Total
	£'m	£'m	£'m	£'m
Borrowings (excluding preference shares)	1,791.4	29.7	1,136.2	2,957.3
Preference share capital				-
Total borrowings				2,957.3
Cash				(31.8)
Short term deposits				(27.0)
Net Debt				2,898.5
Gearing %				67.2%
Adjusted gearing				67.2%
Full year equivalent nominal interest cost	80.5	0.6	43.7	124.8
Full year equivalent cash interest payment	80.5	0.6	14.5	95.6
Indicative interest rates				
Indicative weighted average nominal interest rate	4.44%	1.88%	3.84%	4.18%
Indicative weighted average cash interest rate	4.44%	1.88%	1.27%	3.20%
Weighted average years to maturity	9.9	8.0	17.9	12.9

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1F FINANCIAL FLOWS for the 12 months ended 31 March 2020 and for the price review to date (Price Base 2012/13 RPI average)

	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
Return on regulatory equity	5.65	4.98	5.65	77.1	67.9	67.9	5.67	4.92	5.67	77.5	67.2	67.2
Actual performance adjustment 2010-15	1.30	1.14	1.30	17.7	15.6	15.6	1.34	1.16	1.34	18.3	15.9	15.9
Adjusted Return on regulatory equity	6.95	6.12	6.95	94.8	83.5	83.5	7.01	6.08	7.01	95.8	83.1	83.1
Regulatory equity (£m)	1,364.2	1,364.2	1,201.3				1,366.1	1,366.1	1,185.1			
Financing												
Gearing	-	0.59	0.59	-	7.1	7.1	-	0.71	0.71	-	8.5	8.5
Variance in corporation tax	-	0.45	0.52	-	6.2	6.2	-	0.81	0.93	-	11.1	11.1
Group relief	-	-	-	-	-	-	-	0.03	0.04	-	0.4	0.4
Cost of debt	-	1.14	1.39	-	15.6	16.7	-	0.71	0.86	-	9.6	10.2
Hedging instruments	-	0.20	0.25	-	2.8	3.0	-	0.08	0.10	-	1.1	1.2
Financing total	6.95	8.51	9.69	94.8	115.2	116.5	7.01	8.43	9.66	95.8	113.8	114.5
Operational performance												
Totex out / (under) performance	-	(1.13)	(1.28)	-	(15.4)	(15.4)	-	0.90	1.04	-	12.3	12.3
ODI out / (under) performance	-	(0.01)	(0.02)	-	(0.2)	(0.2)	-	0.14	0.17	-	2.0	2.0
Retail out / (under) performance	-	(0.82)	(0.93)	-	(11.2)	(11.2)	-	0.04	0.05	-	0.6	0.6
Other exceptional items	-	-	-	-	-	-	-	0.04	0.05	-	0.6	0.6
Operational performance total	-	(1.97)	(2.23)	-	(26.8)	(26.8)	-	1.13	1.30	-	15.4	15.4
Total earnings	6.95	6.54	7.46	94.8	88.3	89.6	7.01	9.56	10.96	95.8	129.2	129.9
RCV growth from RPI inflation	2.64	2.64	2.64	36.0	36.0	31.7	2.53	2.53	2.53	34.6	34.6	30.0
Total shareholder return	9.59	9.18	10.10	130.8	124.3	121.3	9.54	12.09	13.49	130.3	163.8	159.9
Net dividend	4.00	4.01	4.55	54.6	54.7	54.7	4.00	9.48	10.92	54.6	129.4	129.4
Retained value	5.59	5.18	5.55	76.3	69.6	66.7	5.54	2.61	2.57	75.7	34.4	30.4
Dividends reconciliation												
Gross dividend	4.00	4.01	4.55	54.6	54.7	54.7	4.00	9.48	10.92	54.6	129.4	129.4
Interest received on intercompany loans	-	-	-	-	-	-	-	-	-	-	-	-
Net dividend	4.00	4.01	4.55	54.6	54.7	54.7	4.00	9.48	10.92	54.6	129.4	129.4

The purpose of this table is to provide transparency of financial flows to investors, comparing actual flows, and the main elements of performance which contribute to these flows, against the financial flows assumed by Ofwat under the notional structure at the last price review.

This commentary explains the key features of the report for both 2019/20 and cumulative performance for the full five years of AMP6, from 2015/16 to 2019/20. Note, all of the financial values are expressed in the same 2012/13 price base as the PR14 price review.

Return on regulatory equity (RORE)

At PR14, the base notional RORE was set at an average 5.73% for the five year period, however this has been reduced to exclude any return on NHH retail from 2017/18 onwards, as a result of NWL exiting the NHH market on 1 April 2017. This has reduced the base notional RORE to 5.65% in 2019/20 and 5.67% average for 2015-20.

In Ofwat's PR14 methodology, certain company-specific changes were made to reflect performance in the previous five year period, 2010-15. For NWL this included an additional return, under Ofwat's Revenue Correction Mechanism, to recover lower than funded revenue received in the previous price control period (from 2010 to 2015) as a result of falling non-household demand. This increased NWL's Adjusted RORE to 6.95% in 2019/20 and 7.01% average for 2015-20.

The regulatory equity base represents the proportion of RCV funded as equity rather than debt. Ofwat's notional structure for PR14 assumed net debt at 62.5% of RCV, equating to base regulatory equity of 37.5%, or £1,364m at March 2020. NWL's average gearing in 2019/20 was 67%, resulting in actual regulatory equity of 33% of RCV, or £1,201m.

Financing

This section of the report relates to performance from financing, including tax.

Gearing is calculated as net debt divided by RCV. NWL's average gearing has reduced from 69.1% in 2015/16 to 67% in 2019/20, remaining above Ofwat's notional structure assumption of 62.5% but below our target level of 70% throughout AMP6. This has generated an average benefit of £8.5m per annum over AMP6.

Corporation tax reports the difference current tax funded in the FD and the actual tax rate applied to profit before fair value, adjusted for capital allowances. This has shown an outperformance of £6.2m in 2019/20. A reconciliation of our current tax to FD allowance is provided on page 20. The average performance for 2015-20 of £11.1m is distorted by a one-off gain in 2015/16 whereby we were funded at PR14 for additional tax costs expected to arise upon transition to IFRS which have not subsequently been incurred (though the tax computation has not yet been finalised with HMRC). In our PR19 Business Plan we committed that we would share the benefit with customers through using interest gained on the unutilised tax funding to support our zero water poverty goal.

There has been only a small outperformance due to Group tax relief over AMP6 to date. All tax losses acquired from related parties in the year were paid for in full.

Cost of debt performance is reported in real terms, rather than nominal. As reported in table 4H, over 60% of the Company's debt is at fixed rate and not impacted by indexation. In 2019/20, the real cost of debt was lower than allowed in the FD producing financing outperformance of £16.7m.

Hedging instruments shows the impact of interest rate swaps on the cost of debt reported in the year, and equates to a benefit of £3.0m in 2019/20.

The net effect of financing and tax in the year was an outperformance of FD allowance by £25.9m.

Operational Performance

This section of the report explains how our strong operational performance over AMP6 on wholesale totex, ODIs and retail costs, which has been explained throughout this report, has contributed to higher returns.

Our wholesale totex performance is explained in the commentary to table 4B. The table above shows the proportion of this outperformance which is retained by the Company, being 51.2% or £12.3m on average over AMP6. The remainder of the outperformance is returned to customers through a reduction in RCV at the next price review. The overspend in 2019/20 is due to the profile of the FD, which reduced sharply in the year whereas we have maintained a more even phasing of our capital programme over AMP6.

ODI performance against our PCs is reported in table 3A, with a net penalty in 2019/20 of £0.2m, though a net cumulative reward for 2015-20 of £9.8m. The rewards relate mostly to strong performance on sewer flooding and interruptions to supply, partially offset by a penalty on drinking water compliance. Our performance against each of these is explained earlier in this report.

The performance of our household retail business is explained in the narrative to table 2C, with higher costs resulting from an increased bad debt provision related to Covid-19. The AMP6 position also includes the benefit of performance on SIM over the first four years of AMP6, as assessed for PR19, which generated a reward of £5m (in 2012/13 prices).

The net effect of operational performance in the year was an underperformance of FD allowance by £26.8m, however, for 2015-20 we have outperformed FD on average by £15.4m per annum, or 1.3% of regulatory equity.

Total Shareholder Return

The total shareholder return comprises adjusted RORE, financing performance, operational performance and growth in the RCV as allowed in the FD. Our performance generated a total shareholder return of £121.3m in 2019/20, a 10.1% return on regulatory equity. Of this return, 4.55% was paid as dividend with 5.55% being value retained within the business.

Our dividend policy, and how this is applied, is set out on **page 124.**

APPOINTED BUSINESS TAXATION

The rate of UK corporation tax for the current year was 19%. The reduction in the rate to 17% legislated for in Finance Act 2016 has now been cancelled. It is therefore expected that the 19% rate will continue to apply for AMP7.

The current tax charge for the Appointed business is derived by reducing the Company's statutory charge (£38.9m) by the amount relating to the activities of the Non-appointed business (£0.9m). The Appointed business charge of £38.0m includes £14.4m payable to fellow group companies in respect of their current year tax losses that will be surrendered to the Appointed business.

The surrender of tax losses to the Appointed business has not required the disclaimer of any capital allowances. Payment for those losses is being made to group companies at the full rate of corporation tax.

The prior years' corporation tax credit of £3.0m mainly reflects a revision to the estimate for corporate interest restrictions and the benefit of improved capital allowances claims (including R&D).

The current tax charge for the Appointed business has increased by £7.3m compared to 2018/19. This is mainly due to a £20.6m increase in profit before tax and fair value movements, but also reflects modest decreases in capital allowances and allowable pension contributions and an increase in general provisions, offset by a decrease in non-allowable expenditure.

The deferred tax charge for the Appointed business is derived by adjusting the Company's statutory charge (£58.9m) by amounts relating to accounting differences (i.e. capitalised interest charge of £2.5m) and the activities of the Non-appointed business (charge of £1.1m). The Appointed business charge of £55.3m includes £50.7m for the restatement of deferred tax from 17% to 19% and £2.3m for prior years related to the matters referred to above. Deferred tax in the year and at the balance sheet date is all provided at 19%, being the rate at which temporary differences are expected to reverse.

An explanation of why the current tax charge for the Appointed business is lower than the result of applying the standard rate of corporation tax to profit before tax is provided in the table opposite :

CURRENT TAX RECONCILIATION for the 12 months ended 31 March 2020

	Total appointed activities
	£'m
Profit before tax and fair value movements	222.8
Profit before tax and fair value movements multiplied by standard rate of corporation tax of 19%	42.3
EFFECTS OF:	
Expenses incurred that are not deductible for tax purposes	0.1
Non-taxable income and other tax reliefs	(0.1)
Depreciation in respect of non-qualifying items	1.0
Tax reliefs claimed for capital expenditure in excess of accounts depreciation	(6.2)
Grants and contributions received in excess of accounts amortisation	3.9
Pension contributions paid in excess of accounts service and finance costs	(1.4)
Other temporary differences	1.4
Adjustments in respect of prior periods	(3.0)
UK:UK transfer pricing adjustments	(0.8)
Balancing payment payable	0.8
Appointed current tax change per line 1A.12	38.0

Factors affecting future tax charges and other significant matters

As well as the tax rate changes referred to above, future tax charges will potentially be affected by the following matters:

The Appointed business expects to continue to incur high levels of capital expenditure during AMP7 which, under current tax legislation, should result in claims for tax reliefs being in excess of depreciation.

CURRENT TAX RECONCILIATION TO FD

An allowance for corporation tax was made in the Final Determination (FD) at PR14. Actual performance differs to the FD for a number of reasons. As far as current tax is concerned, the charge for the year is reconciled to the FD allowance as follows:

	Total appointed activities
	£'m
Current tax charge (at 20%) originally allowed in price limits	43.0
Remove Non-Household included above following exit from market	(0.6)
	42.4
Impact of actual RPI	(1.6)
Impact of reduction in tax rate to 19%	(2.0)
	38.8
Net decrease in profit before tax and depreciation	(0.1)
Increase in allowable pension contributions	(0.8)
Decrease in tax reliefs claimed for capital expenditure	3.6
Increase in amortisation of grants and contributions	(0.9)
Other	0.4
Adjustment in respect of prior years	(3.0)
Current tax charge	38.0

APPOINTED BUSINESS TAX STRATEGY

Scope

The Company is required, by section 3.11 of RAG 3.10, to publish details of its Tax Strategy relating to the Appointed Business within the Annual Performance Report. For the avoidance of doubt, the Company has a single Tax Strategy which applies to its Appointed and Non-appointed businesses, as well as to its subsidiaries.

The Tax Strategy set out below is for the Company's financial year ended 31 March 2020 in order to satisfy the requirements of Schedule 19, Finance Act 2016.

Aim

The Company is committed to fully complying with all its statutory tax obligations, including the payment and recovery of taxes at the right time and the provision of all relevant information to HM Revenue and Customs (HMRC) to support the amounts of tax concerned.

The Company's Board owns and approves the Tax Strategy which comprises the following four components :

a) Tax governance arrangements

The Board reviews and approves all significant investment and business operating decisions directly or delegates the appropriate authority. The Company's Audit Committee considers significant tax related matters as part of its monitoring of internal controls and financial reporting arrangements.

Day-to-day management of the Company's tax affairs is delegated to the Tax Manager and to other appropriately qualified staff who have responsibility for specific taxes. All staff with responsibility for tax report to members of the Company's senior management team which, in turn, reports to the Board.

The Company's tax affairs are conducted in a business-like manner in accordance with the Company's commitment to corporate responsibility.

b) Tax risk management framework

The Company's Risk Committee oversees the risk assessment process applied by the business which includes an assessment of tax risks. Significant risks identified by the business are escalated for the Committee to consider.

As far as possible, through the activities of its Board, Committees and personnel responsible for tax matters, the Company seeks to reduce or eliminate the level of tax risk arising from its operations by ensuring appropriate processes and controls are in place.

The Company only takes tax positions which are justifiable and based on law, with advice taken from reputable professional firms where necessary. In addition, any transaction that has material tax consequences will be referred by the Company to the ultimate parent company's tax team to ensure there is agreement with, and consistency in, the tax treatment.

To help manage tax risk, the Company's taxation affairs are only handled by appropriately qualified and experienced staff and, where necessary, training is given to non-tax staff who are involved in processes which have tax implications.

The Company does not tolerate or condone any form of tax evasion, whether committed or facilitated by its own staff or any associated persons (e.g. agents and other persons who perform services for or on behalf of the Company) and manages this risk by the use of appropriate processes.

c) Approach to tax planning

The Company considers tax as part of its business decision making process. When entering into commercial transactions, the Company seeks to obtain the benefit of tax incentives, reliefs and exemptions available under UK tax legislation, consistent with the purpose and the letter of the law.

The tax affairs of the Company are arranged and managed in response to, and in support of, its business or commercial activities. Related party transactions are managed and documented to ensure they are in compliance with local tax law and practice.

d) Relationship with HMRC

The Company seeks to have a transparent and constructive relationship with HMRC on all taxation matters and keeps HMRC aware of significant transactions and business developments. All contact with HMRC is conducted in a professional and courteous manner.

The Company seeks to obtain certainty from HMRC at the earliest opportunity on the tax treatment of complex or uncertain issues. Discussions with HMRC are held at least annually to review past and present tax risks and agree on the steps required to take matters forward. Resolution of any disputed matters will be sought through open discussion and negotiation with HMRC, but the Company is prepared to litigate in cases where it believes the technical basis of a decision is incorrect.

The Company takes an active role in the development of the UK's legislative framework through participation at company or industry level in Government consultations on significant new tax laws.

Publication date: 15 July 2020.

ANNUAL PERFORMANCE REPORT
SECTION 2: PRICE REVIEW AND OTHER SEGMENTAL REPORTING

2A SEGMENTAL INCOME STATEMENT for the 12 months ended 31 March 2020

	Retail		Wholesale						Total
	Household	Non-Household	Water resources	Water Network+	Water Total	Waste water Network+	Sludge	Wastewater total	
	£'m	£'m	£'m	£'m	£'m	£'m	£'m	£'m	£'m
Revenue - price control	59.8	-		442.1	442.1	324.5		324.5	826.4
Revenue - non price control	0.3	0.3		9.0	9.0	0.7		0.7	10.3
Operating expenditure	(63.5)	(0.2)	(52.6)	(150.1)	(202.7)	(87.9)	(7.4)	(95.3)	(361.7)
Depreciation - tangible fixed assets	(2.5)	-	(2.9)	(67.6)	(70.5)	(50.2)	(7.1)	(57.3)	(130.3)
Amortisation - intangible fixed assets	(1.3)	-	-	(7.5)	(7.5)	(.2)	-	(.2)	(9.0)
Other operating income	-	-	0.8	0.1	0.9	-	0.1	0.1	1.0
Operating profit before recharges	(7.2)	0.1			171.3			172.5	336.7
Recharges in respect of 'principal use' assets									
Recharges from other segments	(3.8)	-	(0.6)	(0.1)	(0.7)	(4.2)	(0.8)	(5.0)	(9.5)
Recharges to other segments	0.2	-	-	9.3	9.3	-	-	-	9.5
Operating profit	(10.8)	0.1			179.9			167.5	336.7
Surface water drainage rebates									0.6

2B TOTEX ANALYSIS: WHOLESALE WATER AND WASTEWATER

for the 12 months ended 31 March 2020

	Water Resources	Water Network+	Wastewater Network+	Sludge	Total
	£'m	£'m	£'m	£'m	£'m
Operating expenditure					
Power	8.0	18.6	21.4	(0.9)	47.1
Income treated as negative expenditure	(0.1)	(0.1)	-	(8.5)	(8.7)
Abstraction charges/ discharge consents	28.0	0.3	3.7	-	32.0
Bulk supply/ Bulk discharge	0.9	-	-	-	0.9
Other operating expenditure - renewals expensed in year (Infrastructure)	0.3	2.8	5.3	-	8.4
Other operating expenditure - renewals expensed in year (Non-Infrastructure)	1.0	0.8	1.5	-	3.3
Other operating expenditure - excluding renewals	6.2	102.6	49.9	15.6	174.3
Local authority and Cumulo rates	3.4	21.4	5.8	1.2	31.8
Total operating expenditure excluding third party services	47.7	146.4	87.6	7.4	289.1
Third party services	4.9	3.7	0.3	-	8.9
Total operating expenditure	52.6	150.1	87.9	7.4	298.0
Capital Expenditure					
Maintaining the long term capability of the assets - infra	0.5	34.1	20.0	-	54.6
Maintaining the long term capability of the assets - non- infra	6.7	79.6	32.0	13.0	131.3
Other capital expenditure - infra	1.7	23.0	9.6	-	34.3
Other capital expenditure - non-infra	3.7	7.0	15.2	-	25.9
Infrastructure network reinforcement	-	2.1	0.1	-	2.2
Total gross capital expenditure excluding third party services	12.6	145.8	76.9	13.0	248.3
Third party services	-	-	-	-	-
Total gross capital expenditure	12.6	145.8	76.9	13.0	248.3
Grants and contributions					
Grants and contributions	-	(16.6)	(3.9)	-	(20.5)
Totex	65.2	279.3	160.9	20.4	525.8
Cash Expenditure					
Pension deficit recovery payments	0.3	6.4	2.7	0.5	9.9
Other cash items	-	-	-	-	-
Total					
Totex including cash items	65.5	285.7	163.6	20.9	535.7

2C OPERATING COST ANALYSIS: RETAIL
for the 12 months ended 31 March 2020

	Household	Non-household	Total
	£'m	£'m	£'m
Operating expenditure			
Customer services	14.8	-	14.8
Debt management	4.9	-	4.9
Doubtful debts	28.1	-	28.1
Meter reading	2.7	-	2.7
Services to developers	-	0.2	0.2
Other operating expenditure	13.0	-	13.0
Total operating expenditure excluding third party services	63.5	0.2	63.7
Third party services operating expenditure	-	-	-
Total operating expenditure	63.5	0.2	63.7
Depreciation - tangible fixed assets	2.5	-	2.5
Amortisation - intangible fixed assets	1.3	-	1.3
Total operating costs	67.3	0.2	67.5
Debt written off	2.3	-	2.3

Retail revenue and cost reconciliation to FD

Household

Household retail revenue, reported in table 2I, was £59.8m, which was £0.8m lower than allowed in the FD. Household retail costs, in table 2C above, were £67.3m, which was £13.4m higher than allowed in the FD. This generated a negative household retail margin of -1.1%, as reported in table 4H, compared to a margin of 1% assumed in the FD.

The higher operating costs included a provision of £6.5m for increased bad debt risk as a result of the economic impact of Covid-19 on our household customers. Costs are also higher than FD as a result of additional costs associated with the implementation of our new customer contact and billing systems and because of inflationary pressures on staff and other costs which were not allowed in the FD.

The operating costs reported in the NHH column relate to activities retained by the wholesale business after NWL's exit from the NHH retail market, for services to developers, but which RAG 4.08 requires to be reported as NHH for consistency with FD allowances. It would not be meaningful to reconcile these costs to the NHH FD allowance which is no longer in effect.

2D HISTORIC COST ANALYSIS OF FIXED ASSETS: WHOLESALE AND RETAIL

for the 12 months ended 31 March 2020

	Wholesale				Retail		Total
	Water Resources	Water Network+	Wastewater Network+	Sludge	Household	Non-Household	
	£'m	£'m	£'m	£'m	£'m	£'m	£'m
Cost							
At 1 April 2019	90.3	3,287.8	2,764.6	185.9	27.9	-	6,356.5
Disposals	(0.1)	(4.2)	(0.9)	(0.4)	(0.1)	-	(5.7)
Additions	12.6	123.4	77.0	13.0	0.9	-	226.9
Adjustments	-	(1.4)	-	-	-	-	(1.4)
Assets adopted at nil cost	-	-	13.5	-	-	-	13.5
At 31 March 2020	102.8	3,405.6	2,854.2	198.5	28.7	-	6,589.8
Depreciation							
At 1 April 2019	(23.8)	(1,140.0)	(740.3)	(120.1)	(18.8)	-	(2,043.0)
Disposals	0.1	0.9	4.1	0.4	0.1	-	5.6
Adjustments	-	-	-	-	-	-	-
Charge for the year	(2.9)	(67.6)	(50.2)	(7.1)	(2.5)	-	(130.3)
At 31 March 2020	(26.6)	(1,206.7)	(786.4)	(126.8)	(21.2)	-	(2,167.7)
Net book amount at 31 March 2020	76.2	2,198.9	2,067.8	71.7	7.5	-	4,422.1
Net book amount at 1 April 2019	66.5	2,147.8	2,024.3	65.8	9.1	-	4,313.5
Depreciation charge for year							
Principal services	(2.9)	(67.3)	(50.2)	(7.1)	(2.5)	-	(130.0)
Third party services	-	(0.3)	-	-	-	-	(0.3)
Total	(2.9)	(67.6)	(50.2)	(7.1)	(2.5)	-	(130.3)

2E ANALYSIS OF CAPITAL CONTRIBUTIONS AND LAND SALES: WHOLESALE
for the 12 months ended 31 March 2020

	Fully recognised in income statement	Capitalised and amortised (in income statement)	Fully netted off capex	Total
	£'m	£'m	£'m	£'m
Grants and contributions - water				
Connection charges	-	7.1	-	7.1
Infrastructure charge receipts	-	3.3	-	3.3
Requisitioned mains	-	2.0	-	2.0
Other contributions (price control)	-	-	-	-
Diversions	4.1	-	-	4.1
Other contributions (non-price control)	0.2	-	-	0.2
Total	4.3	12.4	-	16.7
Value of adopted assets		-		-
Grants and contributions - wastewater				
Infrastructure charge receipts	-	1.9	-	1.9
Requisitioned sewers	-	(0.1)	-	(0.1)
Other contributions (price control)	-	0.8	-	0.8
Diversions	1.0	-	-	1.0
Other contributions (non-price control)	0.4	-	-	0.4
Total	1.4	2.6	-	4.0
Value of adopted assets		13.5		13.5

	Water	Wastewater	Total
	£'m	£'m	£'m
Movements in capitalised grants and contributions			
Brought forward	234.0	149.1	383.1
Received in year (above)	12.4	2.6	15.0
Adopted assets	-	13.5	13.5
Transferred from receipts in advance	(0.1)	-	(0.1)
Amortisation (in income statement)	(3.5)	(2.0)	(5.5)
Carried forward	242.8	163.2	406.0

	Water	Wastewater	Total
	£'000	£'000	£'000
Land sales			
Proceeds from disposals of protected land	1.3	-	1.3

Grants and contributions falling within the wholesale price control, and therefore also reported on table 2B, comprise connection charges, infrastructure charge receipts and requisitioned mains and sewers.

2F HOUSEHOLD REVENUES BY CUSTOMER TYPE

for the 12 months ended 31 March 2020

	Wholesale charges revenue £m	Retail revenue £m	Total revenue £m	Number of customers (000s)	Average household retail revenue per customer £
	£'m	£'m	£'m	000s	£
Unmeasured water only customer	77.0	6.7	83.7	278.4	24.1
Unmeasured wastewater only customer	7.0	0.3	7.3	28.9	10.4
Unmeasured water and wastewater customer	274.9	19.7	294.6	651.1	30.3
Measured water only customer	93.6	14.1	107.7	473.2	29.8
Measured wastewater only customer	6.7	0.8	7.5	37.6	21.3
Measured water and wastewater customer	134.0	18.2	152.2	432.1	42.1
Total	593.2	59.8	653.0	1,901.3	31.5

2G & 2H NON-HOUSEHOLD WATER AND WASTEWATER REVENUES BY TARIFF TYPE

NWL exited the NHH retail market at 1 April 2017 and transferred its NHH retail business to an acquiring licenced retailer, NWGB, another subsidiary of NWGL.

In accordance with RAG 4.08, as NWL has exited all NHH market activities, we are no longer required to publish tables 2G and 2H.

NWL still provides wholesale water and wastewater services to NHH properties in our areas of supply. The NHH wholesale revenue for the year ended 31 March 2020 was £173.4m, as reported in table 2I.

2I REVENUE ANALYSIS for the 12 months ended 31 March 2020

	Household	Non-household	Total
	£'m	£'m	£'m
Wholesale charge - water			
Unmeasured	196.1	1.2	197.3
Measured	150.7	86.9	237.6
Third party revenue	-	7.2	7.2
Total	346.8	95.3	442.1
Wholesale charge - wastewater			
Unmeasured	162.9	3.9	166.8
Measured	83.5	74.2	157.7
Third party revenue	-	-	-
Total	246.4	78.1	324.5
Wholesale Total	593.2	173.4	766.6
Retail revenue			
Unmeasured	26.7	-	26.7
Measured	33.1	-	33.1
Other third party revenue	-	-	-
Retail total	59.8	-	59.8
Third party revenue - non-price control			
Bulk Supplies - water			3.1
Bulk Supplies - wastewater			-
Other third party revenue			6.9
Principal services - non-price control			
Other appointed revenue			0.3
Total appointed revenue			836.7

	Water	Wastewater	Total
	£'m	£'m	£'m
Wholesale revenue governed by price control	442.1	324.5	766.6
Grants & contributions	12.4	2.6	15.0
Total revenue governed by wholesale price control	454.5	327.1	781.6
Amount assumed in wholesale determination	463.7	331.2	794.9
Adjustment for in-period ODI revenue	-	-	-
Adjustment for WRFIM	(9.7)	(2.1)	(11.8)
Total assumed revenue	454.0	329.1	783.1
Difference	0.5	(2.0)	(1.5)

2I REVENUE ANALYSIS for the 12 months ended 31 March 2020 (continued)

Wholesale revenue control reconciliation to FD

Charges for 2019/20 were set taking account of the wholesale revenue forecasting incentive mechanism (WRFIM), which reflected over-recovery of wholesale water of £9.7m and wastewater £2.1m in 2017/18.

Wholesale water revenue in 2019/20 was £0.5m (0.1%) higher than the adjusted revenue allowance. This comprised £2.1m from higher than expected developer contributions less £1.6m received from published water charges. The under-recovery from standard water charges largely reflected an increase in the number vacant non-household properties. This was exacerbated in March 2020 with the temporary closure of a large number of businesses due to Covid-19.

Wholesale wastewater revenue in 2019/20 was £2.0m (0.6%) lower than the adjusted revenue allowance. The revenue from published charges was £0.9m lower than expected, also primarily due to the increase in vacant non-household properties. Revenue from developer contributions was a further £1.1m lower than anticipated when charges were set.

2J INFRASTRUCTURE NETWORK REINFORCEMENT COSTS for the 12 months ended 31 March 2020

	Network reinforcement capex	On site / site specific capex (memo only)
	£'m	£'m
Wholesale water network+ (treated water distribution)		
Distribution and trunk mains	2.0	-
Pumping and storage facilities	-	-
Other	-	-
Total	2.0	-
Wholesale wastewater network+ (sewage collection)		
Foul and combined systems	0.1	-
Surface water only systems	-	-
Pumping and storage facilities	-	-
Other	-	-
Total	0.1	-

2K INFRASTRUCTURE CHARGES RECONCILIATION for the 12 months ended 31 March 2020

	Water	Wastewater	Total
	£'m	£'m	£'m
Impact of infrastructure charge discounts			
Infrastructure charges	3.3	1.9	5.2
Discounts applied to infrastructure charges	0.1	1.0	1.1
Gross infrastructure charges	3.4	2.9	6.3
Comparison of revenue and costs			
Variance brought forward	2.5	2.3	4.8
Revenue	3.4	2.9	6.3
Costs	(2.0)	(0.1)	(2.1)
Variance carried forward	3.9	5.1	9.0

Reconciliation of infrastructure charges and network reinforcement costs

Infrastructure charges are set at a level to funds investment in reinforcement of our networks, to meet the demand arising from new development of household properties. We are required to ensure that revenue from infrastructure charges broadly matches network reinforcement expenditure over a five year rolling period.

We review infrastructure charges annually, taking account of extra capacity expected to be required as a result of new developments in the following five years. Our forecast reflects applications received for the provision of new infrastructure, pre-development enquiries and a longer term view of local authority plans and strategic studies.

The numbers reported in table 2K reflect the second year of our rolling five year review and show a cumulative variance between infrastructure charges received and network reinforcement expenditure of £9m. We anticipated this when we set our charges for 2020/21 and reduced the level of infrastructure charges with effect from April 2020. We also expect to increase the network reinforcement investment over the next three years.

DISCLOSURE OF TRANSACTIONS WITH ASSOCIATES

Services supplied by the appointee to associated companies:

Associate	Service	Turnover	Terms of Supply	Value
		£'m		£'m
AquaGib Limited	Sale of materials	15.1	Negotiated	0.187
Anglian Water Business (National) Limited (AWB)	Water and sewerage supplies	561.3	Competitive letting	149.790
NWG Bioenergy Limited	Pathogen and chemistry testing	3.1	No market	0.037
Northern Gas Networks Limited (NGN)	Mains repairs and trade effluent charges	450.0	No market	0.021
Vehicle Lease and Service Limited (VLS)	Rental of garage and service charges	17.9	Negotiated	0.050
UK Power Networks	Rental income	1,725.9	No market	0.004

Services supplied to the appointee by associated companies:

Associate	Service	Turnover	Terms of Supply	Value
		£'m		£'m
CKI	Software licensing agreements	3,612.5	Negotiated	3.203
NGN	Gas main diversions	450.0	No market	0.089
NWGL	Holding company charges	7.6	No market	1.420
Three Rivers Insurance Company Limited (TRICL)	Public liability insurance (deductible infill policy)	0.5	No market	0.469
VLS	Vehicle maintenance and capital finance charge	17.9	Competitive letting	9.665
UK Power Networks	Cost of damages	1,725.9	No market	0.044

Corporation tax group relief received by the appointee from associated companies:

Associate	Service	Turnover	Terms of Supply	Value
		£'m		£'m
NWG Bioenergy Limited	Transfer of corporation tax group losses	3.1	No market	0.583
Ayr Environmental Services Operations Limited	Transfer of corporation tax group losses	7.8	No market	0.074
NWG Commercial Solutions Limited (NWGCSL)	Transfer of corporation tax group losses	1.0	No market	0.081
NWGL	Transfer of corporation tax group losses	7.6	No market	13.653

Turnover data for all companies relates to the year to 31 March 2020, with the exception of data for VLS and CKI which relates to the year to 31 December 2019.

Payment for tax losses transferred between group companies is calculated as the losses transferred multiplied by the corporation tax rate for the year.

Service provided by the non appointed business:

Service	Basis of recharge made by the appointed business	Value
		£'m
Treatment of imported sludge	The average unit cost per tonne dry solid is calculated using operating costs only and excluding payroll. This gives a unit rate which is more than the incremental cost but less than the income received therefore sharing the benefit of the activity.	0.006
Treatment of tankered waste	The recharge comprises recovery of operating costs of operator time and sampling and analysis and a charge for the use of appointed business assets, calculated using the Biological and Sludge elements of the trade effluent charge set out in the Company's Wholesale Charges Scheme.	1.500
Other	Other assets are specifically identified to the appropriate business.	-

Information in relation to allocations and apportionments

The appointed and non-appointed businesses operate separate accounting records including sales and purchase ledgers. Revenue, operating costs, assets and liabilities are taken directly from these records.

Revenue is separately recorded between wholesale water and wastewater and household and non-household retail services and no apportionment has been necessary. Operating costs have been allocated between wholesale water and wastewater and household and non-household retail services in accordance with the guidance set out in RAG 4.08.

Overhead costs incurred in the appointed business which relate to the non-appointed business have been allocated using an activity based approach to comply with RAG 5.07.

Interest has been allocated between the appointed and non-appointed businesses on the basis of actual cash balances held by these businesses during the year at market rates. Capital costs and the related depreciation charges are specifically identifiable to the appropriate business and service.

Amounts borrowed by the appointee from associated companies

The Company has loans amounting to £2,355.5m due to NWF, a subsidiary company. Details of these loans and the associated guarantees are provided in note 15 of the NWL Annual Report and Financial Statements.

The Company acquires vehicles from VLS, an associated company, on a finance lease basis. During the year, new finance leases of £3.3m were entered into and capital repayments of £3.7m were made. The year end finance lease creditor was £11.6m. All leases have an individual interest rate which is fixed for the term of the lease. In 2019/20 all leases had an interest rate of 5.5%.

Guarantees or other forms of security

There were no guarantees or other forms of security provided by the appointee to any associate during the year, other than those relating to amounts borrowed from NWF, outlined above.

Dividends paid and proposed

During the year, the appointed business paid the following dividends to its immediate parent company:

	£'m
Dividends paid:	
Final dividend for the period ended 31 March 2019	65.0
Total dividends paid in the period	65.0

Dividend policy

The Board has a policy which takes into account the principle of incentive based price cap regulation, including operating and investment performance. When declaring dividends, the Directors consider the Company's five-year plan and give due consideration to business performance, the prospects of the Company and the principal risks facing the business.

Specifically, the Board determines the level of dividend declared by reference to:

- the Company's ability to finance its functions;
- the Company's cumulative financial performance and past outperformance; and
- maintaining the Company's investment grade credit ratings.

The Directors have also have regard to:

- the Company's operational performance and the level of service provided to its customers; and
- employees' interests and, specifically, compliance with the pension deficit repair plan agreed with the Pension Trustee in respect of the NWPS, as submitted to the Pensions Regulator.

Application of Policy

The Company typically pays an interim dividend during the year and a final dividend after the year end, once the Directors have reviewed the financial position of the Company at the balance sheet date.

In April 2019, the Board approved the payment of a final dividend in respect of the year 2018/19. In reaching this decision, the Board took account of the Company's financial position at 31 March 2019, cumulative financial performance in AMP6 and Medium Term Plan projections, which remained compatible with investment grade credit ratings. The Board also took into account the principal risks facing the business; good performance against most performance commitments with no significant service failures to customers; positive ongoing employee engagement and payments made under the schedule of contributions for the NWPS.

No dividends have been proposed, approved or paid in respect of the year ended 31 March 2020. In deciding this, the Board has taken into account the impact of the PR19 FD on the financial position of the Company over a five year time horizon, especially in relation to the Company's credit ratings and regulatory gearing; the need to retain financial resilience in order to be able to deliver the Company's Business Plan commitments for stakeholders; and the uncertainty associated with the impacts of the Covid-19 pandemic on the Company's future cash flows.

Omission of right

There were no omissions by the appointee to exercise any rights which would cause the net assets to decrease.

Waivers

There were no waivers by the appointee of any consideration, remuneration or other payment owed to it by any associated company.

The information in this note has been produced to comply with the requirements of RAG 5.07 Transfer Pricing in the Water Industry and the disclosures required by paragraph 6 of Condition F of the Company's operating licence.

ANNUAL PERFORMANCE REPORT
SECTION 2: PRICE REVIEW AND OTHER SEGMENTAL REPORTING

The Directors confirm that, to the best of their knowledge, all transactions with associated companies have been disclosed.

ANNUAL PERFORMANCE REPORT
SECTION 2: PRICE REVIEW AND OTHER SEGMENTAL REPORTING

INDEPENDENT AUDITOR'S REPORT TO THE WATER SERVICES REGULATION AUTHORITY ('WSRA') AND DIRECTORS OF NORTHUMBRIAN WATER LIMITED

Opinion

We have audited the tables within NWL's 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.9, line 1F.13, line 1F.19, line 1F.21 to line 1F.23 of the statement of financial flows (table 1F) and the related notes; and
- 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 and wholesale control reconciliation (table 2I), the infrastructure network reinforcement costs (table 2J), the infrastructure charges reconciliation (table 2K) and the related notes.

We have not audited lines 1F.10 to 1F.12, 1F.14 to 1F.18, and 1F.20 of table 1F, the Outcome performance tables 3A to 3S and the additional regulatory information in tables 4A to 4W.

In our opinion, NWL'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.

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 AFF 'Reporting to Regulators on Regulatory Accounts' issued by the Institute of Chartered Accountants in England and 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) 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 Annual Performance Report is 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 95 to 125** have been drawn up in accordance with Regulatory Accounting Guidelines with a number of departures from IFRSs. 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 for the Annual Performance Report

As explained more fully in the Statement of Directors' Responsibilities set out on **page 92**, 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).

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.

Auditor's 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 auditor's 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 auditor's 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 15 July 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.

Anthony Matthews (Senior statutory auditor)
for and on behalf of Deloitte LLP
Statutory Auditor
Newcastle Upon Tyne, United Kingdom
15 July 2020

3A - Outcome performance table — Northumbrian Water

For the 12 months ended 31 March 2020

Row	Unique ID	Performance commitment	Unit	Unit description	Decimal places	2018-19 performance level - actual (for information)	2019-20 performance level - actual	2019-20 PCL 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	PR14NESWSW_W-A1	W-A1: Asset health measures - water	N/A	N/A (measured in separate PCs)	na	n/a	n/a	-				
2	PR14NESWSW_W-B1	W-B1: Satisfaction with taste and odour of tap water	nr	No. of complaints per year	0	1,060	862	Yes	-		Outperformance payment	1.3750
3	PR14NESWSW_W-B2	W-B2: Overall drinking water compliance (3-year average)	%	Mean zonal compliance (%)	3	99.941	99.934	No	-		Underperformance payment	-3.9848
4	PR14NESWSW_W-B3	W-B3: Discoloured water complaints (3-year average)	nr	No. of complaints per year	0	2,667	2,492	Yes	-		Outperformance payment	0.0000
5	PR14NESWSW_W-C1	W-C1: Interruptions to water supply for more than 3 hours (average time per property per year)	time	Mins:secs per property per year	mins:secs	09:12	06:08	No	-		Underperformance payment deadband	0.0000
6	PR14NESWSW_W-C2	W-C2: Properties experiencing poor water pressure (3-year average)	nr	No. of properties	0	195	202	Yes	-		Outperformance payment deadband	0.0000
7	PR14NESWSW_W-C3	W-C3: Water mains bursts (3-year average)	nr	No. of burst mains per year	0	4,113	3,628	Yes	-		-	0.0000
8	PR14NESWSW_W-C4	W-C4: Leakage (Ml/d) Northumbrian area	nr	Megalitres per day (Ml/d)	2	136.26	134.8	Yes	-		Outperformance payment deadband	0.0000
9	PR14NESWSW_W-C5	W-C5: Leakage (Ml/d) Essex & Suffolk area	nr	Megalitres per day (Ml/d)	2	64.18	63.2	Yes	-		Outperformance payment deadband	0.0000
10	PR14NESWSW_W-D1	W-D1: NWL independent overall customer satisfaction score	score	Score between 0 and 10	1	8.7	8.6	Yes				
11	PR14NESWSW_W-D2	W-D2: Service incentive mechanism (SIM)	score	Service incentive mechanism (SIM) score	1	85.9	77.4	No				
12	PR14NESWSW_W-D3	W-D3: Domestic customer satisfaction, net promoter score	%	% customer satisfaction	0	43	40	Yes				
13	PR14NESWSW_W-E1	W-E1: NWL independent survey on keeping customers informed	%	% customer satisfaction	0	93	93	No				
14	PR14NESWSW_W-F1	W-F1: Greenhouse gas emissions	nr	ktCO2e	0	148	139	Yes				
15	PR14NESWSW_W-F2	W-F2: Annual environmental performance report	text	CRAG report publication	na	Our Contribution report published	Water Forum statement will be included in the Our Contribution report	Yes				
16	PR14NESWSWW_S-A1	S-A1: Asset health measures - wastewater	N/A	N/A (measured in separate PCs)	na	n/a	n/a	-				
17	PR14NESWSWW_S-B1	S-B1: Properties flooded externally	nr	No. of properties per year	0	902	1,001	Yes	-		Outperformance payment	0.2760
18	PR14NESWSWW_S-B2	S-B2: Properties flooded internally	nr	No. of properties flooded internally per year	0	124	139	Yes	-		Outperformance payment	0.6110
19	PR14NESWSWW_S-B3	S-B3: Repeat sewer flooding (3-year average)	nr	No. of properties per year	0	48	58	Yes	-		Outperformance payment	1.2610
20	PR14NESWSWW_S-B4	S-B4: Sewer collapses (3-year average)	nr	No. of sewer collapses per year - excluding TDSs	0	50	48	Yes	-		-	0.0000
21	PR14NESWSWW_S-B5	S-B5: Transferred drains and sewers - internal sewer flooding	nr	No. of properties per year	0	246	205	Yes	-		Outperformance payment deadband	0.0000
22	PR14NESWSWW_S-B6	S-B6: Transferred drains and sewers - external sewer flooding	nr	No. of properties per year	0	2,967	3,102	No	-		Underperformance payment deadband	0.0000
23	PR14NESWSWW_S-B7	S-B7: Transferred drains and sewers - sewer collapses	nr	No. of sewer collapses per year - TDSs	0	59	63	Yes				
24	PR14NESWSWW_S-C1	S-C1: Sewage treatment works discharge compliance (3-year average)	nr	No. discharge permit condition failures per year	2	1.00	1.33	No	-		Underperformance payment deadband	0.0000
25	PR14NESWSWW_S-C2	S-C2: Pollution incidents - category 3 (3-year average)	nr	No. of pollution incidents (cat 3)	0	73	60	Yes	-		Outperformance payment	0.2720
26	PR14NESWSWW_S-C3	S-C3: Bathing water compliance	nr	No. of bathing waters per year	0	33	33	No	-		Underperformance payment deadband	0.0000
27	PR14NESWSWW_S-C4	S-C4: Whitburn combined sewer overflow (CSO) scheme	text	Delivery / non-delivery	na	n/a	n/a	-	-		-	0.0000
28	PR14NESWSWW_S-D1	S-D1: NWL independent overall customer satisfaction score	score	Customer satisfaction score out of 10	1	8.7	8.6	Yes				
29	PR14NESWSWW_S-D2	S-D2: Service incentive mechanism (SIM)	score	Service incentive mechanism (SIM) score	1	85.9	77.4	No				
30	PR14NESWSWW_S-D3	S-D3: Domestic customer satisfaction, net promoter score	%	% customer satisfaction	0	43	40	Yes				
31	PR14NESWSWW_S-E1	S-E1: NWL independent survey on keeping customers informed	%	% customer satisfaction	0	93	93	No				
32	PR14NESWSWW_S-F1	S-F1: Greenhouse gas emissions	nr	ktCO2e	0	148	139	Yes				
33	PR14NESWSWW_S-F2	S-F2: Annual environmental performance report	text	CRAG report publication	na	Our Contribution report published	Water Forum statement will be included in the Our Contribution report	Yes				
34	PR14NESHHR_R-B1	R-B1: NWL independent overall customer satisfaction score	score	Customer satisfaction score out of 10	1	8.7	8.6	Yes				
35	PR14NESHHR_R-B2	R-B2: Service incentive mechanism (SIM)	score	Service incentive mechanism (SIM) score	1	85.9	77.4	No				
36	PR14NESHHR_R-B3	R-B3: Domestic customer satisfaction, net promoter score	%	% customer satisfaction	0	43	40	Yes				
37	PR14NESHHR_R-C1	R-C1: NWL independent value for money survey	score	Customer satisfaction score out of 10	1	8.2	8.1	Yes				
38	PR14NESHHR_R-C2	R-C2: Satisfied with value for money of water services - Northumbrian region (CCWater research)	%	% customer satisfaction	0	75	79	No				
39	PR14NESHHR_R-C3	R-C3: Satisfied with value for money of sewerage services - Northumbrian region (CCWater research)	%	% customer satisfaction	0	78	84	Yes				
40	PR14NESHHR_R-C4	R-C4: Satisfied with value for money of water services - Essex & Suffolk region (CCWater research)	%	% customer satisfaction	0	71	76	Yes				
41	PR14NESHHR_R-D1	R-D1: NWL independent survey on keeping customers informed	%	% customer satisfaction	0	93	93	No				
42	PR14NESHHR_R-E1	R-E1: Greenhouse gas emissions	nr	ktCO2e	0	148	139	Yes				
43	PR14NESHHR_R-E2	R-E2: Annual environmental performance report	text	CRAG report publication	na	Our Contribution report published	Water Forum statement will be included in the Our Contribution report	Yes				
44	PR14NESHHR_R-F1	R-F1: Delivering a consolidated Customer Information and Billing (CIB) system	£m	£ million cumulative depreciation	3	-	No cumulative depreciation to be applied.	-	-		-	0.0000
45												
46												
47												
48												
49												
50												
51												
52												
53												
54												
55												
56												

Key to cells:

Input cell

Calculation cell

Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

3C - AIM table — Northumbrian Water

For the 12 months ended 31 March 2020

Row	Abstraction site	Decimal places	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	Ormesby Broad	2	N/A	N/A	-942.61	-0.84	AIM was not triggered during the year 2019-20, hence the return of N/A in columns E & F. The cumulative and cumulative normalised figures (columns G & H) therefore remain the same as reported last year.
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
Total			0.0	0.00	-942.6	-0.84	

Key to cells:

Input cell

Calculation cell

Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

3D - SIM table Northumbrian Water

For the 12 months ended 31 March 2020

Line description		Units	DPs	Score
A	Qualitative performance			
3D.1	1st survey score	nr	2	4.15
3D.2	2nd survey score	nr	2	4.19
3D.3	3rd survey score	nr	2	4.30
3D.4	4th survey score	nr	2	4.46
3D.5	Qualitative SIM score (out of 75)	nr	2	61.44
3D.6	Total contact score	nr	2	27.17
3D.7	Quantitative SIM score (out of 25)	nr	2	15.94
3D.8	Total annual SIM score (out of 100)	nr	2	77.38

Key to cells:

Input cell

Calculation cell

Please refer to 'RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20 and the information notice 'Expectations for monopoly company annual performance reporting 2019-20'

ANNUAL PERFORMANCE REPORT
SECTION 4: ADDITIONAL REGULATORY INFORMATION

4A NON-FINANCIAL INFORMATION for the 12 months ended 31 March 2020

Retail	Total Company		Northumbrian Water		Essex and Suffolk Water	
	2019/20		2019/20		2019/20	
	Unmeasured	Measured	Unmeasured	Measured	Unmeasured	Measured
Number of void households	55.8	45.0	44.7	24.3	11.1	20.8
Per capita consumption (excluding supply pipe leakage) l/h/d			147.5	137.7	159.7	150.1

Wholesale	Northumbrian Water		Essex and Suffolk Water	
	2019/20		2019/20	
	Water	Wastewater	Water	Wastewater
Volume (Ml/d)				
Bulk supply export	0.5	-	3.3	-
Bulk supply import	-	-	78.8	-
Distribution input	670.2		453.5	

4B TOTEX ANALYSIS for the 12 months ended 31 March 2020

	Current year		Cumulative 2015-20	
	Water	Wastewater	Water	Wastewater
	£'m	£'m	£'m	£'m
Actual totex	351.2	184.5	1,633.6	885.0
Items excluded from the menu				
Third party costs	8.6	0.3	46.4	5.2
Pension deficit recovery payments	6.7	3.2	30.9	14.5
Other 'Rule book' adjustments	0.3	0.2	2.4	3.1
Total items excluded from the menu	15.6	3.7	79.7	22.8
Transition expenditure	-	-	-	4.0
Adjusted Actual totex	335.6	180.8	1,553.9	866.2
Adjusted Actual totex base year prices	282.4	152.2	1,380.0	771.9
Allowed totex based on final menu choice – base year prices	238.3	171.7	1,302.2	995.8

Wholesale totex reconciliation to FD

Our aim is to deliver the business outcomes of our wholesale activities as efficiently as possible, whilst maintaining the health of our assets and supporting excellent customer service. Over the course of 2015-20 price review period, we have generated efficiencies of £146.1m (over 6%) on wholesale totex through a combination of an efficient delivery model for our capital investment programme, our ongoing focus on our opex efficiency programme and our innovation strategy.

The operating model that weimplemented to deliver our capital investment programme as efficiently and effectively as possible has continued to drive lower costs. This is based on four key principles: we operate as a well-informed professional client; we offer clear visibility of, and commitment to, future workload to suppliers; we engage suppliers as early as practicable in the delivery process to add value and innovation; and we create the right environment for collaboration and co-operation, incentivising innovation and performance.

Wastewater totex compared to FD

The efficiency was generated in our wastewater business. Table 4B shows cumulative actual costs for Wastewater £223.8m (22.5%) lower than the totex allowed in the FD. This exceptionally strong efficiency has also been driven in part by the new capital investment delivery model, but also by investment in renewable energy generation and sustainable urban drainage solutions

This has also been achieved at the same time as delivering excellent customer service, consistently driving down levels of sewer flooding performance and maintaining strong sewage treatment works compliance and asset health performance.

Water totex compared to FD

Coversely, cumulative actual costs for Water were £77.7m (6%) higher than the totex allowed in the FD. The benefits of the capital investment operating model have been offset by increases in operating costs, most notably significant steps up in water cumulo rates, as a result of the 2017 rating valuation, and abstraction charges. We have also experienced increases in power, chemical and contractor costs as a result of higher prices.

The performance reported in table 3A and in Our Performance Summary demonstrates that we have achieved efficiencies whilst continuing to deliver excellent customer service, meeting the majority of our PCs and maintaining asset health performance.

Atypical items

There were no atypical items in 2019/20, 2018/19 or 2017/18.

The 2015/16 results included an exceptional pension credit in respect of a pension curtailment. This related to changes made to future benefits from the Northumbrian Water Pension Scheme, a defined benefit pension scheme, after consultation with employees. Of the total pension credit of £38.9m, £19.7m related to the water service and £10m related to wastewater.

In 2016/17, an exceptional water cumulo rates credit of £10.7m was recognised, relating to a revised 2005 cumulo valuation agreed with the Valuation Office Agency.

Other Rule book adjustments

In accordance with RAG 4.08 and the PR14 reconciliation rulebook, the other 'Rule book' adjustments relate to disallowable costs, as defined in the PR14 reconciliation rulebook. The overarching principle is that costs should only feature in the totex menu where it is appropriate for a company to share an over, or under, spend with customers. Disallowable items are costs that do not conform to this overarching principle, examples being fines and compensation costs. NWL has disallowed the following costs:

Water:
- fines and fixed penalty notices related to traffic management legislation: £0.2m in 2019/20 and £1.8m cumulatively;
- a fine and costs of relating to a DWI prosecution: £0.5m cumulatively; and
- compensation payment of £0.1m in 2019/20.

Wastewater:
- costs associated with pollution incidents: £0.2m in 2019/20 and £3.1m cumulatively.

4C FORECAST IMPACT OF PERFORMANCE ON RCV for the 12 months ended 31 March 2020

	2019/20	
	Water	Wastewater
	£'m	£'m
Cumulative totex over/underspend so far in the price control period	109.9	(254.6)
Customer share of cumulative totex over/underspend	45.8	(144.4)
RCV element of cumulative totex over/underspend	27.8	(137.2)
Adjustment for ODI outperformance payment or underperformance payment	(0.1)	12.0
RCV determined at FD at 31 March	2,118.0	2,198.2
Projected 'shadow' RCV	2,145.7	2,073.0

ANNUAL PERFORMANCE REPORT
SECTION 4: ADDITIONAL REGULATORY INFORMATION

4D TOTEX ANALYSIS: WHOLESALE WATER for the 12 months ended 31 March 2020

	Water resources		Network+				
	Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution	Total
Operating expenditure	£'m	£'m	£'m	£'m	£'m	£'m	£'m
Power	-	8.0	1.9	-	2.5	14.2	26.6
Income treated as negative expenditure	-	(0.1)	-	-	(0.1)	-	(0.2)
Abstraction charges/ discharge consents	28.0	-	-	-	0.3	-	28.3
Bulk supply	-	0.9	-	-	-	-	0.9
Other operating expenditure - renewals expensed in year (Infrastructure)	-	0.3	0.6	-	-	2.2	3.1
Other operating expenditure - renewals expensed in year (Non-Infrastructure)	-	1.0	-	-	0.1	0.7	1.8
Other operating expenditure - excluding renewals	-	6.2	0.6	1.9	40.4	59.7	108.8
Local authority and Cumulo rates	-	3.4	2.4	-	3.2	15.8	24.8
Total operating expenditure excluding third party services	28.0	19.7	5.5	1.9	46.4	92.6	194.1
Third party services	4.9	-	1.2	-	0.1	2.4	8.6
Total operating expenditure	32.9	19.7	6.7	1.9	46.5	95.0	202.7
Capital Expenditure							
Maintaining the long term capability of the assets - infra	-	0.5	0.2	-	-	33.9	34.6
Maintaining the long term capability of the assets - non-infra	-	6.7	0.3	-	36.6	42.7	86.3
Other capital expenditure - infra	-	1.7	-	-	-	23.0	24.7
Other capital expenditure - non-infra	-	3.7	-	-	4.0	3.0	10.7
Infrastructure network reinforcement	-	-	-	-	-	2.1	2.1
Total gross capital expenditure (excluding third party)	-	12.6	0.5	-	40.6	104.7	158.4
Third party services	-	-	-	-	-	-	-
Total gross capital expenditure	-	12.6	0.5	-	40.6	104.7	158.4
Grants and contributions	-	-	-	-	-	(16.6)	(16.6)
Totex	32.9	32.3	7.2	1.9	87.1	183.1	344.5
Cash Expenditure							
Pension deficit recovery payments	-	0.3	-	0.1	1.8	4.5	6.7
Other cash items	-	-	-	-	-	-	-
Totex including cash items	32.9	32.6	7.2	2.0	88.9	187.6	351.2
Population ('000s)	4,569.0	4,569.0	4,569.0	4,569.0	4,569.0	4,569.0	
Unit cost (£/pop)	7.2	4.3	1.5	0.4	10.2	20.8	

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	Licenced volume available	Volume abstracted	Volume transported	Average volume stored	Distribution input from water treatment	Distribution input from treated water
Volume (Ml)	671,951	450,692	434,431	1,556	468,078	414,172
Unit cost (£/Ml)	49.0	43.7	15.4	1,221.1	99.3	229.4

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4E TOTEX ANALYSIS: WHOLESALE WASTEWATER for the 12 months ended 31 March 2020

	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	Total
Operating expenditure	£'m	£'m	£'m	£'m	£'m	£'m	£'m	£'m	£'m
Power	7.1	-	-	12.4	1.9	1.1	(2.0)	-	20.5
Income treated as negative expenditure	-	-	-	-	-	-	(8.5)	-	(8.5)
Discharge consents	1.8	-	-	1.9	-	-	-	-	3.7
Bulk discharge	-	-	-	-	-	-	-	-	-
Other operating expenditure - renewals expensed in year (Infrastructure)	1.5	2.5	1.3	-	-	-	-	-	5.3
Other operating expenditure - renewals expensed in year (Non-Infrastructure)	0.3	0.4	0.2	0.6	-	-	-	-	1.5
Other operating expenditure - excluding renewals	(0.4)	14.5	7.9	26.7	1.2	3.3	11.1	1.2	65.5
Local authority rates and Cumulo rates	0.2	-	-	5.6	-	-	1.2	-	7.0
Total operating expenditure excluding third party services	10.5	17.4	9.4	47.2	3.1	4.4	1.8	1.2	95.0
Third party services	0.1	0.2	-	-	-	-	-	-	0.3
Total operating expenditure	10.6	17.6	9.4	47.2	3.1	4.4	1.8	1.2	95.3
Capital Expenditure									
Maintaining the long term capability of the assets - infra	5.6	9.3	5.0	0.1	-	-	-	-	20.0
Maintaining the long term capability of the assets - non-infra	1.5	2.5	1.4	26.6	-	0.8	12.2	-	45.0
Other capital expenditure - infra	2.7	4.5	2.4	-	-	-	-	-	9.6
Other capital expenditure - non-infra	0.5	0.8	0.4	13.5	-	-	-	-	15.2
Infrastructure network reinforcement	-	0.1	-	-	-	-	-	-	0.1
Total gross capital expenditure (excluding third party services)	10.3	17.2	9.2	40.2	-	0.8	12.2	-	89.9
Third party services	-	-	-	-	-	-	-	-	-
Total gross capital expenditure	10.3	17.2	9.2	40.2	-	0.8	12.2	-	89.9
Grants and contributions	(1.1)	(1.8)	(1.0)	-	-	-	-	-	(3.9)
Totex	19.8	33.0	17.6	87.4	3.1	5.2	14.0	1.2	181.3
Cash Expenditure									
Pension deficit recovery payments	1.0	0.2	-	1.5	-	-	0.5	-	3.2
Totex including cash items	20.8	33.2	17.6	88.9	3.1	5.2	14.5	1.2	184.5

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	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
Population ('000s)	2,647.3	2,647.3	2,647.3	2,647.3	2,647.3	2,647.3	2,647.3	2,647.3
Unit cost (£/pop)	4.0	6.6	3.6	17.8	1.2	1.7	0.7	0.5

	Volume collected foul	Volume collected surface water drainage	Volume collected highway drainage	Biochemical Oxygen Demand (BOD) sewage	Biochemical Oxygen Demand (BOD) imported sludge liquor	Sludge volume transported	Sludge treatment dried mass solid mass treated	Sludge disposal dried solid mass disposed
	Ml	Ml	Ml	Tonnes	Tonnes	m3	ttds	ttds
Volume	163,881	121,164	65,242	66,170	6,890	806,312	68	29
£/unit	64.7	145.3	144.1	713.3	449.9	5.5	26,470.6	41,379.3

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4F OPERATING COST ANALYSIS: HOUSEHOLD RETAIL for the year ended 31 March 2020

	Household unmeasured				Household measured				
	Water only	Wastewater only	Water and wastewater	Total	Water only	Wastewater only	Water and wastewater	Total	Total
	£'m	£'m	£'m	£'m	£'m	£'m	£'m	£'m	£'m
Operating expenditure									
Customer services	1.4	0.2	3.2	4.8	5.0	0.4	4.6	10.0	14.8
Debt management	0.4	0.1	1.1	1.6	1.7	0.1	1.5	3.3	4.9
Doubtful debts	(0.3)	0.3	12.8	12.8	5.8	0.4	9.1	15.3	28.1
Meter reading	-	-	-	-	1.2	0.2	1.3	2.7	2.7
Other operating expenditure	1.2	0.1	2.9	4.2	4.4	0.3	4.1	8.8	13.0
Total operating expenditure excluding third party services	2.7	0.7	20.0	23.4	18.1	1.4	20.6	40.1	63.5
Third party services operating expenditure	-	-	-	-	-	-	-	-	-
Total operating expenditure	2.7	0.7	20.0	23.4	18.1	1.4	20.6	40.1	63.5
Depreciation - tangible fixed assets (on assets existing at 31 March 2015)	0.1	-	0.1	0.2	0.3	-	0.2	0.5	0.7
Depreciation - tangible fixed assets (on assets acquired since 1 April 2015)	0.2	-	0.4	0.6	0.6	-	0.6	1.2	1.8
Amortisation - intangible fixed assets (on assets existing at 31 March 2015)	-	-	0.2	0.2	0.2	0.1	0.2	0.5	0.7
Amortisation - intangible fixed assets (on assets acquired since 1 April 2015)	0.1	-	0.1	0.2	0.2	-	0.2	0.4	0.6
Total operating costs	3.1	0.7	20.8	24.6	19.4	1.5	21.8	42.7	67.3
Capital expenditure	0.1	-	0.3	0.4	0.4	-	0.4	0.8	1.2

Demand-side efficiency and customer-side leaks analysis - Household	£'m
Demand-side water efficiency - gross expenditure	1.4
Demand-side water efficiency - expenditure funded by wholesale	1.4
Demand-side water efficiency - net retail expenditure	-
Customer-side leak repairs - gross expenditure	2.0
Customer-side leak repairs - expenditure funded by wholesale	2.0
Customer-side leak repairs - net retail expenditure	-

4G WHOLESALE CURRENT COST FINANCIAL PERFORMANCE
for the 12 months ended 31 March 2020

	Water	Wastewater	Total
	£'m	£'m	£'m
Revenue	451.1	325.2	776.3
Operating expenditure	(202.7)	(95.3)	(298.0)
Capital maintenance charges	(144.1)	(110.2)	(254.3)
Other operating income	0.9	0.1	1.0
Current cost operating profit	105.2	119.8	225.0
Other income	7.0	4.0	11.0
Interest income	0.2	0.3	0.5
Interest expense	(60.5)	(62.7)	(123.2)
Other interest expense	(1.5)	(0.7)	(2.2)
Current cost profit before tax and fair value movements	50.4	60.7	111.1
Fair value gains/(losses) on financial instruments	(0.3)	(0.4)	(0.7)
Current cost profit before tax	50.1	60.3	110.4

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4H FINANCIAL METRICS for the 12 months ended 31 March 2020

	Units	Current year	AMP to date
Financial indicators			
Net debt	£m	2,898.5	
Regulated equity	£m	1,417.7	
Regulated gearing	%	67.2%	
Post tax return on regulated equity	%	13.0%	
RORE (return on regulated equity)	%	5.6%	7.9%
Dividend yield	%	4.6%	
Retail profit margin - Household	%	(1.1%)	
Retail profit margin - Non household	%	(0.1%)	
Credit rating	Text	BBB+/Baa1 (negative outlook)	
Return on RCV	%	7.2%	
Dividend cover	dec	2.0	
Funds from operations (FFO)	£m	341.2	
Interest cover (cash)	dec	4.5	
Adjusted interest cover (cash)	dec	2.3	
FFO/Debt	dec	0.1	
Effective tax rate	%	18.4%	
RCF	£m	276.2	
RCF/capex	dec	1.1	
Revenue and earnings			
Revenue (actual)	£m	826.4	
EBITDA (actual)	£m	464.7	
Movement in RORE			
Base return	%	5.7%	5.7%
Totex out / (under) performance	%	(0.8%)	1.1%
Retail cost out / (under) performance	%	(0.7%)	0.0%
ODI out / (under) performance	%	0.0%	0.1%
Financing out / (under) performance	%	1.4%	1.0%
Other factors	%	0.0%	0.0%
Regulatory return for the year	**%**	**5.6%**	**7.9%**
Borrowings			
Proportion of borrowings which are fixed rate	%	60.6%	
Proportion of borrowings which are floating rate	%	1.0%	
Proportion of borrowings which are index linked	%	38.4%	
Proportion of borrowings due within 1 year or less	%	1.4%	
Proportion of borrowings due in more than 1 year but no more than 2 years	%	1.3%	
Proportion of borrowings due in more than 2 years but but no more than 5 years	%	14.7%	
Proportion of borrowings due in more than 5 years but no more than 20 years	%	57.3%	

Movements in RORE

This commentary explains the differences between the base return at PR14 and the cumulative RORE performance in AMP6, which have contributed to an overall outperformance of 2.17%.

The base RORE is reported before company-specific adjustments related to revenue under-recovered in the previous price review period, under Ofwat's Revenue Correction Mechanism (RCM). The impact of this adjustment is shown in table 1F, Financial Flows, within the actual performance adjustment 2010-15. The PR19 base RORE has been adjusted by -0.05% to remove NHH retail returns from 1 April 2017, when NWL exited the NHH retail market.

Cumulative totex outperformance for AMP6 to date has added 1.05% to RORE. This is explained in the Wholesale totex reconciliation to FD narrative under table 4B.

Retail performance against FD has reduced RORE by 0.02%. This comprises household retail for the four years of AMP6 to date plus NHH retail for 2015/16 and 2016/17 only, before NWL exited the NHH retail market. Retail costs include the additional £6.5m bad debt provision associated with the Covid-19 which has moved the Company from an outperformance to an underperformance position.

ODI rewards earned in AMP6 to date have added 0.07% to RORE. These have been reported each year in table 3A and comprise £6.3m net reward on wastewater services, mostly due to significant improvements in sewer flooding performance, and £0.1m net penalty on water services, reflecting rewards for interruptions to supply less penalties for overall drinking water compliance.

Financing outperformance of 1.03% over base RORE reflects 1.4% from outperformance of the PR14 cost of debt, in real terms, due to new debt being raised in AMP6 at favourable market rates, less -0.37% due to actual average RPI being lower than anticipated in the PR14 FD.

Other factors, being the profit on the disposal of the NHH retail business upon NWL's exit from the market, contributed 0.04% to RORE.

4I FINANCIAL DERIVATIVES for the 12 months ended 31 March 2020

	Nominal value by maturity (net)			Total value 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	Total accretion at 31 March 2020	Payable	Receivable
	£'m	£'m	£'m	£'m	£'m	£'m	%	%
Derivative type								
Interest rate swap (sterling)								
Floating to fixed rate	20.0	-	150.0	170.0	(13.2)	-	2.65%	0.99%
Fixed to index-linked	-	-	250.0	250.0	(31.0)	27.5	1.94%	2.17%
Total	20.0	-	400.0	420.0	(44.2)	27.5		
Forward currency contracts								
Forward currency contracts USD	1.9	-	-	1.9	0.1	-	0.00%	0.00%
Total	1.9	-	-	1.9	0.1	-		
Other financial derivatives								
Total								
Total financial derivatives	21.9	-	400.0	421.9	(44.1)	27.5	0.00%	0.00%

For the floating to fixed rate swaps, the interest rate receivable has been calculated using a 3 month sterling LIBOR of 0.595%, being the market rate for the last day of 2019/20.

For the fixed to index-linked swaps, the interest rate payable has been calculated using a reference RPI of 2.6%, being the published RPI for March 2020. Both swaps reported in this line are set at RPI minus a fixed percentage.

APPENDIX 2

COST ASSESSMENT TABLES

4J - Atypical expenditure by business unit - Wholesale water — Northumbrian Water

For the 12 months ended 31 March 2020

	Line description	Units	DPs	Water resources		Network+				Total	Company commentary (if required)
				Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution		
A	**Operating expenditure (excl. atypicals)**										
4J.1	Power	£m	3	0.000	7.968	1.897	0.000	2.536	14.167	26.568	
4J.2	Income treated as negative expenditure	£m	3	0.000	-0.124	0.000	0.000	-0.083	0.000	-0.207	
4J.3	Abstraction charges/ discharge consents	£m	3	28.012	0.017	0.000	0.000	0.331	0.000	28.360	
4J.4	Bulk supply	£m	3	0.000	0.922	0.000	0.000	0.000	0.000	0.922	
	Other operating expenditure										
4J.5	- Renewals expensed in year (Infrastructure)	£m	3	0.000	0.258	0.633	0.000	0.000	2.189	3.080	
4J.6	- Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	1.006	0.007	0.000	0.109	0.695	1.817	
4J.7	- Other operating expenditure excluding renewals	£m	3	0.000	6.228	0.574	1.929	40.426	59.696	108.853	
4J.8	Local authority and Cumulo rates	£m	3	0.000	3.394	2.359	0.000	3.196	15.834	24.783	
4J.9	Total operating expenditure (excluding third party services)	£m	3	28.012	19.669	5.470	1.929	46.515	92.581	194.176	
4J.10	Third party services	£m	3	4.937	0.005	1.197	0.003	0.051	2.396	8.589	
4J.11	Total operating expenditure	£m	3	32.949	19.674	6.667	1.932	46.566	94.977	202.765	
B	**Capital expenditure (excl. atypicals)**										
4J.12	Maintaining the long term capability of the assets - infra	£m	3	0.000	0.461	0.189	0.000	0.000	33.887	34.537	
4J.13	Maintaining the long term capability of the assets - non-infra	£m	3	0.000	6.715	0.287	0.000	36.578	42.738	86.318	
4J.14	Other capital expenditure - infra	£m	3	0.000	1.704	0.000	0.000	0.000	22.970	24.674	
4J.15	Other capital expenditure - non-infra	£m	3	0.000	3.746	0.000	0.000	4.017	3.017	10.780	
4J.16	Infrastructure network reinforcement	£m	3	0.000	0.000	0.000	0.000	0.000	2.067	2.067	
4J.17	Total gross capital expenditure excluding third party services	£m	3	0.000	12.626	0.476	0.000	40.595	104.679	158.376	
4J.18	Third party services	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4J.19	Total gross capital expenditure	£m	3	0.000	12.626	0.476	0.000	40.595	104.679	158.376	
4J.20	Grants and contributions	£m	3	0.000	0.000	0.000	0.000	0.000	16.614	16.614	
4J.21	Totex	£m	3	32.949	32.300	7.143	1.932	87.161	183.042	344.527	
C	**Cash expenditure (excl. atypicals)**										
4J.22	Pension deficit recovery payments	£m	3	0.000	0.280	0.031	0.085	1.835	4.485	6.716	
4J.23	Other cash items	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4J.24	Totex including cash items	£m	3	32.949	32.580	7.174	2.017	88.996	187.527	351.243	
D	**Atypical expenditure**										
4J.25	Item 1	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4J.26	Item 2	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4J.27	Item 3	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4J.28	Item 4	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4J.29	Item 5	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4J.30	Item 6	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4J.31	Item 7	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4J.32	Item 8	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4J.33	Item 9	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4J.34	Item 10	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4J.35	Total atypical expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
E	**Total expenditure**										
4J.36	Total expenditure	£m	3	32.949	32.580	7.174	2.017	88.996	187.527	351.243	

Key to cells:

Input cell

Calculation cell

Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

Additional guidance

This table is closely associated with pro forma 4D in the APR (as per RAG4).

4K - Atypical expenditure by business unit - Wholesale wastewater

Northumbrian Water

For the 12 months ended 31 March 2020

Line description		Units	DPs	Network+ Sewage Collection			Network+ Sewage Treatment		Sludge			Total	Company commentary (if required)
				Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal		
A	Operating expenditure (excl. atypicals)												
4K.1	Power	£m	3	7.135	0.006	0.000	12.400	1.874	1.117	-2.037	0.000	20.495	
4K.2	Income treated as negative expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	-8.529	0.000	-8.529	
4K.3	Discharge Consents	£m	3	1.791	0.000	0.000	1.935	0.000	0.000	0.000	0.000	3.726	
4K.4	Bulk discharge	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	Other operating expenditure												
4K.5	- Renewals expensed in year (Infrastructure)	£m	3	1.485	2.461	1.325	0.000	0.000	0.000	0.000	0.000	5.271	
4K.6	- Renewals expensed in year (Non-Infrastructure)	£m	3	0.261	0.432	0.233	0.616	0.000	0.000	0.033	0.000	1.575	
4K.7	- Other operating expenditure excluding renewals	£m	3	-0.442	14.501	7.890	26.660	1.190	3.275	11.157	1.198	65.429	
4K.8	Local authority and Cumulo rates	£m	3	0.227	0.000	0.000	5.554	0.000	0.000	1.184	0.000	6.965	
4K.9	Total operating expenditure (excluding third party services)	£m	3	10.457	17.400	9.448	47.165	3.064	4.392	1.808	1.198	94.932	
4K.10	Third party services	£m	3	0.135	0.155	0.004	0.013	0.000	0.023	0.005	0.000	0.335	
4K.11	Total operating expenditure	£m	3	10.592	17.555	9.452	47.178	3.064	4.415	1.813	1.198	95.267	
B	Capital expenditure (excl. atypicals)												
4K.12	Maintaining the long term capability of the assets - infra	£m	3	5.615	9.307	5.012	0.074	0.000	0.000	0.000	0.000	20.008	
4K.13	Maintaining the long term capability of the assets - non-infra	£m	3	1.519	2.518	1.356	26.640	0.000	0.839	12.158	0.000	45.030	
4K.14	Other capital expenditure - infra	£m	3	2.709	4.490	2.418	0.000	0.000	0.000	0.000	0.000	9.617	
4K.15	Other capital expenditure - non-infra	£m	3	0.484	0.802	0.432	13.522	0.000	0.000	0.000	0.000	15.240	
4K.16	Infrastructure network reinforcement	£m	3	0.034	0.057	0.031	0.000	0.000	0.000	0.000	0.000	0.122	
4K.17	Total gross capital expenditure excluding third party services	£m	3	10.361	17.174	9.249	40.236	0.000	0.839	12.158	0.000	90.017	
4K.18	Third party services	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4K.19	Total gross capital expenditure	£m	3	10.361	17.174	9.249	40.236	0.000	0.839	12.158	0.000	90.017	
4K.20	Grants and contributions	£m	3	1.098	1.819	0.980	0.000	0.000	0.000	0.000	0.000	3.897	
4K.21	Totex	£m	3	19.855	32.910	17.721	87.414	3.064	5.254	13.971	1.198	181.387	
C	Cash expenditure (excl. atypicals)												
4K.22	Pension deficit recovery payments	£m	3	1.030	0.179	0.004	1.476	0.000	0.035	0.452	0.000	3.176	
4K.23	Other cash items	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4K.24	Totex including cash items	£m	3	20.885	33.089	17.725	88.890	3.064	5.289	14.423	1.198	184.563	
D	Atypical expenditure												
4K.25	Item 1	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4K.26	Item 2	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4K.27	Item 3	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4K.28	Item 4	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4K.29	Item 5	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4K.30	Item 6	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4K.31	Item 7	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4K.32	Item 8	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4K.33	Item 9	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4K.34	Item 10	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4K.35	Total atypical expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
E	Total expenditure												
4K.36	Total expenditure	£m	3	20.885	33.089	17.725	88.890	3.064	5.289	14.423	1.198	184.563	

Key to cells:

Input cell

Calculated value

Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

Additional guidance to this table:

This table is closely associated with pro forma 4E in the APR (as per RAG4.08).

4L - Enhancement expenditure by purpose - Wholesale water

Northumbrian Water

For the 12 months ended 31 March 2020

Line description		Units	DPs	Expenditure in report year							Cumulative expenditure on schemes completed in the report year							Company commentary (if required)
				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		
A	Enhancement expenditure by purpose																	
4L.1	NEP - Making ecological improvements at abstractions (Habitats Directive, SSSI, NERC, BAPs)	£m	3	0.000	0.000	0.000	0.000	0.032	0.000	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.2	NEP - Eels Regulations (measures at intakes)	£m	3	0.000	5.115	0.000	0.000	0.000	0.000	5.115	0.000	2.519	0.000	0.000	0.000	0.000	2.519	
4L.3	NEP - Invasive Non Native Species	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.4	Addressing low pressure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.5	Improving taste / odour / colour	£m	3	0.000	0.000	0.000	0.000	0.109	0.000	0.109	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.6	Meeting lead standards	£m	3	0.000	0.000	0.000	0.000	0.190	4.986	5.176	0.000	0.000	0.000	0.000	4.854	5.122	9.976	
4L.7	Supply side enhancements to the supply/demand balance (dry year critical / peak conditions)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.8	Supply side enhancements to the supply/demand balance (dry year annual average conditions)	£m	3	0.000	0.213	0.000	0.000	0.000	0.000	0.213	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.9	Demand side enhancements to the supply/demand balance (dry year critical / peak conditions)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.10	Demand side enhancements to the supply/demand balance (dry year annual average conditions)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.11	New developments	£m	3	0.000	0.000	0.000	0.000	0.000	7.007	7.007	0.000	0.000	0.000	0.000	0.000	7.019	7.019	
4L.12	New connections element of new development (CPs, meters)	£m	3	0.000	0.000	0.000	0.000	0.000	7.552	7.552	0.000	0.000	0.000	0.000	0.000	7.552	7.552	
4L.13	Investment to address raw water deterioration (THM, nitrates, Crypto, pesticides, others)	£m	3	0.000	0.122	0.000	0.000	0.000	0.000	0.122	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.14	Resilience	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.15	SEMD	£m	3	0.000	0.000	0.000	0.000	3.687	0.052	3.739	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.16	NEP - Drinking Water Protected Areas (schemes)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.17	NEP - Water Framework Directive measure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.18	NEP - Investigations	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.19	Improvements to river flows	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.20	Metering (excluding cost of providing metering to new service connections) - meters requested by optants	£m	3	0.000	0.000	0.000	0.000	0.000	6.390	6.390	0.000	0.000	0.000	0.000	0.000	6.390	6.390	
4L.21	Metering (excluding cost of providing metering to new service connections)- meters introduced by companies	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.22	Metering (excluding cost of providing metering to new service connections) - other	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4L.23	Capital expenditure purpose - WATER additional line 1 [Other categories]	£m	3							0.000							0.000	
4L.24	Capital expenditure purpose - WATER additional line 2 [Other categories]	£m	3							0.000							0.000	
4L.25	Capital expenditure purpose - WATER additional line 3 [Other categories]	£m	3							0.000							0.000	
4L.26	Capital expenditure purpose - WATER additional line 4 [Other categories]	£m	3							0.000							0.000	
4L.27	Capital expenditure purpose - WATER additional line 5 [Other categories]	£m	3							0.000							0.000	
4L.28	Capital expenditure purpose - WATER additional line 6 [Other categories]	£m	3							0.000							0.000	
4L.29	Capital expenditure purpose - WATER additional line 7 [Other categories]	£m	3							0.000							0.000	
4L.30	Capital expenditure purpose - WATER additional line 8 [Other categories]	£m	3							0.000							0.000	
4L.31	Capital expenditure purpose - WATER additional line 9 [Other categories]	£m	3							0.000							0.000	
4L.32	Capital expenditure purpose - WATER additional line 10 [Other categories]	£m	3							0.000							0.000	
4L.33	Capital expenditure purpose - WATER additional line 11 [Other categories]	£m	3							0.000							0.000	
4L.34	Capital expenditure purpose - WATER additional line 12 [Other categories]	£m	3							0.000							0.000	
4L.35	Capital expenditure purpose - WATER additional line 13 [Other categories]	£m	3							0.000							0.000	
4L.36	Capital expenditure purpose - WATER additional line 14 [Other categories]	£m	3							0.000							0.000	
4L.37	Capital expenditure purpose - WATER additional line 15 [Other categories]	£m	3							0.000							0.000	
4L.38	Total enhancement capital expenditure	£m	3	0.000	5.450	0.000	0.000	4.018	25.987	35.455	0.000	2.519	0.000	0.000	4.854	26.083	33.456	

Key to cells:

Input cell

Calculation cell

Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

Additional Guidance

Where a quality enhancement scheme (or the proportionally allocated component of a quality enhancement scheme) has more than one cost driver, companies should allocate the expenditure attributable to the primary driver to the relevant 4L lines 1 to 37. Any net additional cost for delivering any further drivers should be included in the relevant line.

4M - Enhancement expenditure by purpose - Wholesale wastewater

Northumbrian Water

For the 12 months ended 31 March 2020

Line description		Units	DPs	Expenditure in report year									Cumulative expenditure on schemes completed in the report year									Company commentary (if required)
				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		
A	Enhancement capital expenditure by purpose																					
4M.1	First time sewerage (s101A)	£m	3	-0.013	-0.021	-0.011	0.050	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.2	Sludge enhancement (quality)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.3	Sludge enhancement (growth)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.4	NEP - Conservation drivers	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.5	NEP - Eels Regulations (measures at outfalls)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.6	NEP - Event Duration Monitoring at intermittent discharges	£m	3	0.279	0.463	0.249	0.489	0.000	0.000	0.000	0.000	1.480	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.7	NEP - Flow monitoring at sewage treatment works	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.8	NEP - Monitoring of pass forward flows at CSOs	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.9	NEP - Schemes to increase flow to full treatment	£m	3	0.000	0.000	0.000	0.162	0.000	0.000	0.000	0.000	0.162	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.10	NEP - Schemes to increase storm tank capacity	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.11	NEP - Storage schemes to reduce spill frequency at CSOs, storm tanks, etc	£m	3	0.018	0.029	0.016	0.000	0.000	0.000	0.000	0.000	0.063	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.12	NEP - Chemicals monitoring/ investigations/ options appraisals	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.13	NEP - National phosphorus removal technology investigations	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.14	NEP - Groundwater schemes	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.15	NEP - Investigations	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.16	NEP - Nutrients (N removal)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.17	NEP - Nutrients (P removal at activated sludge STWs)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.18	NEP - Nutrients (P removal at filter bed STWs)	£m	3	0.000	0.000	0.000	10.349	0.000	0.000	0.000	0.000	10.349	0.000	0.000	0.000	16.009	0.000	0.000	0.000	0.000	16.009	
4M.19	NEP - Reduction of sanitary parameters	£m	3	0.000	0.000	0.000	-0.047	0.000	0.000	0.000	0.000	-0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.20	NEP - UV disinfection (or similar)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.21	NEP - Discharge relocation	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.22	NEP - Flow 1 schemes	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.23	Odour	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.24	New development and growth	£m	3	0.228	0.377	0.203	0.000	0.000	0.000	0.000	0.000	0.808	0.202	0.335	0.180	0.000	0.000	0.000	0.000	0.000	0.717	
4M.25	Growth at sewage treatment works (excluding sludge treatment)	£m	3	0.026	0.043	0.023	2.519	0.000	0.000	0.000	0.000	2.611	0.100	0.165	0.089	10.434	0.000	0.000	0.000	0.000	10.788	
4M.26	Resilience	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.27	SEMD	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4M.28	Reduce flooding risk for properties	£m	3	1.537	2.547	1.372	0.000	0.000	0.000	0.000	0.000	5.456	1.481	2.455	1.322	0.000	0.000	0.000	0.000	0.000	5.258	
4M.29	Transferred private sewers and pumping stations	£m	3	1.118	1.854	0.998	0.000	0.000	0.000	0.000	0.000	3.970	1.116	1.850	0.996	0.000	0.000	0.000	0.000	0.000	3.962	
4M.30	Capital expenditure purpose - WASTEWATER additional line 1 [Other categories]	£m	3									0.000									0.000	
4M.31	Capital expenditure purpose - WASTEWATER additional line 2 [Other categories]	£m	3									0.000									0.000	
4M.32	Capital expenditure purpose - WASTEWATER additional line 3 [Other categories]	£m	3									0.000									0.000	
4M.33	Capital expenditure purpose - WASTEWATER additional line 4 [Other categories]	£m	3									0.000									0.000	
4M.34	Capital expenditure purpose - WASTEWATER additional line 5 [Other categories]	£m	3									0.000									0.000	
4M.35	Capital expenditure purpose - WASTEWATER additional line 6 [Other categories]	£m	3									0.000									0.000	
4M.36	Capital expenditure purpose - WASTEWATER additional line 7 [Other categories]	£m	3									0.000									0.000	
4M.37	Capital expenditure purpose - WASTEWATER additional line 8 [Other categories]	£m	3									0.000									0.000	
4M.38	Capital expenditure purpose - WASTEWATER additional line 9 [Other categories]	£m	3									0.000									0.000	
4M.39	Capital expenditure purpose - WASTEWATER additional line 10 [Other categories]	£m	3									0.000									0.000	
4M.40	Capital expenditure purpose - WASTEWATER additional line 11 [Other categories]	£m	3									0.000									0.000	
4M.41	Capital expenditure purpose - WASTEWATER additional line 12 [Other categories]	£m	3									0.000									0.000	
4M.42	Capital expenditure purpose - WASTEWATER additional line 13 [Other categories]	£m	3									0.000									0.000	
4M.43	Capital expenditure purpose - WASTEWATER additional line 14 [Other categories]	£m	3									0.000									0.000	
4M.44	Capital expenditure purpose - WASTEWATER additional line 15 [Other categories]	£m	3									0.000									0.000	
4M.45	Total enhancement capital expenditure	£m	3	3.193	5.292	2.850	13.522	0.000	0.000	0.000	0.000	24.857	2.899	4.805	2.587	26.443	0.000	0.000	0.000	0.000	36.734	

Key to cells:

Input cell

Calculated value

Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

4N - Sewage treatment - Functional expenditure — Northumbrian Water — Data validation

For the 12 months ended 31 March 2020

Line description		Unit	DPs	Network+	Company commentary (if required)	Completion
A	Costs of STWs in size bands 1 to 5					
4N.1	Direct costs of STWs in size band 1	£000	3	1438.446		
4N.2	Direct costs of STWs in size band 2	£000	3	538.116		
4N.3	Direct costs of STWs in size band 3	£000	3	1396.726		
4N.4	Direct costs of STWs in size band 4	£000	3	3640.422		
4N.5	Direct costs of STWs in size band 5	£000	3	2005.890		
4N.6	General & support costs of STWs in size bands 1 to 5	£000	3	2424.540		
4N.7	Functional expenditure of STWs in size bands 1 to 5	£000	3	11444.140		
B	Costs of STWs in size band 6					
4N.8	Service charges for STWs in size band 6	£000	3	569.262		
4N.9	Estimated terminal pumping costs size band 6 works	£000	3	799.256		
4N.10	Other direct costs of STWs in size band 6	£000	3	24821.611		
4N.11	Direct costs of STWs in size band 6	£000	3	26190.129		
4N.12	General & support costs of STWs in size band 6	£000	3	7040.115		
4N.13	Functional expenditure of STWs in size band 6	£000	3	33230.244		
4N.14	Total Functional expenditure for Sewage treatment	£000	3	44674.384		

Key to cells:

input cell

Calculated value

Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

Additional guidance to this table:

Functional expenditure
Functional expenditure is defined as operating expenditure excluding both third party costs and Local authority and cumulo rates. This is also presented in table 4W.

Treatment works size:

For the purpose of these tables, STW size is defined by the load received by the works, expressed as mass (i.e. kilograms [kg]) of BOD_5 per day. In calculating the size of a works, companies should assume that resident connected population contribute 60g BOD_5/head/day and add the trade effluent load (total COD) using a conversion factor of COD:BOD of 2:1.

No allowance should be made for non-resident population when classifying the size band of a works.

Companies must include non-resident population when reporting loads and costs.

Under this classification scheme, large works are defined as those with an average daily loading >1,500kg BOD_5/day, and small works are those with an average loading <=1,500kg BOD_5/day.

Small works
- size band 1 <= 15kg BOD_5/day (population equivalent: 0 - 250)
- size band 2 >15 but <= 30kg BOD_5/day (population equivalent: 250 - 500)
- size band 3 >30 but <= 120kg BOD_5/day (population equivalent: 500 – 2,000)
- size band 4 >120 but <= 600kg BOD_5/day (population equivalent: 2,000 –10,000)
- size band 5 >600 but <= 1,500kg BOD_5/day (population equivalent: 10,000 – 25,000)

Large works
- size band 6 > 1,500kg BOD_5/day (population equivalent: >25,000)

4O - Large sewage treatment works - Wholesale wastewater

For the 12 months ended 31 March 2020

Line description		Box Code	Units	DPs	STWNAMED01	STWNAMED02	STWNAMED03	STWNAMED04	STWNAMED05	STWNAMED06	STWNAMED07	STWNAMED08	STWNAMED09	STWNAMED10	STWNAMED11	STWNAMED12	STWNAMED13	STWNAMED14	STWNAMED15	STWNAMED16	STWNAMED17	STWNAMED18	STWNAMED19	STWNAMED20	STWNAMED21	STWNAMED22	STWNAMED23	STWNAMED24	STWNAMED25
A	**Sewage treatment works - Explanatory variables**																											
4O.1	Works name	STWNAME01	Text	0	AYCLIFFE	BARKERSHAUGH	BELMONT	CONSETT	BERWICK	BILLINGHAM	BIRTLEY	BISHOP AUCKLAND	BLYTH	BRAN SANDS DOMESTIC	CAMBOIS	CHESTER-LE-STREET	CRAMLINGTON	HENDON	HORDEN	HOWDON	MARSKE	NEWBIGGIN	SEAHAM	SEATON CAREW	SEDGELETCH	STRESSHOLME	WASHINGTON	HEXHAM	WESTWOOD (CONSETT)
4O.2	Classification of treatment works	STWB045	Text	0	TA2	TB2				TA2	TB1	TB2	SAS	TA2	SAS	TB2	SAS	TA2	SAS	TA2	SAS	SAS	SAS	TA2	TA2	SB	SAS		TB2
4O.3	Population equivalent of total load received	STWB005	000	2	63.91	37.39				31.89	28.69	39.20	38.83	422.92	28.67	33.45	32.56	217.97	64.00	957.93	91.50	35.55	38.41	104.40	53.57	105.99	67.26		41.70
4O.4	Suscended solids consent	STWB011	mg/l	0	40	75				60	50	60	30	60	250	35	80	60	250	60	60	250	250	60	75	50	60		50
4O.5	BOD_5 consent	STWB012	mg/l	0	25	25				25	25	25	20	25	25	23	25	25	25	25	25	25	25	25	10	25	25		15
4O.6	Ammonia consent	STWB014	mg/l	0	3	15				N/A		40	10	10	40	N/A	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5	15	N/A		5
4O.7	Phosphorus consent	STWB015	mg/l	0	2	2				N/A	N/A		2	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	N/A	N/A		2
4O.8	UV consent	STWB016	mW/cm²	0	N/A	N/A				23	N/A	N/A	N/A	59	N/A	N/A	N/A	37	N/A	63	38	N/A	N/A	24	N/A	1	N/A	N/A		N/A
4O.9	Load received by STW	STWB017	kgBOD/d	0	3835	2243	0	0	0	1913	1721	2352	2330	25375	1720	2007	1954	13078	3840	57476	5490	2133	2305	6264	3214	6359	4036	0	2502
4O.10	Flow passed to full treatment	STWB018	m³/d	0	17,143	9,466				11,637	9,926	15,285	13,318	130,470	10,983	8,790	9,694	65,827	24,377	291,252	30,043	13,285	12,324	34,410	14,184	42,861	19,171		13,373
B	**Sewage treatment works - Functional expenditure**																											
4O.11	Service charges	STWB040	£000	0	19	19				22	20	19	10	57	19	20	20	57	33	60	33	20	19	33	20	33	20		19
4O.12	Estimated terminal pumping expenditure	STWB038	£000	0	0	95				50	52	0	0	0	0	43	0	441	0	0	0	0	0	0	120	0	0		0
4O.13	Other direct expenditure	STWB033	£000	0	719	282				378	231	129	410	6945	252	244	667	1622	619	7990	752	318	610	750	358	644	269		632
4O.14	Total direct expenditure	STWB033	£000	0	738	396	0	0	0	449	304	148	420	7002	271	307	686	2119	652	8049	785	337	628	783	498	677	289	0	650
4O.15	General and support expenditure	STWB036	£000	0	198	107				121	82	40	113	1882	73	82	185	570	175	2164	211	91	169	210	134	182	78		175
4O.16	Functional expenditure	STWB037	£000	0	937	503	0	0	0	570	386	188	532	8884	344	389	871	2689	828	10215	996	428	797	994	632	859	366	0	825

Key to cells:

Input cell

Calculated value

Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

Additional guidance on completion of Table 4O:

Please do not amend or delete the names of wastewate treatment works in row 6.
Any listed WTW not required should have the rows 7 to 22 left blank
Any new WTW can be added to the blank columns at the end of the WTW listed.

Additional guidance to this table:

In accordance with RAG 4.08 (Appendix 1), tankered waste is not part of the appointed business and should therefore be excluded from consideration when completing line 3.

Direct costs - Direct costs are the costs directly attributable to each of the individually identified service

General and Support expenditure - The aggregate direct cost of general and support activities is termed general and support expenditure.

RAG2 sets out how costs should be divided across that price control units. In this table, general and support costs may, where they cannot be directly attributed, require allocation so that the network* element can be identified.
Companies should follow the guidance in RAG2 table 2.4.1 to source appropriate cost drivers for allocation.

General and support activity	Cost driver
Administrative services	1. Analysis of staff time determined by hierarchy detailed above under employment costs 2. Number of full time equivalents (FTEs)
Planning liaison	
Financial services	
Management services	
Property management services	
Legal services	
Research and development	
Audit services	
Operational and technical support	
Human resources and personnel services	1. Analysis of staff time determined by hierarchy detailed above under employment costs 2. Headcount of employees
IT and data processing	1. Usage of mainframe by system type 2. Number of computers
Vehicles and plant	1. Pro rata to direct allocation of vehicles and plant
Electrical and mechanical maintenance	1. Pro rata to direct allocation of electrical and mechanical maintenance
Land and property maintenance	1. Pro rata to direct allocation of land and property maintenance 2. Analysis of staff time determined by hierarchy detailed above under employment costs
Materials storage	1. Pro rata to direct allocation of materials and consumables

Sludge costs: expenditure above should not include any sludge costs

4P - Non-financial data for WR, WT and WD - Wholesale water

Northumbrian Water | **Data validation**

For the 12 months ended 31 March 2020

Line	Line description	Bon Code	Units	DPs	Current year	Company commentary (if required)	Completion
A	**Water resources**						
4P.1	Proportion of distribution input derived from impounding reservoirs	BN4833	Propn 0 to 1	3	0.218		
4P.2	Proportion of distribution input derived from pumped storage reservoirs	BN4834	Propn 0 to 1	3	0.286		
4P.3	Proportion of distribution input derived from river abstractions	BN4838	Propn 0 to 1	3	0.429		
4P.4	Proportion of distribution input derived from groundwater works,excluding managed aquifer recharge (MAR) water supply schemes	BN4848	Propn 0 to 1	3	0.067		
4P.5	Proportion of distribution input derived from artificial recharge (AR) water supply schemes	BN4846	Propn 0 to 1	3	0.000		
4P.6	Proportion of distribution input derived from aquifer storage and recovery (ASR) water supply schemes	BN4847	Propn 0 to 1	3	0.000		
4P.7	Proportion of distribution inout derived from saline abstractions	BN4854	Propn 0 to 1	3	0.000		
4P.8	Proportion of distribution input derived from water reuse schemes	BN4855	Propn 0 to 1	3	0.000		
4P.9	Number of impounding reservoirs	BN4830	nr	0	22		
4P.10	Number of pumped storage reservoirs	BN4849	nr	0	3		
4P.11	Number of river abstractions	BN4835	nr	0	10		
4P.12	Number of groundwater works excluding managed aquifer recharge (MAR) water supply schemes	BN4851	nr	0	52		
4P.13	Number of artificial recharge (AR) water supply schemes	BN4852	nr	0	0		
4P.14	Number of aquifer storage and recovery (ASR) water supply schemes	BN4853	nr	0	0		
4P.15	Number of saline abstraction schemes	BN4856	nr	0	0		
4P.16	Total number of sources	BN4843	nr	0	87		
4P.17	Number of reuse schemes	BN4857	nr	0	0		
4P.18	Total number of water reservoirs	BN10190	nr	0	34		
4P.19	Total capacity of water reservoirs	BN10191	Ml	0	450206		
4P.20	Total number of intake and source pumping stations	W5003	nr	0	85		
4P.21	Total number of raw water transport stations	WR001	nr	0	8		
4P.22	Total capacity of intake and source pumping stations	W5003CAP	kW	0	43213		
4P.23	Total capacity of raw water transfer pumping stations	WR002	kW	0	6684		
4P.24	Total length of raw water abstraction mains and other conveyors	BN10290	km	2	125.98		
4P.25	Average pumping head – raw water abstraction	BN4861	m.hd	2	36.33		
4P.26	Average pumping head – raw water transport	BN4862	m.hd	2	12.67		
4P.27	Total length of raw and pre-treated (non-potable) water transport mains	BN4858	km	2	516.39		
4P.28	Water resources capacity (measured using water resources yield)	BN4859	Mld	2	1532.69		
B	**Water treatment**						
4P.29	Total water treated at all SW simple disinfection works	CPMW0098	Mld	2	0.00		
4P.30	Total water treated at all SW1 works	CPMW0104	Mld	2	0.00		
4P.31	Total water treated at all SW2 works	CPMW0110	Mld	2	0.00		
4P.32	Total water treated at all SW3 works	CPMW0116	Mld	2	34.08		
4P.33	Total water treated at all SW4 works	CPMW0165	Mld	2	733.47		
4P.34	Total water treated at all SW5 works	CPMW0166	Mld	2	288.04		
4P.35	Total water treated at all SW6 works	CPMW0167	Mld	2	0.00		
4P.36	Total water treated at all GW simple disinfection works	CPMW0027	Mld	2	0.00		
4P.37	Total water treated at all GW1 works	CPMW0033	Mld	2	15.19		
4P.38	Total water treated at all GW2 works	CPMW0039	Mld	2	7.31		
4P.39	Total water treated at all GW3 works	CPMW0045	Mld	2	19.31		
4P.40	Total water treated at all GW4 works	CPMW0185	Mld	2	13.53		
4P.41	Total water treated at all GW5 works	CPMW0197	Mld	2	20.69		
4P.42	Total water treated at all GW6 works	CPMW0198	Mld	2	0.00		
4P.43	Total water treated at more than one type of works	CPMW001A	Mld	2	0.00		
4P.44	Total number of SW simple disinfection works	CPMW0015	nr	0	0		
4P.45	Total number of SW1 works	BN10491	nr	0	0		
4P.46	Total number of SW2 works	BN10490	nr	0	0		
4P.47	Total number of SW3 works	BN10590	nr	0	6		
4P.48	Total number of SW4 works	BN10597	nr	0	14		
4P.49	Total number of SW5 works	BN10598	nr	0	4		
4P.50	Total number of SW6 works	BN10599	nr	0	0		
4P.51	Total number of GW simple disinfection works	CPMW0021	nr	0	0		
4P.52	Total number of GW1 works	BN10791	nr	0	11		
4P.53	Total number of GW2 works	BN10790	nr	0	5		
4P.54	Total number of GW3 works	BN10890	nr	0	4		
4P.55	Total number of GW4 works	BN10897	nr	0	6		
4P.56	Total number of GW5 works	BN10898	nr	0	5		
4P.57	Total number of GW6 works	BN10899	nr	0	0		
4P.58	Number of treatment works requiring remedial action because of raw water deterioration	W4005	nr	0	3	Mosswood, Rickenhall, Layer	
4P.59	Zonal population receiving water treated with orthophosphate	BN10901	000	3	4506.286	N/A	
4P.60	Average pumping head – water treatment	BN10902	m.hd	2	2.78		
C	**Water distribution**						
4P.61	Total length of potable mains as at 31 March	BN1100	km	1	26200.20		
4P.62	Total length of potable mains relined	BN1204	km	1	0.0		
4P.63	Total length of potable mains renewed	BN1200	km	1	77.8		
4P.64	Total length of new potable mains	BN1208	km	1	97.5		
4P.65	Total length of potable water mains (<=320mm)	BN14990	km	1	23841.0		
4P.66	Total length of potable water mains >320mm - <=450mm	BN14890	km	1	1086.4		
4P.67	Total length of potable water mains >450mm - <=610mm	BN14790	km	1	406.9		
4P.68	Total length of potable water mains > 610mm	BN14690	km	1	865.9		
4P.69	Capacity of booster pumping stations	BN11300CA	kW	0	42559		
4P.70	Capacity of service reservoirs	BN10300CA	Ml	0	2109		
4P.71	Capacity of water towers	BN11200CA	Ml	0	27		
4P.72	Distribution input	BN1000	Mld	2	1123.64		
4P.73	Water delivered (non-potable)	BN2350	Mld	2	76.11		
4P.74	Water delivered (potable)	BN2330	Mld	2	962.84		
4P.75	Water delivered (billed measured residential)	BN2000	Mld	2	276.77		
4P.76	Water delivered (billed measured business)	BN2010	Mld	2	211.25		
4P.77	Total leakage	BN2345	Mld	2	198.05		
4P.78	Distribution losses	BN2340	Mld	2	155.96		
4P.79	Water taken unbilled	BN2327	Mld	2	35.32		
4P.80	Number of lead communication pipes	BN11600	nr	0	545561		
4P.81	Number of galvanised iron communication pipes	BN11610	nr	0	51389		
4P.82	Number of other communication pipes	BN11620	nr	0	1522077		
4P.83	Number of booster pumping stations	BN11390	nr	0	309		
4P.84	Total number of service reservoirs	BN10990	nr	0	305		
4P.85	Number of water towers	BN11090	nr	0	36		
4P.86	Total length of potable mains laid or structurally refurbished pre-1880	BB13000	km	1	25.7		
4P.87	Total length of potable mains laid or structurally refurbished between 1881 and 1900	BB13010	km	1	191.4		
4P.88	Total length of potable mains laid or structurally refurbished between 1901 and 1920	BB13020	km	1	339.9		
4P.89	Total length of potable mains laid or structurally refurbished between 1921 and 1940	BB13030	km	1	2527.9		
4P.90	Total length of potable mains laid or structurally refurbished between 1941 and 1960	BB13040	km	1	3433.8		
4P.91	Total length of potable mains laid or structurally refurbished between 1961 and 1980	BB13050	km	1	5342.2		
4P.92	Total length of potable mains laid or structurally refurbished between 1981 and 2000	BB13060	km	1	8335.2		
4P.93	Total length of potable mains laid or structurally refurbished post 2001	BB13070	km	1	6004.0		
4P.94	Average pumping head – treated water distribution	BN4870	m.hd	2	53.91		
D	**Band Disclosure (nr)**						
4P.95	WTWs in size band 1	WTW001NR	Nr	0	13		
4P.96	WTWs in size band 2	WTW002NR	Nr	0	7		
4P.97	WTWs in size band 3	WTW003NR	Nr	0	10		
4P.98	WTWs in size band 4	WTW004NR	Nr	0	6		
4P.99	WTWs in size band 5	WTW005NR	Nr	0	2		
4P.100	WTWs in size band 6	WTW006NR	Nr	0	7		
4P.101	WTWs in size band 7	WTW007NR	Nr	0	2		
4P.102	WTWs in size band 8	WTW008NR	Nr	0	6		
E	**Band Disclosure (%)**						
4P.103	Proportion of Total DI band 1	WTW001PN	%	1	0.3%		
4P.104	Proportion of Total DI band 2	WTW002PN	%	1	1.7%		
4P.105	Proportion of Total DI band 3	WTW003PN	%	1	2.2%		
4P.106	Proportion of Total DI band 4	WTW004PN	%	1	3.2%		
4P.107	Proportion of Total DI band 5	WTW005PN	%	1	2.9%		
4P.108	Proportion of Total DI band 6	WTW006PN	%	1	17.1%		
4P.109	Proportion of Total DI band 7	WTW007PN	%	1	16.6%		
4P.110	Proportion of Total DI band 8	WTW008PN	%	1	56.0%		

Key to cells:

Input cell

Calculation cell

Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

Treatment

This section covers the proportion of distribution input derived from works falling into each category of water treatment and the numbers of works in each category as detailed in the table.

The proportions entered in lines 1 to 8 should sum to unity. The proportion of water in each source category is a measure of how difficult a company's water is to treat. When classifying the water into one of the categories, the following guidelines should be followed.
- Water abstracted from boreholes or springs and pumped directly to a treatment works should be classified as borehole water.
- Water abstracted from a river and transported directly to a treatment works (either by pumping or by gravity) should be classified as river water.
- Water that is transported directly to a treatment works from a reservoir which has been filled by a river should be classified as water from reservoirs (this is because, in general, while the water is stored in the reservoir, sediments will settle making the water easier to treat).
- Water that is transported from a reservoir, via a river, to a treatment works should be classified as water from a river.

If multiple sources feed a works (for example a river and a number of boreholes) and the flow from these sources is combined prior to treatment, then all of the flow entering the works can be categorised as the more difficult to treat water. (In this example, all of the water would be categorised as river water.)

For Water Treatment, rows 29 to 60:
For both groundwater and surface water, a works is here defined as an individual location which receives raw or partially treated water for treatment (excluding secondary disinfection) and direct delivery to customers.
For the avoidance of doubt:

- if the output of a site needs to be blended so as to be come potable, then that site in itself is not defined as a works. However, where the total treatment process is split between a number of sites, The DI entering treated distribution should be split pro rata between bands based on the volumes treated at the individual sites.

- the pre-aeration of deep borehole water is included in category SD,correction

- Companies should include in Lines 44-57 water treatment works that have not been used in the year but have not been decommissioned and state in their commentary any instances where this is the case.

The categories of treatment types are:	Examples
SD: Works providing simple disinfection only;	• Marginal chlorination • Pre-aeration
W1: Simple disinfection plus simple physical treatment only;	• Rapid gravity filtration • Slow sand filtration • Pressure filtration
W2: Single stage complex physical or chemical treatment; W3: More than one stage of complex treatment; but excluding processes in W4, W5 or W6.	• Super chlorination • Coagulation • Flocculation • Biofiltration • pH correction • Softening
W4: Single stage complex physical or chemical treatment with significantly higher operating costs than in W2/W3; W5: More than one stage of complex, high cost treatment;	• Membrane filtration (excluding desalination) • Ozone addition • Activated carbon / pesticide removal • UV treatment • Arsenic removal • Nitrate removal
W6: Works with one or more very high cost processes;	• Desalination • Re-use

Band Guidance

Size Band		Distributed Input Mld
Band 1		< 2
Band 2		≥ 2 & <4
Band 3		≥ 4 & < 8
Band 4		≥ 8 & < 16
Band 5		≥ 16 & < 32
Band 6		≥ 32 & < 64
Band 7		≥ 64 & < 128
Band 8		≥ 128

4Q - Non-financial data - Properties, population and other - Wholesale water

Northumbrian Water | **Data validation**

For the 12 months ended 31 March 2020

Line description		Bon Code	Units	DPs	Current year	Company commentary (if required)	Completion
A	**Properties and population**						
4Q.1	Residential properties billed for measured water (external meter)	BN2110	000	3	781.408		
4Q.2	Residential properties billed for measured water (not external meter)	BN2115	000	3	123.872		
4Q.3	Business properties billed measured water	BN2210	000	3	77.631		
4Q.4	Residential properties billed for unmeasured water	BN2100	000	3	929.540		
4Q.5	Business properties billed unmeasured water	BN2200	000	3	7.350		
4Q.6	Total business connected properties at year end	BN2221	000s	3	108.895		
4Q.7	Total residential connected properties at year end	BN2161	000s	3	1938.818		
4Q.8	Total connected properties at year end	BN1001	000	3	2047.713		
4Q.9	Number of residential meters renewed	BN1765	000	3	6.472	Less meter replacements this year due to no planned meter replacement programme for this financial year	
4Q.10	Number of business meters renewed	BN1767	000s	3	1.310		
4Q.11	Number of meters installed at request of optants	BN1715	000	3	20.680		
4Q.12	Number of selective meters installed	BN1711	000	3	0.002		
4Q.13	Total number of new business connections	BP3405	000	3	0.516		
4Q.14	Total number of new residential connections	BP3400	000	3	15.367		
4Q.15	Total population served	BN2590	000	3	4568.986		
4Q.16	Number of business meters (billed properties)	BN11630	000	3	79.260		
4Q.17	Number of residential meters (billed properties)	BN11640	000	3	905.280		
4Q.18	Company area	SYS03	km2	0	11806		
B	**Other**						
4Q.19	Number of lead communication pipes replaced for water quality	BN1231	nr	0	424		
4Q.20	Total supply side enhancements to the supply demand balance (dry year critical / peak conditions)	W3007SO	Ml/d	2	0.00		
4Q.21	Total supply side enhancements to the supply demand balance (dry year annual average conditions)	W3008SO	Ml/d	2	0.00		
4Q.22	Total demand side enhancements to the supply demand balance (dry year critical / peak conditions)	W3007DO	Ml/d	2	5.71		
4Q.23	Total demand side enhancements to the supply demand balance (dry year annual average conditions)	W3008DO	Ml/d	2	5.71		
4Q.24	Energy consumption - network plus	BM902ECNP	MWh	0	172247		
4Q.25	Energy consumption - water resources	BM902ECWR	MWh	0	70534		
4Q.26	Energy consumption - wholesale	BM102ECWW	MWh	0	242781		
4Q.27	Mean Zonal Compliance	QEBW0180	%	2	99.92%		
4Q.28	Compliance Risk Index	QEBW0183	nr	1	3.2	Based on company asset base	
4Q.28	Event Risk Index	QEBW0184	nr	1	3821.1	Based on a number of provisional assessments.	
4Q.30	Volume of Leakage above or below the sustainable economic Level	BN2341	Ml/d	3	16.096		

Key to cells:

Input cell

Calculation cell

Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

Additional guidance

Lines 22 and 23 should exclude any costs incurred by the retail business unit. All demand management savings delivered in the reporting year should be included (whether funded as enhancement or

Lines 24, 25 and 26 relate to the energy costs associated with operating costs only. For consistency with the APR (Line 2B.1) this line should include all energy costs (including electricity, gas and fuel for vehicles, plant and machinery). These lines are intended to capture energy consumed; energy exported should not be included. Energy consumption should be allocated between lines 25 and 26 in a way that is consistent with the accounting separation units, i.e. 'network +' includes raw water distribution, water treatment and treated water distribution (in line with Ofwat's Water 2020 decisions

4R - Non-financial data - Wastewater network and sludge - Wholesale wastewater

Northumbrian Water

Data validation

For the 12 months ended 31 March 2020

Line	Item description	Bon Code	Unit	DPs	Current year	Company commentary (if required)
A	**Wastewater network**					
4R.1	Connectable properties served by s101A schemes completed in the report year	S4002	nr	0	0	
4R.2	Number of s101A schemes completed in the report year	S4002A	Nr	0	0	
4R.3	Total pumping station capacity	S4029	kW	0	44844	
4R.4	Number of network pumping stations	S6019	nr	0	1007	
4R.5	Total number of sewer blockages	BN13522	nr	0	11875	
4R.6	Total number of gravity sewer collapses	BN13521	nr	0	89	
4R.7	Total number of sewer rising main bursts / collapses	BN13520	nr	0	24	
4R.8	Number of combined sewer overflows	CPMS2005	nr	0	1408	
4R.9	Number of emergency overflows	CPMS2004	nr	0	262	
4R.10	Number of settled storm overflows	CPMS2014	nr	0	119	
4R.11	Sewer age profile (constructed post 2001)	BB2370	km	0	916	The sewer model has been amended to not split sewers where other sewers connect at a point where there is not a manhole. Over 17000 sewers were deleted during a joining process. Some of these sewers may have had dates on them that would have put them into the >2001 band wich accounts fo rthe drop in length compared to last year.
4R.12	Volume of trade effluent	CPMS2012	Ml/yr	2	6077.10	
4R.13	Volume of wastewater receiving treatment at sewage treatment works	CPMS2015	Ml/yr	2	350286.93	
4R.14	Length of gravity sewers rehabilitated	BN13519	km	0	56	For assets where the length is not known such as un-mapped transferred assets an average has been applied. This average has been calculated using current mapped asset lengths on 3rd April 2020.
4R.15	Length of rising mains replaced or structurally refurbished	BN13523	km	0	10	For assets where the length is not known such as un-mapped transferred assets an average has been applied. This average has been calculated using current mapped asset lengths on 3rd April 2020.
4R.16	Length of foul (only) public sewers	BN13524	km	0	3079	
4R.17	Length of surface water (only) public sewers	BN13525	km	0	4494	
4R.18	Length of combined public sewers	BN13526	km	0	8392	
4R.19	Length of rising mains	BN13527	km	0	433	
4R.20	Length of other wastewater network pipework	BN13534	Km	0	198	
4R.21	Total length of "legacy" public sewers as at 31 March	BN13535	Km	0	16596	
4R.22	Length of formerly private sewers and lateral drains (s105A sewers)	BN13528	km	0	13510	Current Mapped length of Transferred Assets 1116
B	**Sludge**					
4R.23	Total sewage sludge produced, treated by incumbents	BP05613	ttds/ year	1	68.4	
4R.24	Total sewage sludge produced, treated by 3rd party sludge service provider	MP05614	ttds/ year	1	0.0	
4R.25	Total sewage sludge produced	MP05611	ttds/ year	1	68.4	
4R.26	Total sewage sludge produced from non-appointed liquid waste treatment	MP05613	ttds/ year	1	1.0	See separate commentary supplied.
4R.27	Percentage of sludge produced and treated at a site of STW and STC co-location	MP05615	%	2	62.59%	
4R.28	Total sewage sludge disposed by incumbents	BN1623	ttds/ year	1	29.0	
4R.29	Total sewage sludge disposed by 3rd party sludge service provider	BN1622	ttds/ year	1	0.0	
4R.30	Total sewage sludge disposed	BN1621	ttds/ year	1	29.0	
4R.31	Total measure of intersiting 'work' done by pipeline	BN1640	ttds*km/year	0	0	
4R.32	Total measure of intersiting 'work' done by tanker	BN1641	ttds*km/year	0	771	
4R.33	Total measure of intersiting 'work' done by truck	BN1642	ttds*km/year	0	696	
4R.34	Total measure of intersiting 'work' done (all forms of transportation)	BN1643	ttds*km/year	0	1467	
4R.35	Total measure of intersiting 'work' done by tanker (by volume transported)	BN1644	m3*km/year	0	21418511	
4R.36	Total measure of 'work' done in sludge disposal operations by pipeline	BN1648	ttds*km/year	0	0	
4R.37	Total measure of 'work' done in sludge disposal operations by tanker	BN1645	ttds*km/year	0	0	
4R.38	Total measure of 'work' done in sludge disposal operations by truck	BN1646	ttds*km/year	0	926	
4R.39	Total measure of 'work' done in sludge disposal operations (all forms of transportation)	BN1647	ttds*km/year	0	926	
4R.40	Total measure of 'work' done by tanker in sludge disposal operations (by volume transported)	BN1649	m3*km/year	0	0	
4R.41	Chemical P sludge as percentage of sludge produced at STWs	MP05616	%	2	15.19%	Similar volumes to last year but lower dry solids figures gives a lower overall percentage.

Key to cells:

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Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

Additional guidance to this table:

For the purposes of reporting quantities of sludge produced (lines 4R 23 to 25), this is measured ideally at the boundary between the Network plus and Bioresources business units as defined in RAG 4 or if not, at the point of treatment. There should be continuous measurement via instrumentation rather than by composite or spot sampling.

Where both the incumbent and a 3rd party service provider undertake different stages of sludge treatment eg dewatering followed by lime stabilisation, sludge quantities should not be doubled-counted and should be reported either in 4R line 23 or 4R line 24, not both. Where this situation occurs the company should report on the quantity involved and the line to which it has been allocated in the commentary.

For the purposes of reporting against 4R lines 27 and 28, sludge disposal operations for sludge recycled to farmland are assumed to end upon arrival at the field. Accordingly, no account need be taken of changes in the quantity of sludge stored in field piles when completing these lines.

4S - Non-financial data - sewage treatment - Wholesale wastewater

Northumbrian Water

For the 12 months ended 31 March 2020

Line description	Unit	DPs	Treatment categories								Treatment works consents																Company commentary (if required)
				Secondary		Tertiary					Phosphorus					BOD_5						Ammonia						
			Primary	Activated Sludge	Biological	A1	A2	B1	B2	Total	<=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 2019-20**																											
4S.1	Load received by STWs in size band 1	kg BOD_5/day	0	111	204	719	0	0	21	0	1055	0	0	0	1055	1055	0	0	10	379	666	1055	0	0	0	229	826	1055	
4S.2	Load received by STWs in size band 2	kg BOD_5/day	0	0	0	555	0	0	0	54	609	0	0	0	609	609	0	0	74	477	58	609	0	0	51	220	339	609	
4S.3	Load received by STWs in size band 3	kg BOD_5/day	0	0	0	2561	0	0	0	381	2941	0	300	80	2561	2941	0	0	427	2393	122	2941	0	0	900	1142	900	2941	
4S.4	Load received by STWs in size band 4	kg BOD_5/day	0	1854	3794	0	0	2924	1922	10493	0	761	851	8881	10493	0	2194	2877	5423	0	10493	0	214	5241	2624	2414	10493	
4S.5	Load received by STWs in size band 5	kg BOD_5/day	0	2091	1444	0	2813	0	6231	12580	0	2061	6984	3535	12580	0	2231	3254	7094	0	12580	0	2673	3805	2570	3532	12580	
4S.6	Load received by STWs above size band 5	kg BOD_5/day	0	18317	6359	0	116646	1721	9105	152148	0	3214	12939	135995	152148	0	3214	4832	144102	0	152148	0	3835	12405	35700	100209	152148	
4S.7	Total load received	kg BOD_5/day	111	22466	15432	0	119459	4666	17693	179827	0	6336	20854	152637	179827	0	7639	11474	159868	846	179827	0	6721	22402	42483	108221	179827	
4S.8	Load received from trade effluent customers at treatment works	kg BOD_5/day	0							13872																		
B	**Number of sewage treatment works at 31 March 2020**																											
4S.9	STWs in size band 1	nr	0	87	11	171	0	0	2	0	271	0	0	0	271	271	0	0	2	23	246	271	0	0	0	9	262	271	
4S.10	STWs in size band 2	nr	0	0	0	26	0	0	0	2	28	0	0	0	28	28	0	0	3	22	3	28	0	0	2	10	16	28	
4S.11	STWs in size band 3	nr	0	0	0	40	0	0	0	4	44	0	3	1	40	44	0	0	7	35	2	44	0	0	15	16	13	44	
4S.12	STWs in size band 4	nr	0	3	15	0	0	9	6	33	0	2	2	29	33	0	6	9	18	0	33	0	1	17	8	7	33	
4S.13	STWs in size band 5	nr	0	2	2	0	2	0	7	13	0	2	7	4	13	0	2	3	8	0	13	0	3	3	3	4	13	
4S.14	STWs above size band 5	nr	0	7	1	0	8	1	4	21	0	1	5	15	21	0	1	2	18	0	21	0	1	5	4	11	21	
4S.15	Total number of works	nr	87	23	255	0	10	12	23	410	0	8	15	387	410	0	9	26	124	251	410	0	5	42	50	313	410	

Line description	Unit	DPs	Current year	Company commentary (if required)
C	**Population equivalent**			
4S.16	Current population equivalent served by STWs	000	3	2895.966	
4S.17	Current population equivalent served by discharge relocation schemes	000s	3	0.000	
4S.18	Current population equivalent served by filter bed STWs with tightened/new P consents	000s	3	19.050	
4S.19	Current population equivalent served by activated sludge STWs with tightened/new P consents	000s	3	0.000	
4S.20	Current population equivalent served by groundwater protection schemes	000s	3	0.000	
4S.21	Current population equivalent served by STWs with a Flow1 driver scheme	000s	3	0.000	
4S.22	Current population equivalent served by STWs with tightened/new N consents	000s	3	0.000	
4S.23	Current population equivalent served by STWs with tightened/new sanitary parameter consents	000s	3	0.000	
4S.24	Current population equivalent served by STWs with tightened/new UV consents	000s	3	0.000	
4S.25	Population equivalent treatment capacity enhancement	000s	3	2.891	During 2018-19 work was in progress to increase the treatment capacity at the Barkers Haugh Sewage Treatment Works. This project was substantially complete by March 2019 with the increase in capacity delivered and in use. Therefore this increase in population equivalent capacity was included in the APR 2019 4S. 25. This project was finally completed in May 2019.

Key to cells:

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Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

Additional information on definitions

Primary sewage treatment works	Treatment methods are restricted to primary treatment (screening, comminution, maceration, grit and detritus removal, pre-aeration and grease removal, storm tanks, plus primary sedimentation, including where assisted by the addition of chemicals e.g. Clariflow).
Secondary activated works	Sewage treatment works providing secondary activated sludge treatment methods whose treatment methods include those for primary works plus works whose treatment methods include activated sludge (including diffused air aeration, coarse bubble aeration, mechanical aeration, oxygen injection, submerged filters) and other equivalent techniques including deep shaft process, extended aeration (single, double and triple ditches) and biological aerated filters as secondary treatment.
Secondary biological	Sewage treatment works providing secondary biological treatment methods whose treatment methods include those for primary works plus works whose treatment methods include rotating biological contractors and biological filtration (including conventional filtration, high rate filtration, alternating double filtration and double filtration, root zone treatment (where used as a secondary treatment stage).
Tertiary activated works	A1 - Works with a secondary activated sludge process whose treatment methods also include prolonged settlement in conventional lagoons or raft lagoons, irrigation over grassland, constructed wetlands, root zone treatment (where used as a tertiary stage), drum filters, microstrainers, slow sand filters, tertiary nitrifying filters, wedge wire clarifiers or Clariflow installed in humus tanks, where used as a tertiary treatment stage. A2 - Works with a secondary activated sludge process whose treatment methods also include rapid-gravity sand filters, moving bed filters, pressure filters, nutrient removal control using physico-chemical and biological methods, disinfection, hard COD and colour removal, where used a s a tertiary treatment stage.
Tertiary biological works	B1 - Works with a secondary stage biological process whose treatment methods also include prolonged settlement in conventional lagoons or raft lagoons, irrigation over grassland, constructed wetlands, root zone treatment (where used as a tertiary stage), drum filters, microstrainers, slow sand filters, tertiary nitrifying filters, wedge wire clarifiers or Clariflow installed in humus tanks, where used as a tertiary treatment stage. B2 - Works with a secondary biological process whose treatment methods also include rapid-gravity sand filters, moving bed filters, pressure filters, nutrient removal control using physico-chemical and biological methods, disinfection, hard COD and colour removal, where used as a tertiary treatment stage.

Load received by STWs in size band 1	The average daily load received (in kg of BOD_5/day) by STWs of size band 1 (<= 15kg BOD_5/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.
Load received by STWs in size band 2	The average daily load received (in kg of BOD_5/day) by STWs of size band 2 (15 - 30kg BOD_5/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.
Load received by STWs in size band 3	The average daily load received (in kg of BOD_5/day) by STWs of size band 3 (30 - 120kg BOD_5/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.
Load received by STWs in size band 4	The average daily load received (in kg of BOD_5/day) by STWs of size band 4 (120 - 600kg BOD_5/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.
Load received by STWs in size band 5	The average daily load received (in kg of BOD_5/day) by STWs of size band 5 (600 - 1500kg BOD_5/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.
Load received by STWs above size band 5	The average daily load received (in kg of BOD_5/day) by STWs above size band 5 (>1500kg BOD_5/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.

Additional guidance to this table:

In accordance with RAG 4 (Appendix 1), tankered waste is not part of the appointed business and should therefore be excluded from consideration when completing lines 4S.1 to 4S.7 (and lines 4O.3 and 4O.9).

4T - Non-financial data - sludge treatment - Wholesale wastewater — Northumbrian Water

For the 12 months ended 31 March 2020

Line	Item description	Unit	DPs	by Incumbent	by 3rd party sludge service providers	Company commentary (if required)
A	**Sludge treatment process**					
4T.1	% Sludge - untreated	%	1	0.0%	0.0%	
4T.2	% Sludge treatment process - raw sludge liming	%	1	0.0%	0.0%	
4T.3	% Sludge treatment process - conventional AD	%	1	0.0%	0.0%	
4T.4	% Sludge treatment process- advanced AD	%	1	100.0%	0.0%	
4T.5	% Sludge treatment process - incineration of raw sludge	%	1	0.0%	0.0%	
4T.6	% Sludge treatment process - incineration of digested sludge	%	1	0.0%	0.0%	
4T.7	% Sludge treatment process - phyto-conditioning/composting	%	1	0.0%	0.0%	
4T.8	% Sludge treatment process - other (specify)	%	1	0.0%	0.0%	
4T.9	% Sludge treatment process - Total	%	1	100.0%	0.0%	
B	**(Un-incinerated) sludge disposal route**					
4T.10	% Sludge disposal route - landfill, raw	%	1	0.0%	0.0%	
4T.11	% Sludge disposal route - landfill, partly treated	%	1	0.0%	0.0%	
4T.12	% Sludge disposal route - land restoration / reclamation	%	1	0.0%	0.0%	
4T.13	% Sludge disposal route - sludge recycled to farmland	%	1	100.0%	0.0%	
4T.14	% Sludge disposal route - other (specify)	%	1	0.0%	0.0%	
4T.15	% Sludge disposal route - Total	%	1	100.0%	0.0%	

Key to cells:

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Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

Additional guidance to this table:

The quantity of sludge produced to which the percentages reported in lines 1 to 9 (inclusive) relate should be that reported in Table 4R, line 25.

4U - Non-financial data - Properties, population and other - Wholesale wastewater — Northumbrian Water

For the 12 months ended 31 March 2020

Line	Item description	Bon Code	Unit	DPs	Current year	Company commentary (if required)
A	**Properties and population**					
4U.1	Residential properties connected during the year	BP3410	000	3	9.463	
4U.2	Business properties connected during the year	BP3415	000	3	0.325	
4U.3	Residential properties billed unmeasured sewage	BN2130	000	3	680.003	
4U.4	Residential properties billed measured sewage	BN2140	000	3	469.644	
4U.5	Residential properties billed for sewage	BN2150	000	3	1149.647	
4U.6	Business properties billed unmeasured sewage	BN2250	000	3	9.284	
4U.7	Business properties billed measured sewage	BN2260	000	3	39.767	
4U.8	Business properties billed for sewage	BN2270	000	3	49.051	
4U.9	Void properties	BN2285	000	3	85.026	
4U.10	Total number of properties	BN1178	000s	3	1283.724	
4U.11	Resident population	BN2630	000	3	2647.253	
4U.12	Non-resident population	BN2620	000	3	96.591	
B	**Other**					
4U.13	Energy consumption - network plus	BM902ECNPS	MWh	3	176413.000	
4U.14	Energy consumption - sludge	BM602EC	MWh	3	115493.000	
4U.15	Energy consumption - wholesale	BM902ECWS	MWh	3	291906.000	
4U.16	Population resident in National Parks, SSSIs and Areas of Outstanding Natural Beauty (AONBs)	BN1609	000s	3	55.709	
4U.17	Total sewerage catchment area	BN1176CA	km2	0	1316	
4U.18	Designated bathing waters	BN1615	nr	0	34	No change in 2019
4U.19	Number of intermittent discharge sites with event duration monitoring	S4016	nr	0	350	Total of 473 over AMP period. This comprises 3 EDM1 monitors in 2015/16, 86 in 2017/18 (reduced from 91 previously reported), 34 in 2017/18 (reduced from 39 previously reported) and 350 in 2019/20. The reductions in previous years are due to further investigation of individual assets in the final year. These are documented in the spreadsheet linked from the Methodology under the individual year worksheets.
4U.20	Number of monitors for flow monitoring at STWs	STWM001	Nr	0	0	
4U.21	Number of odour related complaints	S4017	nr	0	1150	This number is much lower than last year (1651) but isn't much lower than some annual counts observed in the last 11 years.
4U.22	Volume of storage provided at CSOs, storm tanks, etc to meet spill frequency objectives	S4026	m3	0	73	The volumes have been provided at the Storm Tanks at two STWs - Butterknowle (28m3) and Ramshaw (45m3). No storage has been provided at CSOs
4U.23	Total volume of network storage	CPMS2016	m3	0	3641531	No significant difference from last year

Key to cells:

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Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

Additional guidance to this table:

Non-resident population (4U Line 12)
Non-resident population should comprise holiday and tourist population. An acceptable method of estimation would be to obtain from tourist boards estimates of the number of bed spaces available for non-residents. Except where there is firm evidence to the contrary, companies should assume a two-thirds occupancy rate for four months in the year. Non-resident population should exclude day visitors and daily commuters.
Where companies have followed a different methodology, they should provide details of the approach in their commentary.

4V - Operating cost analysis - water resources

Northumbrian Water

For the 12 months ended 31 March 2020

Line	Item description	Bon Code	Unit	DPs	Impounding Reservoir	Pumped Storage	River Abstractions	Groundwater, excluding MAR water supply schemes	Artificial Recharge (AR) water supply schemes	Aquifer Storage and Recovery (ASR) water supply schemes	Other	Total	Company commentary (if required)
Water resources													
A	**Opex analysis**												
4V.1	Power	BM102	£m	3	0.045	1.213	5.103	1.607	0.000	0.000	0.000	7.968	
4V.2	Income Treated as negative expenditure	BM836	£m	3	-0.124	0.000	0.000	0.000	0.000	0.000	0.000	-0.124	
4V.3	Abstraction charges/ discharge consents	WS1003	£m	3	1.499	5.892	19.459	1.179	0.000	0.000	0.000	28.029	
4V.4	Bulk supply	BM240	£m	3	0.000	0.000	0.922	0.000	0.000	0.000	0.000	0.922	
	Other operating expenditure												
4V.5	- Renewals expensed in year (Infrastructure)	WS1005	£m	3	0.056	0.074	0.111	0.017	0.000	0.000	0.000	0.258	
4V.6	- Renewals expensed in year (Non-Infrastructure)	WS1006	£m	3	0.219	0.288	0.431	0.068	0.000	0.000	0.000	1.006	
4V.7	- Other operating expenditure excluding renewals - direct	BM108	£m	3	0.989	1.299	1.947	0.305	0.000	0.000	0.000	4.540	
4V.8	- Other operating expenditure excluding renewals - indirect	BM110	£m	3	0.368	0.484	0.723	0.113	0.000	0.000	0.000	1.688	
4V.9	Total functional expenditure	BM816	£m	3	3.052	9.250	28.696	3.289	0.000	0.000	0.000	44.287	
4V.10	Local authority and Cumulo rates	BM817	£m	3	1.188	0.882	0.204	1.120	0.000	0.000	0.000	3.394	
4V.11	Total operating expenditure (excluding 3rd party)	BM316	£m	3	4.240	10.132	28.900	4.409	0.000	0.000	0.000	47.681	
4V.12	Depreciation	FT00865	£m	3	0.510	0.711	0.162	1.436	0.000	0.000	0.000	2.819	
4V.13	Total operating costs (excluding 3rd party)	BM319	£m	3	4.750	10.843	29.062	5.845	0.000	0.000	0.000	50.500	

Line	Item description	BON code	Unit	DPs	Water resources	Raw water distribution	Water treatment	Treated water distribution	Total
B	**Other expenditure - wholesale water**								
4V.14	Employment costs - directly allocated	BM3010	£m	3	2.705	0.468	14.390	37.653	55.216
4V.15	Employment costs - indirectly allocated	BM3011	£m	3	0.933	1.472	7.544	19.147	29.096
4V.16	Number FTEs consistent - directly allocated	W3030	Nr	0	51	8	262	771	1092.000
4V.17	Number FTEs consistent - indirectly allocated	W3031	Nr	0	14	21	109	277	421.000
4V.18	Costs associated with Traffic Management Act	W3032	£m	3	0.000	0.000	0.000	0.144	0.144
C	**Service charges**								
4V.19	Canal & River Trust service charges and discharge consents	W3033	£m	3	0.000	0.000	0.000	0.000	0.000
4V.20	Environment Agency service charges/ discharge consents	W3034	£m	3	28.029	0.000	0.331	0.000	28.360
4V.21	Other abstraction charges/ discharge consents	W3035	£m	3	0.000	0.000	0.000	0.000	0.000
4V.22	Statutory water softening	W3036	£m	3	0.000	0.000	0.000	0.000	0.000

Key to cells:

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Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

Additional guidance to this table:

Artificial recharge (AR) schemes are a subset of managed aquifer recharge (MAR) schemes, which function by recharging an aquifer before or after abstraction. The water abstracted is not necessarily the water that has been recharged, so the water can be of natural quality and require more complex treatment.
Aquifer storage and recovery (ASR) schemes are a subset of managed aquifer recharge (MAR) schemes, which function by recharging an aquifer, storing that water and maintaining its quality. The aim is to enable simple and less costly treatment of the re-abstracted water, and that the water recharged is predominantly the water that is re-abstracted.

4W - Operating cost analysis - sludge transport, treatment and disposal

Northumbrian Water

For the 12 months ended 31 March 2020

Line	Item description	Unit	DPs	Pipeline	Tanker	Truck	Total	Company commentary (if required)
A	Sludge transport method							
4W.1	Power	£m	3	0.000	1.117	0.000	1.117	
4W.2	Income Treated as negative expenditure	£m	3	0.000	0.000	0.000	0.000	
4W.3	Discharge consents	£m	3	0.000	0.000	0.000	0.000	
4W.4	Bulk supply	£m	3	0.000	0.000	0.000	0.000	
	Other operating expenditure							
4W.5	- Renewals expensed in year (Infrastructure)	£m	3	0.000	0.000	0.000	0.000	
4W.6	- Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000	
4W.7	- Other operating expenditure excluding renewals - direct	£m	3	0.000	3.275	0.000	3.275	
4W.8	- Other operating expenditure excluding renewals - indirect	£m	3	0.000	0.000	0.000	0.000	
4W.9	Total functional expenditure	£m	3	0.000	4.392	0.000	4.392	
4W.10	Local authority and Cumulo rates	£m	3	0.000	0.000	0.000	0.000	
4W.11	Total operating expenditure (excluding 3rd party)	£m	3	0.000	4.392	0.000	4.392	
4W.12	Depreciation	£m	3	0.000	0.795	0.000	0.795	
4W.13	Total operating costs (excluding 3rd party)	£m	3	0.000	5.187	0.000	5.187	

B	Sludge treatment type			Untreated sludge	Raw sludge liming	Conventional AD	Advanced AD	Incineration of raw sludge	Incineration of digested Sludge	Photo-conditioning /	Other	Total	Company commentary (if required)
4W.14	Power	£m	3	0.000	0.000	0.000	-2.037	0.000	0.000	0.000	0.000	-2.037	
4W.15	Income treated as negative expenditure	£m	3	0.000	0.000	0.000	-8.529	0.000	0.000	0.000	0.000	-8.529	
4W.16	Discharge consents	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4W.17	Bulk supply	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	Other operating expenditure												
4W.18	- Renewals expensed in year (Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4W.19	- Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.033	0.000	0.000	0.000	0.000	0.033	
4W.20	Other direct operating expenditure	£m	3	0.000	0.000	0.000	8.238	0.000	0.000	0.000	0.000	8.238	
4W.21	Other indirect operating expenditure	£m	3	0.000	0.000	0.000	2.919	0.000	0.000	0.000	0.000	2.919	
4W.22	Total functional expenditure	£m	3	0.000	0.000	0.000	0.624	0.000	0.000	0.000	0.000	0.624	
4W.23	Local authority and Cumulo rates	£m	3	0.000	0.000	0.000	1.184	0.000	0.000	0.000	0.000	1.184	
4W.24	Total operating expenditure (excluding 3rd party)	£m	3	0.000	0.000	0.000	1.808	0.000	0.000	0.000	0.000	1.808	
4W.25	Depreciation	£m	3	0.000	0.000	0.000	6.174	0.000	0.000	0.000	0.000	6.174	
4W.26	Total operating costs (excluding 3rd party)	£m	3	0.000	0.000	0.000	7.982	0.000	0.000	0.000	0.000	7.982	

C	Sludge disposal route			Landfill, raw	Landfill, partly treated	Land restoration / reclamation	Sludge recycled to farmland	Other	Total	Company commentary (if required)
4W.27	Power	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	
4W.28	Income treated as negative expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	
4W.29	Discharge consents	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	
4W.30	Bulk supply	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	
	Other operating expenditure									
4W.31	- Renewals expensed in year (Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	
4W.32	- Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	
4W.33	Other direct operating expenditure	£m	3	0.000	0.000	0.000	0.865	0.000	0.865	
4W.34	Other indirect operating expenditure	£m	3	0.000	0.000	0.000	0.333	0.000	0.333	
4W.35	Total functional expenditure	£m	3	0.000	0.000	0.000	1.198	0.000	1.198	
4W.36	Local authority and Cumulo rates	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	
4W.37	Total operating expenditure (excluding 3rd party)	£m	3	0.000	0.000	0.000	1.198	0.000	1.198	
4W.38	Depreciation	£m	3	0.000	0.000	0.000	0.105	0.000	0.105	
4W.39	Total operating costs (excluding 3rd party)	£m	3	0.000	0.000	0.000	1.303	0.000	1.303	

Other expenditure - Wholesale wastewater

Line	Item description	Unit	DPs	Network plus sewage collection	Network plus sewage treatment	Sludge	Total	Company commentary (if required)
D	Opex analysis							
4W.40	Employment costs - directly allocated	£m	3	11.611	12.112	7.612	31.335	
4W.41	Employment costs - indirectly allocated	£m	3	5.526	7.522	2.985	16.033	
4W.42	Number FTEs - directly allocated	Nr	0	228	253	178	659	
4W.43	Number FTEs - indirectly allocated	Nr	0	80	109	43	232	
4W.44	Costs asscociated with Traffic Management Act	£m	3	0.000	0.000	0.000	0.000	
4W.45	Costs associated with Industrial Emissions Directive	£m	3	0.000	0.000	0.000	0.000	
E	Service charges							
4W.46	Canal & River Trust service charges and discharge consents	£m	3	0.000	0.000	0.000	0.000	
4W.47	Environment Agency service charges / discharge consents	£m	3	1.791	1.935	0.000	3.726	
4W.48	Other service charges / permits	£m	3	0.000	0.000	0.000	0.000	

Key to cells:

Input cell

Calculated value

Please refer to RAG 4.08 - Guideline for the table definitions in the annual performance report for the reporting year 2019-20

Bidding activity: bioresources market

Northumbrian Water

Data validation

For the 12 months ended 31 March 2020

Line	Item description	Bon Code	Units	DPs	Current year
A	**Summary of market activity**				
A1	Total number of contracts held with a third party at end of the financial year	CR3001BIOM	nr	0	3
A2	Total amount paid on contracts during the financial year	CR3002BIOM	£000	3	960.230
A3	Number of different suppliers at the year end	CR3003BIOM	nr	0	3
A4	Number of contracts ended during the year	CR3004BIOM	nr	0	0
A5	Number of contracts renewed during the year	CR3005BIOM	nr	0	0
A6	Number of new contracts that have been agreed during the year	CR3006BIOM	nr	0	0
B	**Formal tender process**				
B1	Number of formal tenders you issued during the year	CR3007BIOM	nr	0	0
B2	Total number of bids received on all your tenders	CR3008BIOM	nr	0	0
B3	Number of tenders you awarded during the year	CR3009BIOM	nr	0	0
C	**Informal bidding process**				
C1	Number of offers made by a third party outside the formal tender process during the financial year	CR3010BIOM	nr	0	0
C2	The number of successful offers	CR3011BIOM	nr	0	0
D	**Treatment of sludge**				
D1	Total quantity of sludge produced in performance of the company's functions as a sewerage undertaker	CR3012BIOM	ttds/ year	2	68.39
D2	Quantity of sludge treated in-house	CR3013BIOM	ttds/ year	2	68.39
D3	Quantity of sludge treated by a third party	CR3014BIOM	ttds/ year	2	0.00
D4	Number of contracts to provide sludge treatment	CR3015BIOM	nr	0	0
D5	Number of suppliers with contracts for sludge treatment	CR3016BIOM	nr	0	0
E	**Sludge transported**				
E1	Total quantity of sludge transported by road	CR3017BIOM	ttds/ year	2	60.41
E2	Quantity of sludge transported by road in-house by your own bioresources service	CR3018BIOM	ttds/ year	2	57.30
E3	Quantity of sludge transported by road by a third party	CR3019BIOM	ttds/ year	2	3.11
E4	Number of contracts to provide sludge transport services	CR3020BIOM	nr	0	1
E5	Number of suppliers with contracts for sludge transportation	CR3021BIOM	nr	0	1
F	**Sludge recycled or disposed**				
F1	Total quantity of sludge recycled or disposed	CR3022BIOM	ttds/ year	2	29.04
F2	Quantity of sludge recycled or disposed in-house by your own bioresources service	CR3023BIOM	ttds/ year	2	29.04
F3	Quantity of sludge recycled by a third party	CR3024BIOM	ttds/ year	2	0.00
F4	Number of contracts held to provide sludge recycling or disposal services	CR3025BIOM	nr	0	2
F5	Number of suppliers with contracts for sludge recycling or disposal	CR3026BIOM	nr	0	2

Completion

Key to cells:

Input cell

Calculated value

Bioresources - Line definitions	
A1	The number of current contracts held with third parties to provide a bioresources service (treatment, transport, recycling) at the end of the financial year. Where a contract covers
A2	The total amount paid to third parties on bioresources service contracts during the financial year. This is for all contracts. It includes any amount of money paid out on contracts that
A3	The number of different suppliers with contracts held with the company to provide a bioresources service. A company's own bioresources business should not be counted as a
A4	The number of contracts that have either been terminated in the year or have come to the end of the contract. Where a contract has been terminated the company should provide
A5	The number of contracts renewed during the financial year to provide a bioresources service.
A6	The number of new contracts that have been agreed during the financial year to provide a bioresources service.
B1	The number of formal tenders issued during the financial year asking for bids by a third party to provide bioresources services.
B2	Total number of bids received for all formal tenders issued during the year. For instance if a company received 6 bids for one project, the company should count all six bids.
B3	Number of contracts awarded during the year through the formal tendering process. The company should provide an explanation where the number of tenders awarded is different
C1	The number of offers or bids received by the company outside of any formal tendering process. We expect that an offer of services would include some financial and contractual
C2	The number of offers or bids that have resulted in a contract being agreed during the financial year.
D1	Total quantity of sludge produced by the network plus function. This figure should be given as thousand tonnes of dry solids in the financial year.
D2	Thousand tonnes of dry solids treated in-house by your own bioresources business in the financial year.
D3	Thousand tonnes of dry solids treated by a third-party in the financial year.
D4	The number of current contracts held with third parties to provide sludge treatment.
D5	The number of different third-party suppliers that hold contracts to treat sludge as at the end of the financial year. The company should not include its own bioresources business as
E1	Total thousand tonnes dry solids of sludge transported by road. This includes sludge transported from the network plus function to the sludge treatment centre (STC) as well as
E2	Thousand tonnes of dry solids transported by your own bioresources business in the financial year.
E3	Thousand tonnes of dry solids transported by a third party in the financial year.
E4	The number of current contracts held with third parties to provide sludge transportation.
E5	The number of different third-party suppliers that hold contracts to transport sludge as at the end of the financial year. The company should not include its own bioresources
F1	Total thousand tonnes dry solids of sludge that is either disposed of or taken to land for recycling. This figure is reported in thousand tonnes dry solids for the financial year.
F2	Thousand tonnes of dry solids disposed or recycled by your own bioresources business in the financial year.
F3	Thousand tonnes of dry solids disposed or recycled by a third-party in the financial year.
F4	The number of current contracts held with third parties to provide sludge recycling or disposal services.
F5	The number of different third-party suppliers that hold contracts to dispose of or recycle sludge at the end of the financial year. The company should not include its own