



# NORTHUMBRIAN WATER LIMITED ANNUAL PERFORMANCE REPORT

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FOR THE YEAR ENDED 31 MARCH 2019



# CONTENTS

<b>BOARD STATEMENT</b>	<b><u>4-5</u></b>
<b>CHIEF EXECUTIVE OFFICER’S WELCOME</b>	<b><u>6-7</u></b>
<b>WATER FORUMS' VIEWS</b>	<b><u>8-9</u></b>
<b>WHO WE ARE</b>	<b><u>10-15</u></b>
<b>OUR STAKEHOLDERS</b>	<b><u>16-21</u></b>
<b>ASSURANCE SUMMARY</b>	<b><u>23</u></b>
<b>INTRODUCTION</b>	<b><u>24-25</u></b>
<b>OUR LONGER TERM PLANS</b>	<b><u>26-27</u></b>
<b>OUR ANNUAL PERFORMANCE</b>	<b><u>28-29</u></b>
• WE PROVIDE EXCELLENT SERVICE AND IMPRESS OUR CUSTOMERS	<u>30-45</u>
• WE PROVIDE A RELIABLE AND SUFFICIENT SUPPLY OF WATER	<u>46-55</u>
• WE SUPPLY CLEAN, CLEAR DRINKING WATER THAT TASTES GOOD	<u>56-61</u>
• WE PROVIDE A SEWERAGE SERVICE THAT DEALS EFFECTIVELY WITH SEWAGE AND HEAVY RAINFALL	<u>62-71</u>
• WE HELP TO IMPROVE THE QUALITY OF RIVERS AND COASTAL WATERS FOR THE BENEFIT OF THE PEOPLE, THE ENVIRONMENT AND WILDLIFE	<u>72-81</u>
• WE PROTECT AND ENHANCE THE ENVIRONMENT IN DELIVERING OUR SERVICES, LEADING BY EXAMPLE	<u>82-85</u>
• WE DELIVER WATER AND SEWERAGE SERVICES THAT MEET THE NEEDS OF CURRENT AND FUTURE GENERATIONS IN A CHANGING WORLD	<u>86-89</u>
• WE ARE AN EFFICIENT AND INNOVATIVE COMPANY	<u>90-91</u>
• WE ARE PROUD TO CONTRIBUTE TO THE SUCCESS OF LOCAL COMMUNITIES	<u>92-97</u>
• WE WORK IN PARTNERSHIP TOWARDS COMMON GOALS	<u>98-103</u>
• OUR PEOPLE	<u>104-115</u>
• WE ARE SEEN AS A GREAT PLACE TO WORK	<u>116-123</u>
• WE ARE A COMPANY THAT CUSTOMERS TRUST	<u>124-127</u>
<b>REGULATORY ACCOUNTS</b>	<b><u>128-179</u></b>
<b>DIRECTORS’ RESPONSIBILITIES AND DECLARATIONS</b>	<b><u>130-132</u></b>
<b>REGULATORY ACCOUNTING POLICIES AND DISCLOSURES</b>	<b><u>133-135</u></b>
<b>SECTION 1: REGULATORY FINANCIAL REPORTING</b>	<b><u>136-151</u></b>
<b>SECTION 2: PRICE REVIEW AND OTHER SEGMENTAL REPORTING</b>	<b><u>152-171</u></b>
<b>SECTION 3: PERFORMANCE SUMMARY</b>	<b><u>172-179</u></b>
<b>SECTION 4: ADDITIONAL REGULATORY INFORMATION</b>	<b><u>180-197</u></b>



# 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, described on [page 90](#). 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 and challenging Performance Commitments, 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, on [page 15](#) of this report. We report on our performance against these Outcomes and our Measures of Success and Performance Commitments on [pages 28 and 29](#).

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 our Water Forums, one each for our Northumbrian and Essex & Suffolk operating regions, which bring together expertise from the wide range of stakeholders. Our Water Forum Chair has attended a number of full Board meetings and our Independent Non-Executive Directors, and Executive Directors, regularly attend Forum meetings and workshops to ensure that the Board understands directly 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 in our [Annual Report and Financial Statements](#), a separate report available on our websites, provides full, transparent detail on our directors' remuneration policy and how remuneration in the year has been calculated.

## PERFORMANCE IN 2018/19

Our performance in 2018/19 against our Measures of Success is described in detail throughout this report. The information provided is supported by case studies to illustrate where we are adopting particularly participative or innovative approaches in the way we deliver services.

We are delighted to be the only company awarded the top four star rating in the Environment Agency's latest performance assessment, reflecting industry leading performance in pollution and discharge compliance.

We are also very pleased to achieve our leakage target in both our operating areas, following a sustained challenging period due to adverse climate conditions.

In respect of customer service, as measured by Ofwat's Service Incentive mechanism, we have seen a slight dip in performance on the satisfaction survey in 2018/19, we remain confident that, building on the implementation of our new billing system, our Unrivalled Customer Experience Strategy ([highlighted on pages 38 to 39](#)) will continue to drive long term improvements and support our aspiration to be the best service provider that our customers experience.

We are pleased that our sewer flooding performance in the round continues to compare very favourably to our commitments, and accept the challenge posed by the smaller pipes immediately adjacent to customer properties – which is now the most significant driver of our flooding performance.

We welcome the key role that our Water Forums play in providing challenge on behalf of our customers. As part of this process we report to and discuss our performance with the Water Forums and they provide their independent commentary on [pages 8 to 9](#).

The Water Forums Chair highlights our progress in environmental performance and leakage.

We continually strive to improve our performance for customers and accept the challenge from our Water Forums to ensure that dips in interruptions and taste and odour performance in 2018/19 were one-offs, which we are confident will be the case.

## 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. We published more detail on how we will deliver these ambitions in our Business Plan for 2020-2025, developed in partnership with our customers. 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 generation and our customers of the future.

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 2018/19, and remain among the leaders of performance in our industry.

This has been a very important year not just delivering continued strong performance against our current commitments but laying the foundations for the next five years in our [2020–25 Business Plan](#).

## OUR PERFORMANCE

It was a very important year in our customer team as we implemented our new customer contact and billing system. This was a significant undertaking and we saw a decrease in customer satisfaction due to it taking us longer than normal to respond to customers' queries, as our people became familiar with the new system and processes. On a more positive note, billing accuracy was high and our teams have worked hard to improve response times. I would like to personally thank the project and business teams for their tremendous efforts.

I believe that our new system gives us a great platform to transform our engagement with customers, which we will further enhance when we introduce our new digital platforms later this year. This will be especially important as the sector moves to a new holistic measure of customer experience.

We know from our research that customer expectations of the services we provide are rising all of the time and that we need to continuously improve to match or exceed their expectations. However, it is also important that we are able to support customers who are in more vulnerable circumstances and our 'Water Without the Worry' campaign brings together all of our inclusivity work from social tariffs to our priority services register. I am particularly proud of the commitment we launched in May last year to eradicate water poverty across the areas we service by 2030, in partnership with the charity, National Energy Action. This has been a very challenging year for our water business with the

after effects of the 'Beast from the East' being followed by an extended period of hot, dry weather. However, we have been able to demonstrate the resilience of our services and continued to deliver high quality water to our customers. I was particularly pleased that we were able to deliver our leakage commitments thanks to a number of innovative approaches we've introduced over the past year, from satellite technology in the sky to our four-legged friend, springer spaniel Denzel, sniffing out leaks on the ground.

Our innovations stretch beyond leakage and we are proud of our innovative culture. This was embodied by our second Innovation Festival last year, and working with our partners we are now starting to see some of these ideas develop into reality. For example, we've worked with Ordnance Survey, local authorities and other utility services to produce an underground map of all utility pipes and cables in Sunderland. This innovation will help our people to work more safely and will save us and other utilities tens of millions of pounds each year. I was delighted to host a visit from the Minister for Implementation to demonstrate the mapping underground project and we're looking forward to working with government and others to expand the work nationally and showcase the powers of data sharing for public good.

In our wastewater business we were delighted to achieve our target of zero discharge compliance failures at our sewage treatment works, building on our very strong record over several years. This has been achieved through our innovative operational management and early warning systems which allow us to understand and manage risks across our works in real time.

A similar focused approach has transformed our performance in reducing pollution incidents from our assets. In recent years, our performance in

this area was not as strong as we wanted it to be, so we created a special project team to develop ideas as part of a zero tolerance approach to pollution. Through use of data analytics to target proactive maintenance and rapid response to minimise the impact of events, we have achieved some fantastic results.

Staying on the theme of our environment, we have continued our commitment to renewable energy. Not only do we continue to make 'power from poo' through using 100% of our sewage sludge to generate energy, a large portion of our power requirements are now met through long term 'renewable only' agreements, specifically from offshore wind farms. This has allowed us to commit to becoming a carbon neutral company within the next decade.

## OUR PEOPLE AND THE COMMUNITIES WE SERVE

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 that our efforts to achieve this were recognised recently as one of the Sunday Times 25 Best Big Companies to Work For in the UK.

Another commitment we made during the year was joining over 90 signatories to the Waste to Wealth Commitment. By signing this Commitment, we recognise the Intergovernmental Panel on Climate Change challenge that we only have 12 years to change our relationship with the resources we use, if we are to avoid catastrophic climate change and restore the health of our environment. We have taken this forward into the ambitious goals we have set for the future such as eliminating avoidable waste by 2025 and having the lowest levels of leakage in the country in our water-stressed ESW region. This has also contributed to us being recognised as one of the 'most ethical companies' in the world by the Ethisphere Institute, the only water company in the world to be included.

## LOOKING FORWARD

We are incredibly proud of the business plan we submitted for 2020-25, which was shaped by over 400,000 of our customers. Our plan clearly sets out our ambition to deliver world class service to our customers as well as significant improvements for the environment, and the initiatives we will deliver to achieve this. At the same time, our plan delivers a substantial reduction in bills for all of our customers of 14% to 17% across water and wastewater.

We were delighted that 91% of our customers accepted our plan and, while we were surprised that Ofwat did not accept our original plan and requested that we resubmit it, based on detailed evidence we still believe our plan will deliver unrivalled service at an affordable cost for our customers.

We focused our plan around six themes and fourteen ambitious goals that will have a fundamental impact on the way our customers experience their water and wastewater services in future. Underpinning these goals are a series of stretching Performance Commitments that will continue to push the performance and efficiency frontier.

We are proud of our achievements to date, but we are never complacent and will continue to make further service improvements in 2019/20 and beyond into 2020-25.

**Heidi Mottram CBE**  
CEO





# WATER FORUMS' VIEWS

It has been a challenging year for the industry as a whole, and a busy one too but despite much of our discussion with the company being about its 'PR19' Business Plan, we have had the opportunity for an open discussion about its performance for 2018/19. Our comments below are about the contents of this report and are made with the company's ambition and longer-term strategy in mind.

## Risen to the challenge on pollutions

In last year's Annual Performance Report we challenged the company to improve its Environment Agency two star rating – this is an important issue for customers. We very much commend the efforts that have resulted in achieving a four star rating this year. It has taken strong leadership and a whole-company effort to achieve this accolade, and demonstrates the power of commitment and focus in turning a challenging situation around. Through our Environment sub-group, we look forward to working with NWL as it strives to sustain this achievement in the coming years.

## Good performance on leakage and mains bursts

Reducing water losses, through leaks and bursts, is another area we urged the company to pay more attention to. We are pleased at the progress that has been made, especially given that recent weather could mean another challenging year ahead for water resources. Their performance is a real achievement, and an important one for customers as it is an indicator that NWL really is taking asset management seriously.

## A second year of zero failures

Discharge compliance is a measure of the health of the assets at the company's sewage treatment works, and an important factor in NWL's environmental impact. We are encouraged that the company has delivered a second consecutive year of zero failures against the Environment Agency's strict standards.

## Customer satisfaction

The positive achievements we've highlighted above have all contributed to good levels of customer satisfaction in most of the measures used. Our view is that some extra focus on the following areas over the next 12 months will help further:

- **Sewer flooding:** Overall this is a positive story, but the performance data reveals that NWL's challenge remains to prevent sewer flooding from the smaller pipes that lie between customers' properties and the main sewer network. We have sought reassurance that they are working towards a consistently good level of performance for all pipes, and welcome the change to a combined sewer flooding performance measure from 2020.
- **Drinking water quality:** We are disappointed to see failures in this area but are encouraged that the trend is positive. Our Water Quality sub-group has been actively involved challenging the company as it develops its strategy for the next 5-10 years. Having shown how strong leadership and focus can accelerate improvements, we expect the renewed strategy to deliver stronger performance for customers.
- **Interruptions to supply:** NWL has consistently stated that it wants to be the fastest water company to respond to unplanned interruptions to customers' water supplies – an area that the industry as a whole is struggling to improve. Historically, NWL has performed really well, but with an average 9-minute response time last year, they fell short of their own stretching target – a target that will become even more challenging in 2020-25. We urge them to learn from all interruption events

and proactively put measures in place that prevent a further deteriorating trend. We will certainly be paying close attention to this area in the coming year.

- **Taste and Odour:** Customers can notice changes to the way their drinking water tastes and smells, and the past year has seen a rise in complaints as NWL has had to address water resource challenges by blending more water. This is not a public health concern, and we have challenged the company to review the way it proactively communicates with customers about such matters. Getting this right will support their ambition to encourage even more customers to drink tap over bottled water.

## Billing and complaints

As recognised in last year's Annual Performance Report, the company delayed the launch of the new billing system and we applauded their decision to do so. When the system came in this year, it was well handled and billing accuracy was high; however, when customers phoned with queries, there were issues with how long it took to answer calls and many just hung up before speaking to anybody. This is now beginning to recover, but there is still a way to go. We are confident that the company understands the issues and are pleased at how NWL has shared its learnings across the industry – this is another example of how collaboration and partnership

can make customers' experiences better, and we call on Ofwat to try to unlock this approach to working more broadly across the sector.

In conclusion, the Water Forums are pleased with NWL's successes in 2018/19, especially achieving the Environment Agency's four star rating. Over the next 12 months, we will continue to fulfil our role of providing independent challenge to the company in the areas where it has fallen short of hitting its performance targets; as well as offering our insights and expertise as the company embarks on its 2020-25 improvement and investment plans.

## Jim Dixon, Water Forums Chair

On behalf of the Forums for Northumbrian Water and Essex & Suffolk Water

**Note:** Note: You may find it useful to read this report in conjunction with the latest 'Environmental Performance Assessment' from the Environment Agency and 'Report of the Chief of the Drinking Water Inspectorate' from the DWI.





# 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 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 current caretakers of the water in our regions, and we take this important responsibility very seriously. Day to day our practical purpose is to supply safe clean water, and effectively remove and treat wastewater so that our communities benefit from excellent public health. At a macro level our purpose is so much more; safeguarding the water supply for future generations requires innovative solutions, anticipating and instigating change, planning ahead and making the right long-term decisions about how to run our business. While our ambition is strong, we set effective and sustainable targets, always considering the lasting impact we leave behind.

## 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, going well beyond our regulatory obligations. We know our operations can be resource intensive but that we can also make a significant contribution to

reducing plastic pollution, producing renewable energy, reducing carbon emissions, preventing flooding and improving public access to recreation. It's not enough to offset or compensate for loss of natural resources, our operational activities should have a lasting positive impact on protecting and improving the natural environment too.

## WE ARE COMMITTED TO DELIVERING WORLD-CLASS CUSTOMER SERVICE

**Giving unrivalled customer experiences every time.**

We strive to give our customers leading customer service in the water industry and beyond. Our customer service ethos is core to our brand, values and culture; our people have a drive and energy to truly put our customers at the heart of everything they do. We listen to our customers and are empowered to take action to help them. Our customers are supported to participate fully in our business and in designing the services they receive. Every customer voice is important. Our people are passionate about delivering world-class customer service; they know it is expected of them, and they are committed to it because they believe the services we provide are essential to life and wellbeing. We all want our customers to always have complete trust and confidence in what we do. We own a customer's problem, keep our promises and show each customer that they are special by focusing on individual needs. We know that every interaction with every customer matters.

## 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 that we understand what matters most to them and what their expectations are of us. We have a unique opportunity to be able to operate a business that delivers public value. Protecting the most vulnerable people in our society drives us to eliminate water poverty and increase the disposable incomes of those who need it most; reducing the worry they face. Working, living and volunteering amongst our customers helps us to understand and foster a positive impact on the wellbeing of the communities we serve.

## WE ENABLE EXTRAORDINARY LEADERS

**Empowering people to know their purpose.**

We work hard to give our people and the jobs they do a real sense of meaning. Working with a sense of purpose enables personal fulfilment. We foster a high performing culture and value diverse perspectives and skills. We support our leaders to develop high emotional intelligence, enabling our people to behave in the right and responsible way. Our aspiration is for all our people to have a great experience at work and understand the part their play to achieve our purpose and live our company values. Our people have clear Outcomes and are held to account, enabling them to take personal responsibility as they contribute to our sustainability in a balanced way, always striving to be leading.

You can read more about how we live our purpose in the case studies that follow in this Annual Performance Report and in [Our Contribution report](#) for 2019, which looks at our influence and impact in the wider economy, the environment and society.

The things we are most proud of from 2018/19, that truly embody our purpose are:

## SET UP WATER POVERTY UNIT FOR NEA



We've established the first national water poverty unit with National Energy Action (NEA) to establish an understanding of the issues, inform policy, be a best profile hub and to take practical action to eradicate water poverty in our areas. An early win this year was to sign 1,638 people onto our Water Without the Worry programme.



## EPA 4\* COMPANY

The Environment Agency rated us four star in their annual Environmental Performance Assessment. We were the only company to score as green across all areas including serious pollution, supply resilience and self-reporting of pollution. This is the first time that any company has achieved this excellent level of environmental performance since 2012.

## LEADING POLLUTION PERFORMANCE



Especially proud of our leading pollution performance. Following a couple of years where our performance was not what we wanted it to be, we have really focused on improving in this area and have transformed our pollution performance.

## SUNDAY TIMES TOP 25 COMPANIES TO WORK FOR



Following our strategy to be a Great Place to Work so that we can attract and retain the best talent, we were delighted to be named one of the Sunday Times Top 25 Big Companies to work for.

## ETHISPHERE MOST ETHICAL



Reflecting our support for our people, environment and communities, we were delighted to be named as one of the most ethical companies in the world by Ethisphere for the eighth time. We were again the only water company in the world to achieve this accolade.



## 962 REFILL STATIONS

This year saw the launch of our Refill campaign in partnership with City to Sea. The campaign is aimed at reducing the need for single use plastics by encouraging people to use refillable water bottles rather than buying bottled water. In the first 12 months we've signed up 962 refill stations.

# 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.
CREATIVE:	We continuously strive for innovation and better ways to deliver our business.
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.
ONE TEAM:	We work together consistently, promoting co-operation, to achieve our corporate objectives.

# OUR OUTCOMES

THEME	OUTCOME
 CUSTOMER	<ul style="list-style-type: none"><li>• We deliver water and sewerage services that meet the needs of current and future generations in a changing world</li><li>• We supply clean, clear drinking water that tastes good</li><li>• We provide a reliable and sufficient supply of water</li><li>• Our customers consider the services they receive to be value for money</li><li>• Our customers are well informed about the services they receive and the value of water</li><li>• We provide a sewerage service that deals effectively with sewage and heavy rainfall</li><li>• We provide excellent service and impress our customers</li></ul>
 ENVIRONMENT	<ul style="list-style-type: none"><li>• We help improve the quality of rivers and coastal waters for the benefit of people, the environment and wildlife</li><li>• We protect and enhance the environment in delivering our services, leading by example</li></ul>
 COMPETITIVENESS	<ul style="list-style-type: none"><li>• We are an efficient and innovative company</li><li>• Our finances are sound, stable and achieve a fair balance between customers and investors</li></ul>
 PEOPLE	<ul style="list-style-type: none"><li>• Our people are talented, committed and inspired to deliver great services to customers</li><li>• Our people act in line with our values</li><li>• We are seen as a great place to work</li><li>• Our workplaces are healthy and safe</li></ul>
 COMMUNITIES	<ul style="list-style-type: none"><li>• We are proud to contribute to the success of local communities</li><li>• We work in partnership towards common goals</li></ul>
 REPUTATION	<ul style="list-style-type: none"><li>• We are a company that customers trust</li></ul>



# 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 our Water Forums and Consumer Council for Water (CCWater).

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 and co-create our strategies and approaches.

STAKEHOLDERS / KEY ISSUES WE ENGAGE ON	HOW WE ENGAGE	EXAMPLES OF 2018/19 ACTIVITIES
<b>Customers</b> <ul style="list-style-type: none"><li>• Performance Commitments</li><li>• Risk management</li><li>• Data protection</li><li>• Resilience</li><li>• Co-creation of services</li><li>• Our Plan 2020-25 and beyond</li><li>• Water Resources Management Plan (WRMP)</li></ul>	<ul style="list-style-type: none"><li>• Focus groups / deliberative workshop groups</li><li>• Co-creation workshops</li><li>• Email surveys</li><li>• SMS surveys</li><li>• Flo customer engagement vehicle and Customer Heroes</li><li>• Social media</li><li>• Community Portal</li></ul>	<ul style="list-style-type: none"><li>• Inclusivity Strategy co-creation</li><li>• Make My Day campaign</li><li>• PR19 engagement with customers – future customer needs; collaborative communities; payment options and innovative tariffs; resilience; long term strategy and acceptability engagement</li><li>• Digital services design with customers</li><li>• Customers joining Innovation Festival sprints</li><li>• Trial of digital engagement platform allowing customers to compare water consumption and get tailored solutions to save water, energy and money</li></ul>
<b>Ofwat</b> <ul style="list-style-type: none"><li>• Trust and confidence</li><li>• License modifications</li><li>• Periodic Review 19 (PR19)</li><li>• Market reform</li><li>• Annual performance</li><li>• Governance and assurance</li><li>• Non-domestic retail market</li></ul>	<ul style="list-style-type: none"><li>• Responding to consultations</li><li>• Targeted reviews</li><li>• Peer to peer contact and meetings</li><li>• Annual Performance Report (APR)</li><li>• Annual Assurance Plan</li><li>• Periodic Review 19 (PR19) submissions</li></ul>	<ul style="list-style-type: none"><li>• Hosted Chief Executive on visit to Abberton reservoir</li><li>• Roundtable meeting on Shaping the Future of Water</li><li>• Hosting directors and communications team at Innovation Festival (peer learning)</li><li>• Participation in Ofwat’s key campaigns: innovation, resilience, customer participation and water stories</li><li>• Monthly account management calls</li><li>• Participating in the market place for ideas</li></ul>
<b>Environment Agency</b> <ul style="list-style-type: none"><li>• Environmental performance</li><li>• Discharge compliance</li><li>• Flooding</li><li>• Pollution</li><li>• Strategic level objectives including catchment approaches</li><li>• Catchment Based Approach (CaBA) partnership activity</li><li>• Drainage and wastewater management planning</li><li>• Innovative approaches for water management</li><li>• 25-year Environment Plan</li><li>• Biodiversity</li><li>• Bioresources</li><li>• Environmental permitting</li></ul>	<ul style="list-style-type: none"><li>• Responding to consultations</li><li>• Annual and monthly performance reviews</li><li>• Management reviews</li><li>• National strategy and practitioner networks</li><li>• Industry task and finish groups</li><li>• Collaborative workshops and joint learning</li><li>• Joint working group on pollution incidents and monthly pollution challenge group meetings</li><li>• 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</li><li>• Catchment Partnership strategy and activity</li><li>• Drainage Water Management Plan (DWMP) Steering Group</li><li>• North East Environmental Leaders Group</li></ul>	<ul style="list-style-type: none"><li>• Senior director visit to Killingworth Rainwise scheme</li><li>• Prioritising and engagement through the Northumbrian Integrated Drainage Partnership</li><li>• Contribution to Regional Flood and Coastal Committee and subsequent sub groups</li><li>• Contribution to Strategic Regional Flood Meetings with Lead Local Flood Authorities (LLFA) and EA</li><li>• Joint community events such as Flood Resilience events in schools</li><li>• Capacity Building training courses</li><li>• Response to Section 18 of the Flood and Water Management Act (FWMA)</li><li>• Agreeing business cases for Water Industry National Environment Programme (WINEP) schemes</li><li>• Meetings with area teams to explore catchment approach delivery for WINEP phosphorus removal sites</li><li>• Water Hub Project Meetings and organised events including Innovation Festival Sprint</li><li>• Catchment Partnership steering groups and sub-groups through our regions</li><li>• Sustainable Urban Water Management Workshop</li><li>• Joint EA/NW Blue Green Cities presentation</li></ul>
<b>Drinking Water Inspectorate (DWI)</b> <ul style="list-style-type: none"><li>• Drinking water quality</li><li>• Customer satisfaction</li><li>• Progress with named schemes</li><li>• Quarterly performance reviews</li><li>• Cyber security</li><li>• British, European and International Standards (BS EN ISO)</li><li>• Laboratory method development</li><li>• License to Operate / competent operator</li></ul>	<ul style="list-style-type: none"><li>• Responding to consultations</li><li>• Quarterly operational liaison meetings</li><li>• Annual strategy meetings</li><li>• Chief Inspector’s report launch meetings</li><li>• Water Safety Plan forums</li><li>• Consultation and negotiation via Water UK</li><li>• Regulatory commitments reviews</li><li>• Promoting good practice</li><li>• NWG Innovation Festival</li><li>• Industry task and finish groups</li></ul>	<ul style="list-style-type: none"><li>• Sponsored Wildfowl and Wetlands Trust (WWT) Annual Water Quality Conference</li><li>• Leading Water Regulations Advisory Scheme (WRAS) campaign</li><li>• Undertakings agreed</li><li>• Letter of support commending water resilience plans</li><li>• Periodic Review 19 (PR19) water quality programme agreed</li><li>• Achieved new competent operator framework requirements</li><li>• Sponsored water industry water quality conference and hosted private round table with DWI senior team</li></ul>



STAKEHOLDERS / KEY ISSUES WE ENGAGE ON	HOW WE ENGAGE	EXAMPLES OF 2018/19 ACTIVITIES
<b>Water Forums</b> <ul style="list-style-type: none"> <li>Our Plan 2020-25 and beyond</li> <li>Customer service</li> <li>Performance Commitments</li> <li>Customer participation, research and engagement</li> <li>Affordability</li> <li>Drinking water quality</li> <li>Trust and confidence</li> </ul>	<ul style="list-style-type: none"> <li>Participation in co-creation and research workshops and events</li> <li>Partnership events</li> <li>Formal meetings</li> <li>Meetings with senior managers, Executive Leadership Team, and the Board and INeDs</li> <li>Operational fact finding tours, e.g. customer centre, partnership drainage sites' wastewater treatment works</li> </ul>	<ul style="list-style-type: none"> <li>Review and input into our Annual Performance Report and Our Contribution report</li> <li>Regulatory finance workshop attendance</li> <li>Reviewing the customer engagement strategy, challenging our approach, attending customer events to observe, debating the outcomes and supporting in triangulation of results</li> <li>Water Forums PR19 Report</li> <li>Attendance by the Water Forums Chair and Vice Chair at the Board sub-group meetings and the Board PR19 sub-group</li> <li>Attendance by Water Forum members at 2018 Innovation Festival and company engagement/information events</li> </ul>
<b>CCWater</b> <ul style="list-style-type: none"> <li>Vulnerability</li> <li>Our Plan 2020-25 and beyond</li> <li>Complaints management and best practice</li> <li>Water Matters research</li> <li>Tariffs, including social tariffs</li> </ul>	<ul style="list-style-type: none"> <li>Responding to consultations</li> <li>Sharing material for review</li> <li>Quarterly liaison meetings</li> <li>Attendance at regional public meetings</li> </ul>	<ul style="list-style-type: none"> <li>Discussing C-Mex and D-Mex readiness</li> <li>PR19 workshops</li> <li>Attendance at Innovation Festival</li> <li>Attendance and engagement in the Water Forums</li> </ul>
<b>Supply Chain Partners</b> <ul style="list-style-type: none"> <li>Capex programme delivery</li> <li>Health, safety and environment</li> <li>Attracting and developing the next generation of engineers and project managers</li> <li>Developing our approach to digital construction (BIM)</li> <li>Leaving a positive lasting legacy from our investment projects</li> <li>Innovation</li> </ul>	<ul style="list-style-type: none"> <li>Framework agreements for long term relationships</li> <li>Joint Framework Governance Groups</li> <li>Integrated programme delivery teams</li> <li>Joint conferences and workshops</li> <li>Joint recruitment and development of employees</li> <li>Awards ceremonies</li> <li>Leading and participating in industry bodies</li> <li>Presentations at conferences and events</li> <li>Partner participation in our Innovation Festivals</li> </ul>	<ul style="list-style-type: none"> <li>Delivery of a joint framework business plan to drive forward improvements</li> <li>Joint initiatives and approaches to health, safety and welfare, such as mental health first aiders, fire safety officers, wellbeing initiatives, psychological health checks</li> <li>Innovation Festival – joint sprint on innovation and technology opportunities for design, construction, operation and maintenance</li> <li>Joint conference on Legacy from investment projects and integration of the “Five Capitals”</li> <li>Winner of the Constructing Excellence North East People Development Award for “Run2Academy”</li> <li>Establishment of a Customer Forum with our partners</li> <li>Monthly “lunch and learn” sessions at our Seaham hub where suppliers and manufacturers showcase their products and services</li> <li>Innovation event – “Innov8 my day” at our Seaham hub to show case new ideas and approaches.</li> <li>Presentations to conference and industry bodies on our thought leading approach to digital construction (BIM)</li> <li>Run2Academy – Summer placements, year in industry students and work experience opportunitiesInnov8 My Day event</li> </ul>
<b>Local authorities</b> <ul style="list-style-type: none"> <li>Planning</li> <li>Customers in vulnerable circumstances</li> <li>Economic development</li> <li>Emergency response</li> <li>Flooding risk</li> </ul>	<ul style="list-style-type: none"> <li>Regular meetings with senior officials and lead councillors</li> <li>Technical input and support on planning matters</li> <li>Participation in consultations and steering groups relating to environment or economic development issues</li> <li>Lead flood authority on flooding risk and mitigation</li> </ul>	<ul style="list-style-type: none"> <li>Met Chief Executives / Managing Directors of multiple councils including Brentwood, Chelmsford, Durham, Newcastle, North Tyneside, Stockton and Suffolk Coastal</li> <li>Met the leaders of multiple councils including Brentwood, Chelmsford, Gateshead, Maldon, Newcastle, Southend, South Tyneside, Suffolk, Thurrock and Waveney</li> <li>Engagement sessions with councillors/officers from all local authorities ahead of PR19 plan publication</li> <li>Working closely with Mid Suffolk and Babergh Council on a major water infrastructure scheme to support economic growth at Eye Airfield</li> <li>We have prepared written submissions for Local Plan responses for councils including Darlington, Durham, Middlesbrough, Northumberland, North York Moors, Sunderland, South Tees, Suffolk Coastal and Thurrock</li> <li>Presented our PR19 Growth Plan to a number of Local Planning Authority representatives at a Royal Town Planning Institute infrastructure seminar</li> </ul>
<b>Employees</b> <ul style="list-style-type: none"> <li>Creating a great place to work</li> <li>Health, safety and wellbeing</li> <li>Company values and behaviours</li> <li>Inclusion and diversity</li> <li>Employee benefits</li> <li>Volunteering opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Employee roadshows and other events</li> <li>Internal communication channels – intranet, weekly newsletter,</li> <li>NWG news app, Yammer</li> <li>Tap Into online benefits portal</li> <li>Team Talk face-to-face sessions with senior managers</li> <li>Annual company-wide employee survey and local pulse surveys</li> </ul>	<ul style="list-style-type: none"> <li>Continuation of the Great Place to Work programme for all employees focusing on specific areas of feedback from survey results</li> <li>We were 19th in the Sunday Times Top 25 Best Big Companies in the UK to work for list</li> <li>49% of employees participated in Just an Hour – our employee volunteering scheme</li> <li>New benefits platform introduced to help employees access our great range of benefits more easily</li> <li>Four large company-wide Wellbeing campaigns ran throughout the year</li> <li>Our new people managers are participating in an innovative Leadership Management Development Programme to support their teams and leadership growth</li> <li>Launch of our ‘Everyone home safe every day’ aspiration for health and safety – delivering workshops, Virtual Reality sessions and other campaign activity</li> <li>ViVa awards scheme recognises our employees for the great work they do and for living and breathing our vision and values – 134 people nominated for an award and 864 ViVa thank yous were sent</li> <li>Leadership conference - where our leaders come together twice a year to collaborate on how to improve our performance</li> <li>Celebrating colleagues who have reached their 20, 30, or 40 year service milestone with a long service lunch – 134 employees with a combined service of 3,650 years</li> </ul>



STAKEHOLDERS / KEY ISSUES WE ENGAGE ON	HOW WE ENGAGE	EXAMPLES OF 2018/19 ACTIVITIES
<b>Media and opinion formers</b> <ul style="list-style-type: none"> <li>Capital schemes</li> <li>Environmental initiatives</li> <li>Innovation and skills</li> <li>Community investment</li> <li>Corporate responsibility</li> <li>SuDS</li> <li>Corporate campaigns (including Every Drop Counts, Refill and Love Your Drain)</li> </ul>	<ul style="list-style-type: none"> <li>News releases</li> <li>Briefings</li> <li>Face to face meetings</li> <li>Feature articles</li> <li>Case studies</li> <li>Social media messaging</li> <li>Events</li> </ul>	<ul style="list-style-type: none"> <li>Partner in Research plc Invest North East media campaign</li> <li>Dedicated partnerships with Essex Live, the East Anglian Daily Times and the Enquirer Group</li> <li>Award nominations for activity on key projects including Innovation Festival, Make My Day and Kielder Marathon</li> <li>Record number of reach, follower growth and engagement on social media channels for 2018</li> <li>Record level of media coverage for the business in 2018, reaching more than 390 million people (95% of which was positive or neutral in tone)</li> <li>National print / online coverage for key stories on innovation and resilience</li> <li>Local broadcast coverage for stories including Refill campaign, flushability, Innovation Festival and Make My Day</li> <li>Positive coverage in print / broadcast media in response to handling of bursts and other critical incidents</li> <li>National media coverage on the <i>Sunday Times</i> best places to work result and Refill campaign</li> </ul>
<b>Government and Policy Makers</b> <ul style="list-style-type: none"> <li>Capital schemes</li> <li>Environmental initiatives</li> <li>Innovation and skills</li> <li>Community investment</li> <li>Corporate responsibility</li> <li>Resilience</li> <li>Sustainable Drainage Systems (SuDS)</li> <li>Corporate campaigns</li> </ul>	<ul style="list-style-type: none"> <li>Briefings</li> <li>Site visits</li> <li>Face to face meetings</li> <li>Attendance at key forums</li> <li>Party conference activity</li> </ul>	<ul style="list-style-type: none"> <li>Only water company represented at the ‘Environmental Net Gain’ Roundtable with Michael Gove</li> <li>Meetings with Thérèse Coffey (Parliamentary Under-secretary of State) and Lord Gardiner (Parliamentary Under-secretary of State)</li> <li>Events at both Conservative and Labour Party Conferences</li> <li>Attendance at Chamber of Commerce private dinners in Westminster</li> <li>Visits with Defra, the National Infrastructure Commission and the Environment Agency at sites including Abberton and Howdon</li> <li>Shadow Innovation Minister and Defra Permanent Secretary attended Innovation Festival</li> </ul>
<b>Investors</b> <ul style="list-style-type: none"> <li>Financial results and regulatory and operating performance</li> <li>Funding, hedging and liquidity</li> <li>Regulatory environment</li> <li>Political environment</li> <li>UK legislation</li> <li>Capital programme update</li> </ul>	<ul style="list-style-type: none"> <li>Non-deal roadshows</li> <li>Presentations</li> <li>Visits</li> <li>Meetings</li> </ul>	<ul style="list-style-type: none"> <li>Investor update</li> <li>Monthly reporting</li> <li>Board meetings</li> <li>Credit agency meetings</li> <li>Engagement with banks</li> </ul>
<b>Non-Governmental Organisations and charities</b> <ul style="list-style-type: none"> <li>Community investment</li> <li>Corporate Social Responsibility (CSR)</li> <li>Environmental initiatives</li> <li>Volunteering</li> <li>Regional policy</li> <li>Economic and social well being</li> <li>Innovation</li> </ul>	<ul style="list-style-type: none"> <li>Sponsorship</li> <li>Just an Hour</li> <li>Donations</li> <li>Fund raising</li> <li>Meetings and forums</li> <li>Collaboration on innovation project</li> </ul>	<ul style="list-style-type: none"> <li>Workshop on circular economy in Tees Valley and in London with HRH with Business in the Community</li> <li>Powered by Water programme with sporting club partners</li> <li>Business Plan presentations to Chambers of Commerce and CBI</li> <li>Engagement with Rivers Trusts on Water Rangers programme expansion</li> <li>Working with NHS partners on Priority Services Register and hydration</li> <li>Support for Great Exhibition of the North</li> <li>Our CEO is Vice Chair of Learning Enterprise Partnership and regional HRH ambassador</li> <li>Our Director of Corporate Communications is on the North East Chamber of Commerce and Confederation of British Industry North East Councils</li> <li>Business in the Community Water Task Force national activity</li> <li>Working with North East Learning Enterprise Partnership (NELEP) on engaging SMEs in our Innovation Festival</li> <li>Participation in the Innovation Supernetwork to engage with start-up companies and SMEs on innovation projects</li> <li>Partnerships with Durham University, Newcastle University and Northumbria University on <a href="#">developing game-changing innovations</a> and cutting edge research</li> </ul>



## 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 their water and sewerage company.

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 2019. This is the fourth year of our 2015-20 Business Plan.

We have underpinned our drive to be the best with five strategic themes: customer, competitiveness, people, environment, and communities. 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 (PC).

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 Outcomes and provide the water and wastewater services that our customers want. 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 Section 3 on [page 173](#).

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 four years to 31 March 2019, although this will not be realised until April 2020, the start of the next price control period.

Our asset health ODIs are calculated on a three-year average. The first assessment took place at the end of 2017/18, this year we make our second assessment.

Within 'Table 3A', performance against PC 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 websites at [www.nwl.co.uk](http://www.nwl.co.uk), [www.eswater.co.uk](http://www.eswater.co.uk) and [www.welivewater.co.uk](http://www.welivewater.co.uk).

For information about how we are performing in comparison to other water and sewerage companies visit [www.discoverwater.co.uk](http://www.discoverwater.co.uk).



## APR FOCUS GROUPS RESEARCH FEBRUARY 2019

Before we began drafting this Annual Performance Report, we wanted to understand whether the format of the previous report was as clear as possible for customers. Where customers found aspects unclear, we wanted to understand what these were and how clarity could be improved. We also wanted to understand whether the report missed out any areas that customers would want to know about, what these were and how customers would expect these to be presented.

We carried out two focus groups with a total of 24 customers in February 2019 and shared with them our 2017/18 Annual Performance Report (APR) and the APR Summary that we publish for customers. Most of these customers did not read annual performance reports but some had read them as part of their jobs. They usually judged our performance through their personal experiences of our services. The majority preferred the APR Summary, with links to more information. They were generally positive about the layout, wording and content of the APR and APR Summary, but suggested extra things they would like to see.

Their suggestions included traffic light colours on charts to show whether performance is good or bad and comparative information to put targets and performance into context. We've included links to [www.discoverwater.co.uk](http://www.discoverwater.co.uk) when relevant. They also talked about eliminating jargon, writing out acronyms in full and making it clear why we use calendar or financial years, and three-year averages.

You can read our APR summary [here](#).



# OUR LONGER TERM PLANS

In preparing our Business Plan for 2020–25, we revisited our Outcomes with our customers and stakeholders. We have adjusted them accordingly to reflect our customers' preferences and our ambitious goals.

Our Plan for 2020–25, is structured across six key themes to deliver the Outcomes that matter most to our customers. These are listed below and opposite.

As well as continuing to work hard to deliver the promises we made to our customers for 2015–20, we are already working hard to put in place plans to meet the ambitious promises that we are making to our customers for 2020–25. In next year's (2019/20) Annual Performance Report, we will share more detail on how our plans are being shaped.

In the meantime, further detail about our ambitious promises for 2020–25 can be found here [www.nwgourplan.co.uk](http://www.nwgourplan.co.uk). If our customers or stakeholders would like to talk to us about them, we would be delighted if they would join us on our customer forums: [www.nwaterhaveyoursay.co.uk](http://www.nwaterhaveyoursay.co.uk) and [www.eswaterhaveyoursay.co.uk](http://www.eswaterhaveyoursay.co.uk).



## BUILDING SUCCESSFUL ECONOMICS 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.



## 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.



## 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 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.



## 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 area 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.



## 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.

# OUR ANNUAL PERFORMANCE

We show (●) where we have met our performance against our promise in that 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
<b>We provide excellent service and impress our customers</b>			
Ofwat Service Incentive Mechanism (SIM)	90	●	85.9 R
Independent overall customer satisfaction survey (out of 10)	8.2	●	8.7 R
Domestic customer satisfaction (net promoter score)	+32	●	+43 R
<b>Our customers consider the services they receive to be value for money</b>			
Independent value for money survey (out of 10)	7.9	●	8.2 R
CCWater value for money survey – Water Services Northumbrian Water	83%	●	75% R
CCWater value for money survey – Sewerage Services Northumbrian Water	84%	●	78% R
CCWater value for money survey – Water Services Essex & Suffolk Water	73%	●	71% R
<b>Our customers are well informed about the services they receive and the value of water</b>			
Independent survey on keeping customers informed	94%	●	93% R
<b>We provide a reliable and sufficient supply of water</b>			
Leakage (MI/d) – Northumbrian area (per day)	137	●	136 R
Leakage (MI/d) – Essex & Suffolk area (per day)	66	●	64 R
Water mains bursts* (per year)	4,586	●	3,853 R
Interruptions to water supply for more than 3 hours (per property per year)	05:29	●	09:12 R
Properties experiencing poor water pressure*	216	●	200 R

\*Asset health measure (three-year average performance) will be discussed later in this report. This table shows annual performance. Table 3A shows three-year average performance for the asset health measures.

MEASURE OF SUCCESS	OUR PROMISE	OUR PERFORMANCE	CALENDAR OR REGULATORY YEAR PERFORMANCE
<b>We supply clean, clear drinking water that tastes good</b>			
Overall drinking water quality compliance*	100%	●	99.949% C
Discoloured water complaints* (per year)	2,908	●	2,594 C
Satisfaction with taste and odour of tap water (no. of properties per year)	987	●	1,060 C
<b>We provide a sewerage service that deals effectively with sewage and heavy rainfall</b>			
Properties flooded internally (per year)	186	●	124 R
Properties flooded internally (TDS) (per year)	228	●	246 R
Properties flooded externally (per year)	1,318	●	902 R
Properties flooded externally (TDS) (per year)	2,931	●	2,967 R
Repeat sewer flooding* (in the last 10 years)	496	●	60 R
Sewer collapses* (per year)	58	●	49 R
Sewer collapses* (TDS) (per year)	84	●	59 R
<b>We help improve the quality of rivers and coastal waters for the benefit of people, the environment and wildlife</b>			
Pollution incidents* (category 3)	115	●	59 C
Bathing water quality compliance (no. of sufficient bathing waters)	34	●	33 C
Sewage treatment works discharge compliance* (no. of discharge permit condition failures)	0	●	0 C
<b>We protect and enhance the environment in delivering our services, leading by example</b>			
Greenhouse gas emissions	172	●	148 R



# WE PROVIDE EXCELLENT SERVICE AND IMPRESS OUR CUSTOMERS

## OUR CUSTOMERS 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

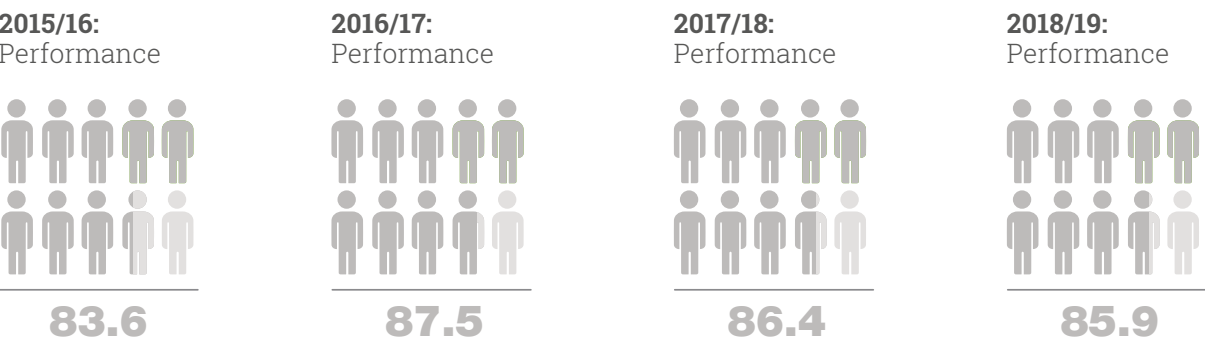
### OUR MEASURES OF SUCCESS AND PERFORMANCE COMMITMENTS

We have grouped these three Outcomes together as they are very closely connected and help us frame how we add value to our customers' lives every day, as part of our 'living water, loving customers' ambition to deliver unrivalled customer experience. Together, they have eight Measures of Success (MoS):

- OFWAT'S SERVICE INCENTIVE MECHANISM (SIM)
- INDEPENDENT OVERALL CUSTOMER SATISFACTION SCORE
- DOMESTIC CUSTOMER SATISFACTION (NET PROMOTER SCORE)
- INDEPENDENT VALUE FOR MONEY SCORE
- INDEPENDENT SURVEY ON KEEPING CUSTOMERS INFORMED
- THREE CCWATER VALUE FOR MONEY SURVEYS COVERING WATER AND WASTEWATER SERVICES

To see how we score for customer satisfaction in comparison to other water companies, please go to [www.discoverwater.co.uk](http://www.discoverwater.co.uk)

### OFWAT SERVICE INCENTIVE MECHANISM (SIM)



SIM measures our customers' experiences of dealing with us and provides a good indication of how well we are serving those customers who have had a reason to contact us.

There are two elements to the SIM measure: an independent customer satisfaction survey and a count of how many times customers have contacted us about a negative subject, including written complaints. The scores of each of these measures are combined to give an overall SIM score out of 100.

2018/19 was an exceptional year for us, as we invested £26M in introducing a brand new customer care and billing system; replacing our outdated legacy systems, and giving us a great platform for growth and improved customer experience. Introducing a whole new end-to-end billing system is always challenging and we saw lots change for both our customers and our people, who of course serve our customers.

We had forecast it would take both our people and our customers some time to get used to our new system and its workings, and we brought in extra people to help with our huge, once-in-a-generation transformational change programme. This enabled us to move into a period of 'stabilisation' fairly quickly. We did have a number of months where many more of our customers than in previous years, were trying to talk with us about changes and what they meant for them.

These additional contacts have had an impact on performance this year, with some customers having to wait for longer than normal, and than we would like, to have their query answered. This has been across all channels, with our people taking more time to build their confidence and skills (we call it speed-to-competency) in handling contacts through our new system, meaning that calls, letters and emails took longer than planned to answer. This caused some of our customers who were affected to become dissatisfied, and we have seen an increase in the number of complaints received this year as a result.

We put clear plans in place to address this, and we are confident both that these plans will help us into our optimisation phase more quickly, and that they will see a reduction in 'handling time' for all channels, and a resultant reduction in complaints. We are pleased that while our first stage (where people say they are dissatisfied) complaints levels have increased, our second stage (where people say their dissatisfaction has not been satisfactorily resolved) ratio has not. This means that we have been able to recover the situation well where people originally voiced dissatisfaction, turning around their experience; something we have worked really hard to do as we have worked through our stabilisation plans.

We have also made sure that we've learned from where things could have been better so that we can use customer feedback to continually improve the services we offer our customers, and keep a focus on striving to deliver world class experiences.

SIM calculates these additional contact as negative ones and this has had an adverse impact on our SIM score for 2018/19. We have seen this dip from our 2017/18 performance of 86.4, to 85.9.

We are confident the investment we've made in improving our customer care and billing system will really help us deliver on our ambition to provide world class customer experiences once we move into our 'optimisation' phase and all positive changes are properly embedded and understood. We were delighted to win a prestigious industry award for our system implementation at the Utility Week Awards in December 2018.

In this context it was also very reassuring to see in the Consumer Council for Water (CCWater) Water Matters survey that our Northumbrian Water customers ranked us top water and sewerage company for aspects of contact performance including, quality and clarity of information, knowledge and professionalism of staff, and confidence that contacts would be resolved.

We're passionate about wowing our customers and providing services that are inclusive for everyone; no matter what their circumstances, whether they need a little extra support at that time, or not. Our customers are at the heart of everything we do and we know that our plan for the next five year period – we call it our PR19 plan as it relates to Ofwat's 2019 Price Review – is centred on doing even more of what matters most to our customers, based on their feedback, and we're excited to start delivering it.

Ofwat is moving away from SIM for the next reporting period (from March 2019) and will be introducing C-MeX, which stands for 'customer measure of experience'. C-MeX uses a model much more like our own independent measurement models, and is based on asking some of the same questions about service received as in SIM. It incorporates broader experiences that customers have, including those who have no recent experience of NW or ESW, so that customers who are randomly selected can share information on their whole experience and perception of Northumbrian Water Group; not just when they've had to contact us. We welcome this change as it gives us opportunity to understand a more holistic reflection of customers' experiences with their water, or water and wastewater company.

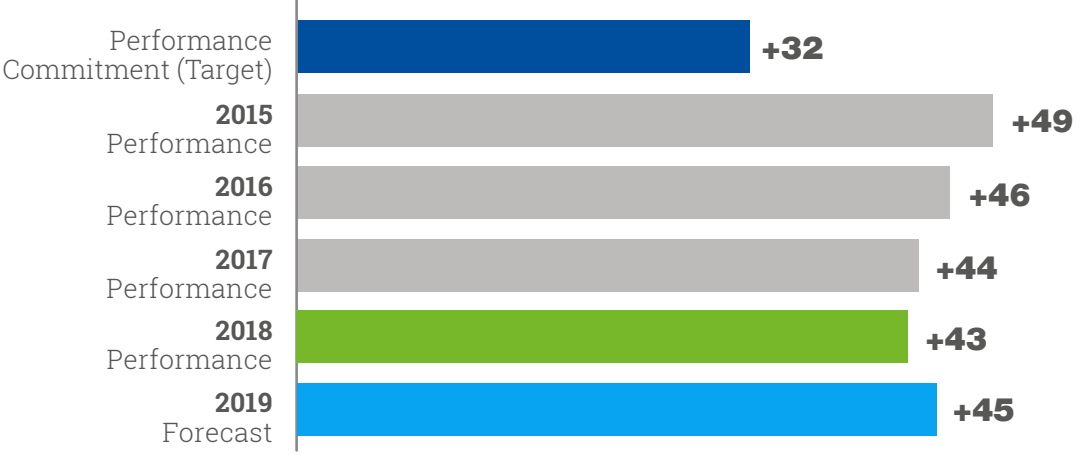
INDEPENDENT OVERALL CUSTOMER SATISFACTION SCORE



Our own customer satisfaction research is carried out quarterly by an independent company and shows us how satisfied our customers are overall with our services. We randomly survey all of the customers we serve, not just those who've had a reason to get in touch. We are delighted that we matched our 2017 best-ever score of 8.7 this year, again exceeding our target of 8.2.



DOMESTIC CUSTOMER SATISFACTION (NET PROMOTER SCORE)

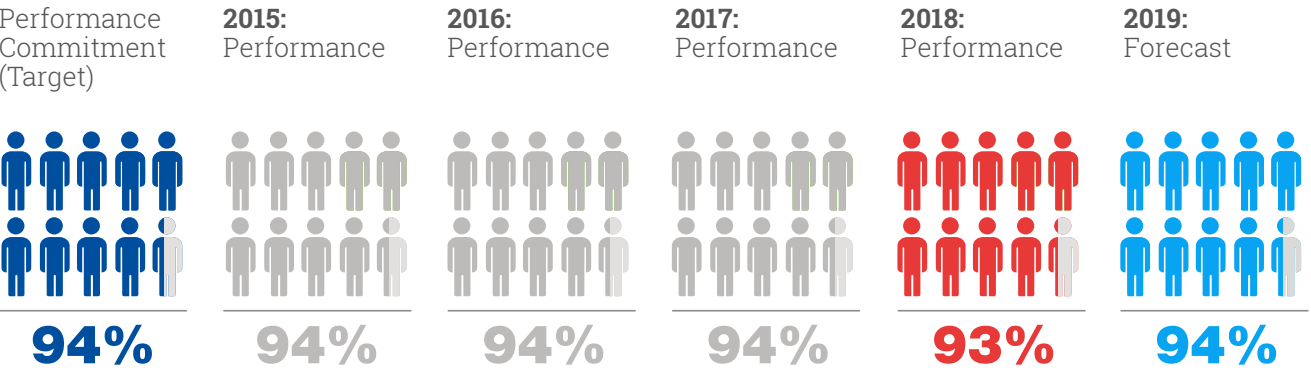


Net Promoter Score (NPS) measures customer advocacy which is the loyalty that exists between a company and its customers. It serves as an alternative to traditional customer satisfaction research, and complements it as well. Importantly, it enables companies to assess their performance across a wide spectrum of industries and service providers; we know this is important because when we've talked to our customers it's clear that they compare our service with that of retailers, delivery companies, restaurants etc. in their local area, not other water, or water and sewerage companies.

Our NPS score this year is fairly consistent with last year and remains a very strong score that compares well to other companies in our sector, as well as other companies recognised as leading brands by customers (we know this because of information published by Satmetrix, the independent company who conduct NPS surveys throughout the country). NPS is measured on a scale of -100 to +100 and we aspire to achieve a score of +45 so plan to roll out a specific NPS campaign in 2019/20.

CCWater also measures NPS as part of its annual Water Matters survey where we also compare well. Northumbrian Water was assessed as the joint second water and sewerage company, with Essex & Suffolk Water in third place amongst water only companies.

INDEPENDENT SURVEY ON KEEPING CUSTOMERS INFORMED

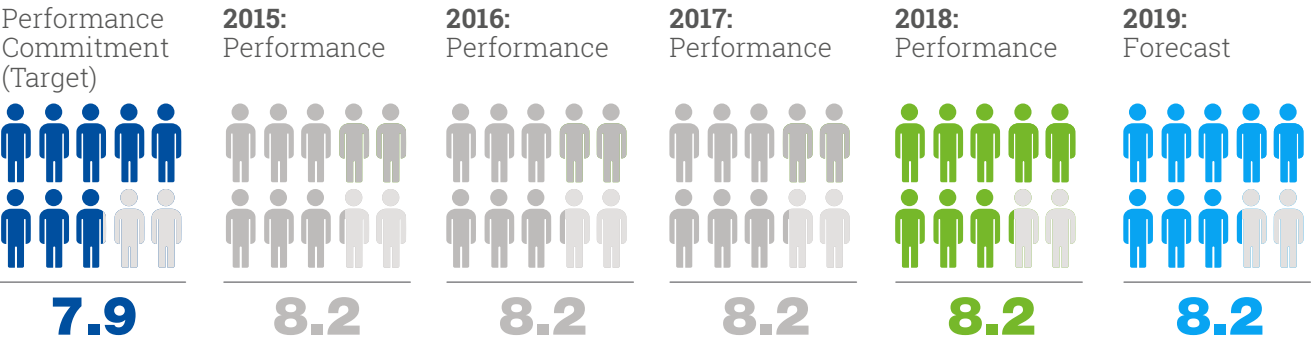


Our customers tell us that it is important to them that we keep them informed. Over the last few years, as we've prepared to submit our PR19 Plan to Ofwat, we've engaged with more than 400,000 customers. We've reached out to them in new and innovative ways about exciting new ideas, as well as talking with them in time-tested ways that we know they recognise and trust.

We're delighted that 93% of our customers have told us that they were satisfied that they are supplied with all the information they want to feel informed about the services we provide. This is a slight reduction on the 94% we've achieved for the last few years though, so we will be working hard to meet that target next year, and to give our customers even more value-adding information about the services we're so proud to offer and deliver.



INDEPENDENT VALUE FOR MONEY SURVEY



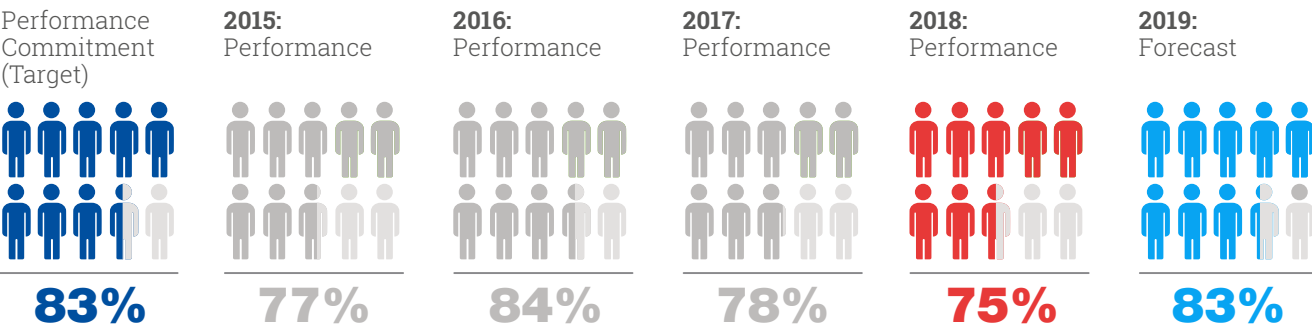
This is the annual score from the ‘value for money’ question in the independent customer satisfaction survey.

This measure is expressed as a score out of 10. Our target, performance commitment is 7.9 or above, and we’ve again remained consistent at a score of 8.2 this year, which is the fourth year in a row that we’ve got this great score.

SATISFIED WITH VALUE FOR MONEY (CCWATER RESEARCH)

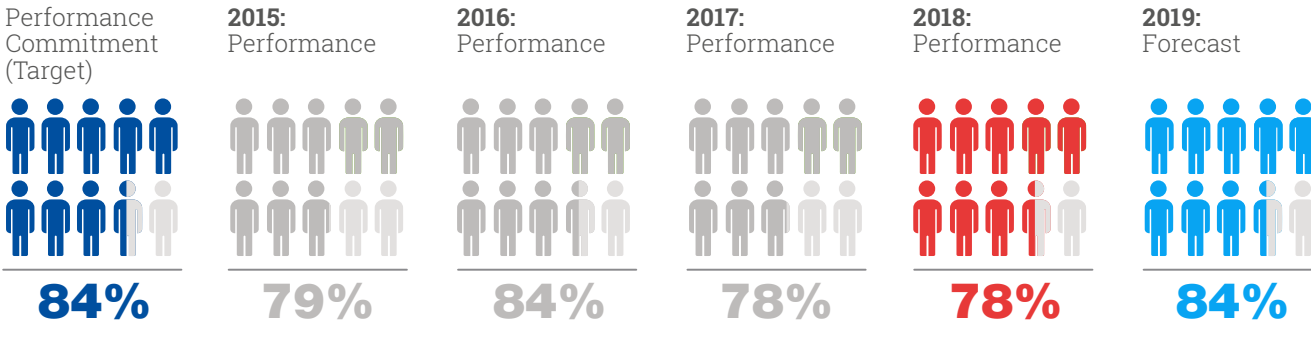
These three measures are taken from CCWater’s Water Matters survey, which is completed annually, and allows us to compare ourselves with other water, and water and wastewater companies.

Satisfied with Value For Money of Water Services – Northumbrian Region (CCWater research)



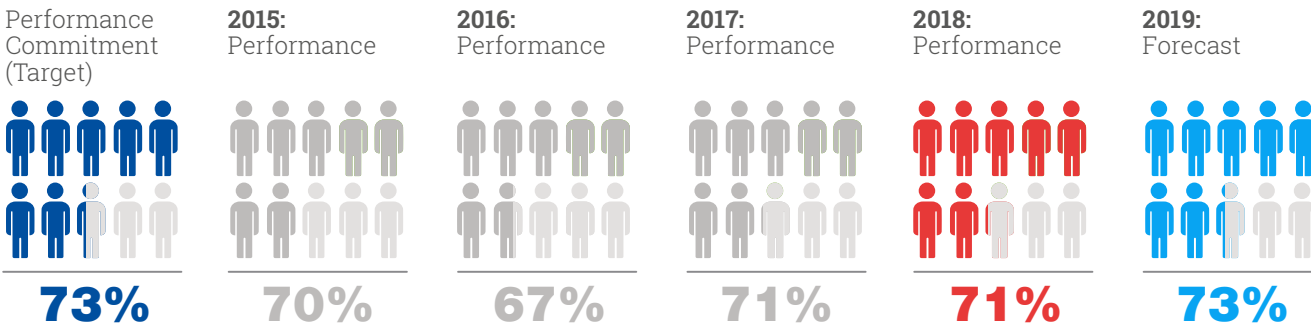
The Consumer Council for Water (CCWater) publishes annual research on customers’ perceptions of their water and sewerage companies and one element relates to value for money. While we are disappointed that we have not met our PC and our score has dipped slightly from the previous year, from 78% in 2017 to 75% in 2018; we are still above the industry average score of 72%.

Satisfied with Value For Money of Sewerage Services – Northumbrian Region (CCWater research)



We are pleased to show a stable trend from last year, scoring 78% again which is higher than the industry average of 75%, although lower than our PC.

Satisfied with Value For Money of Water Services – Essex and Suffolk Region (CCWater research)



We show a stable trend from last year, scoring 71% in this area again which is slightly lower than our PC of 73% and the industry average of 72%.





# HIGHLIGHTS

## Providing an unrivalled customer experience to each and every customer, whatever their circumstances or needs, and however they choose to contact us, is our clear ambition.

Understanding our customers' preferences and changing needs is key to our success in providing an unrivalled customer experience to each and every one of our customers. We know that customers' circumstances change as their lives evolve and we know from research for our inclusivity strategy, that customers will likely flex in and out of needing a little extra help during their lives. We've engaged with lots of our customers to make sure we have a deep understanding of what extra help our customers may need.

We have listened to our customers and work hard to ensure that we:

- Make sure that all our services are inclusive and affordable for all.
- Listen, and think beyond the obvious. Own the customer's problem. Proactively offer support when customers need it.
- Design customer policies with sensitivity to the needs of customers who may benefit from extra help and support.
- Engage the experts and promote our great work locally. Spread the word to customers by partnering with trusted local organisations and charities.

Our ambition to provide inclusive services is why we've been investing so strongly in our transformational change programme, once (our new customer experience). The premise of our once programme is that a customer should only have to tell us once about something and we'll have the agility, focus and people with the right skills, to create a positive experience from it. An incredible amount of effort and investment has been progressed throughout 2018, and by 2020 we will have completed the largest transformation ever carried out across our customer-facing operation, with investment of around £36m in cultural, operational, technological, and digital change.

Our new customer experience platform (cep) and our new customer care and billing (cc&b) systems use intuitive technology to identify who is contacting us, allowing customers to be instantly routed to the right team. This provides customers

with an easy-to-access, tailored and flexible service with a degree of personalisation from their water company.

In our view there is no reason why, in the 21st century, customers should be in a position where a water bill is unaffordable. We are committed to leading the way in making this happen. As part of this we aim to eradicate water poverty by 2030 and to make sure that water bills are affordable for all of our customers. We continue to develop our tariffs and charging approach to maximise the numbers of customers we support.

Seeking support from The Plain English Campaign, we reviewed 263 'standard' letter types from our billing suite.

**We now have a new suite of 222 'standard' letters. 125 of the letters display The Plain English Campaign's coveted crystal accreditation mark.**

We know our people are our biggest and most fantastic asset. The majority live in our supply areas and are customers too, so it's even more important to them that we get things right. Not only do they provide resilient, reliable services delivered through fantastic experiences – our people also know that communicating clearly with customers is also key to delivering world-class service.

When we have what we call 'significant weather events', performing at our best becomes ever more important and a tough challenge for all, heightened because the importance of our resilience increases in the eyes of our customers at these times.

The hottest summer on record meant more pressure on our people to deliver. As always, they stepped up to the challenge and we did our very best to communicate openly and sensitively with our customers whilst working on repairs and restoring supplies. We used weather-related demand as a catalyst to test and embed a number

of positive digital initiatives that we were confident would strengthen customer engagement and make sure our customers felt informed.

**We're delighted that these new, quick-and-easy channels are also producing positive customer feedback.**

Our two-way texting platform enables us to communicate quickly with customers, in ways that they have told us they are happy to hear from us. For example:

- Sending text messages to acknowledge reports of leaks and expected repair dates.
- Sending text messages to confirm water supplies have been fully restored after interruptions to water supplies.
- Sending text messages to confirm reported issues are fully resolved.

**Two way texting allows us to communicate in real-time with our customers, sharing information updates and receiving feedback quickly. It also lends itself to fewer calls into our frontline teams as we are proactively providing customers updates. Customers love that we're better able to engage proactively with them and tell us this in our satisfaction surveys.**





# ALWAYS DELIVERING AN UNRIVALLED CUSTOMER EXPERIENCE

## Helping those who need it most

Scott and Julie visited an elderly customer who was struggling to pay her water bill, and to cover her wider household finances. She was really worried about how she would cope and was upset that it all seemed 'just too much'. By sitting down with our customer, Scott and Julie were able to confirm eligibility for one of our support tariffs therefore reducing her water bill, and also put her in touch with Step Change, our debt partner, who was able to offer support with her overall finances. Our customer was delighted that we cared enough to take the time to visit her and really listen in order to be able to help.

## Unrivalled customer experience

Amy helped one of our customers who popped into our customer centre to speak with us. Our customer was moving out of the area and had had a difficult experience with other utility suppliers when trying to close her accounts with them, so she was really keen to talk to us and get things sorted. Amy walked her through the process with confidence and sorted everything out on the spot. Our customer took the time to write to us to say that Amy was 'kind, polite and incredibly helpful' and that she 'found [her] experience to be fabulous.'



## One team approach

Sandra and John worked really hard to help a customer who was struggling with sewer-related issues. It was a complex case, and together John and Sandra found the right way to resolve it for our customer, with him taking the time to share feedback after our visits:

"From the customer care department to John and his team, the level of customer service has been outstanding. I am delighted with the level of support we have received in tackling this problem and feel confident that every effort has been made to resolve it as quickly as possible."



## Above and beyond

Claire made a customer's day when she realised there was something unusual going on with the customer's water consumption levels, so began a thorough investigation and discovered that the customer had a leak in her home. Using previous readings and understanding our customers' living situation, Claire was able to work out a leak allowance, refund our customer some money, and help her set up a reduced payment plan – as well as sorting the leak itself. The customer was delighted and wanted to let Claire's managers know, copying them to a lovely note:



"Thank you again for all the time you've spent on this I appreciate it very much. I am extremely grateful for the fact that you've taken this lengthy and arduous case on and now I am just happy it's all been resolved now."

## We give our field teams plumbing training so they can go the extra mile!

Darren, one of our Technicians called to investigate low water pressure at a newly built home. Although the problem was on the private pipework, Darren put his newly acquired plumbing training to use by stripped down the internal stop tap to clear a blockage and restore a very grateful customer's water supply, free of charge.



## You cared

A worried customer called to report a blocked sewer. "Basically, we seemed to matter. You cared. The lady on the phone was so pleasant and helpful, keeping us informed. It mattered to her, that we got the best service. Your engineer was equally friendly and helpful and didn't leave until he was satisfied that everything had been done to our satisfaction. We felt that our problem mattered to you."

## We know when customers need a little extra help



When our team arrived to check a leak, it was clear it had been running a long time and our customer needed a little more help. The team talked to Social Services for the customer who approved the work. Despite extremely poor and difficult conditions the team worked together to get the job done. They really went the extra mile for a customer who was clearly in need of some TLC.

## Ownership

Mrs M, whose son suffers with autism and dyspraxia wrote a personalised thank you to Carol, a member of our Litigation team for "outstanding customer service and responsibility of taking on the case and ensuring it's been seen through from beginning to resolution." Mrs M finished by saying her family, who own UK and international call centre management services would be proud to have Carol as an employee or member of their team.

## We help customers to keep their heads held high

When an emotional Mr W rang he said he felt he had lost his dignity. He was in debt and didn't know how to turn things around. Rachel, one of our experienced advisors, was on hand to help. She was able to take control and guide Mr W to come up with solutions that were right for him. Rachel was able to reduce Mr W's bill and payments to help him get back on track and is also arranging a water meter as Mr W felt this would help him save more money and feel more in control. Having listened to Mr W, Rachel still knew he was worrying about other things such as food, so she sent him a food hamper to help him over the next couple of weeks.



## SOCIAL LISTENING TRIAL

Our social listening trial with linguistics experts, Wordnerds, is a brilliant example of us embracing digital channel engagement and using advanced linguistics, Artificial Intelligence (AI) and natural language processing (NLP) to provide automated understanding of unstructured text data.

We gather insight from social media and can proactively engage with our customers to deliver exceptional service. For example, if a customer were to Tweet about a leaking toilet, we would be able to send them a Leaky Loo test kit.

The reliable and actionable insight gathered, helps us to differentiate us from other water companies and allows us to engage in a light touch and interesting way, often using humour, and with added relevance

- Twitter estimates that over 17,000 people have seen the messages sent out by us to customers over the course of this campaign.
- Responding to general questions, queries and comments about water have worked well in terms of engagement – we are in a position of trust and authority in the 'water' space and so our involvement in these conversations has been a good fit.
- The rate of engagement with these Tweets was almost 9%. This is extremely high – a best practice ratio of a benchmark social media campaign is between 2–4%.
- Humour and a light hearted approach has worked where the original post had this sort of tone: 85% of our more light-hearted Tweets were liked, or replied to with thanks, by the original poster.

We love that our customers respond positively to this type of engagement.

## THINK DIGITAL

Think Digital is our programme to provide an unrivalled digital experience to customers by developing digital products and services that exceed their expectations. Our approach is to create digital services that are easy and quick, digital end to end, personal, customer focused, channel rich, and delightful.

We develop all of our digital services in close collaboration with our customers, and make sure we partner with innovative technology

companies across the globe, to deliver a fantastic digital customer experience.

We work in an agile way – in the same way that leading digital companies like Amazon and Netflix develop their services – so that we can quickly launch products, gain customer feedback, and iteratively make improvements.

## CUSTOMERS HELPING CUSTOMERS

As well as truly listening to our customers and being able to interact and engage with them, we were keen to be innovative and take it to another level.

We began a trial signing-up some of our customers as brand ambassadors.

We reached out to Limitless and are using their on-demand platform and app technology to further transform our customer experiences by connecting customers to other customers (our brand ambassadors) who can answer their questions.

We are the first water company to trial this model and it's great to be able to offer innovation to our customers by trying out new technologies. We are also giving back to our communities, as a portion of the fees we pay to Limitless go straight back to the customers who act as our brand ambassadors. We really like this angle to the platform, and it's one of the key reasons we've chosen to partner with them.

The platform is available 24 hours a day, 365 days a year. Our ambassadors can access it to reply from wherever they are, making it really easy for them to access and respond quickly and easily.

We're excited to be trialling this as it is helping shape our digital ambition and find cost-effective ways to do things differently, and still do it really well.

A key feature of the platform is that we can track customer satisfaction easily, review quality in real-time, and engage with our ambassadors in order to support, celebrate and ensure learning in the best possible way. So far, our customers have been very positive and we've gained useful and actionable insight that will help strengthen this and help us think differently about other channels and integrations.



## ALEXA SKILL

A key element of developing and prioritising our digital roadmap and ambition has been, and will continue to be, engaging with our customers, to help understand their thinking around what digital tools would add value to their interactions with our company.

With the rise of virtual AI assistants, it was perhaps unsurprising that customers we engaged with were keen for us to explore an Alexa skill (another key idea to come from our Innovation Festival).

We did a lot of testing to work out the best, most value-adding things we could develop for our soft launch of the Alexa skill. We're delighted it is now available to download from the skill store – customers can find it by searching for 'Northumbrian Water'. Once activated on their device, which means it's tagged to their home postal code, they are able to ask about water disruptions in their area and also ask how much water day to day things use.

Customers without an Alexa device, can still download the Alexa App to their Android or IOS phones and search for the skill from within the app to try it out.

Feedback from our soft launch has been positive and we're now testing further elements so we can add more to the skill, allowing customers to do more and interact with us more widely. For example, we are exploring how we can use this to better engage with our visually impaired customers in relation to their bills. We're also looking at a wider ability to notify people of upcoming visits and specify who will be visiting, and to proactively notify customers about issues in their area (without them having to ask) through push notifications.

All of this is leading edge within our sector.

## OUR NEW WEB PLATFORM

We are currently engaging with customers in the design and build of our completely new web platform.

This will be a game-changing introduction for our customers when we launch the platform in autumn 2019. It will provide an agile and flexible new digital platform that will allow us to accelerate even further, improvements to customers' digital experience. Our new platform uses better technology and is also much more intuitive.

Every digital customer journey is being redesigned from scratch with customer experience central to thinking and we will see a new and fresh 'look and feel' to our online presence, which we're really excited about.

The new website will deliver a tailored and personalised experience to our customers. In the same way that Netflix provides 'recommended for you' based on your viewing history, we will be able to make personal recommendations based on individual customer's circumstances.

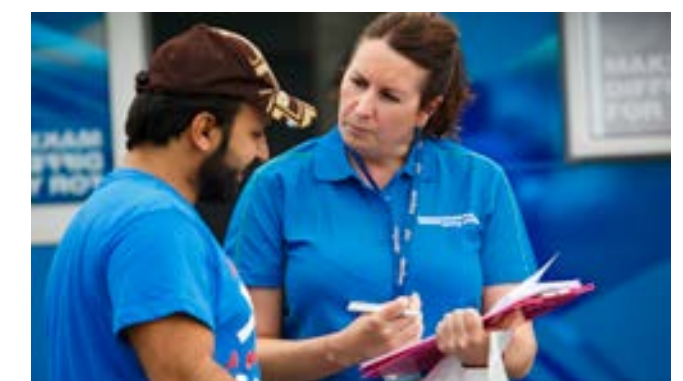
By providing more channels that customers can choose from, and giving them the opportunity to self-complete where they want to, we make sure that our stellar frontline teams are available to deal with the more complex queries our customers may have, or to manage calls where customers choose to engage with us through voice channels even if they could self-serve.



## OUR NEW CUSTOMER APP(LICATION)

Our research shows that customers are keen to engage using an app. We are developing a value adding app that will provide a simple payment channel for our customers.

It will also allow high levels of personalisation and customisation, while giving us the platform to build-in exciting gamification on topical issues such as water efficiency and digital adoption. Working with innovative partners like TopCoder, we are able to access leading edge design ideas from across the globe and are seeking to bring something new to the sector in this space.







## CASE STUDY

# WATER WITHOUT THE WORRY – ERADICATING WATER POVERTY

We were the first in the industry to make a commitment to eradicating water poverty; challenging all of its causes and making the necessary investment to make a difference to the lives of our most vulnerable customers.

A household paying more than 3% of their income on water, after housing costs, is defined as being in water poverty. It is estimated that around 400,000 of our customers are living in water poverty. Our aim is that by 2025 we will have helped around 300,000 customers and 400,000 by 2030.

We're working with National Energy Action (NEA), the charity that leads in tackling fuel poverty. Together we will be funding the new Water Poverty Unit, to take on the challenge of bringing affordable water and warmth to vulnerable and low income households. This is a multi-year commitment that will not only help us understand what opportunities there are to help our most vulnerable customers, but also offer opportunities for the wider water, and utilities sector, to take on the challenges set by Ofwat and Ofgem.

As part of delivering this commitment our 'Water without the Worry' initiative was launched – an umbrella campaign that brought together all of our inclusivity work under one banner. Taking a joined up approach gives clarity for our employees and links together all our services. From social tariffs to worrying about a leak, the Priority Services Register to metering – this campaign demonstrates our holistic, whole company response to tackling water poverty.

"This is a tremendously exciting project. We are delighted to use our 35 years' experience tackling fuel poverty to help better understand and tackle water poverty. People who struggle to afford a warm and dry home will struggle to afford other essential services, such as water. Understanding what works and how it can be applied in energy and water should bring benefits to both sectors and we look forward to working with NWG, and other water stakeholders, to help make it happen."

Adam Scorer, Chief Executive, NEA

**HELP FOR  
300,000  
CUSTOMERS  
BY 2025**





## CASE STUDY

# RANT AND RAVE

Understanding our customers and getting a real feel for how we're performing in our service delivery underpins everything we do.

We use the Rant and Rave system to capture feedback which is then used to influence decision making right across the business.

It enables us to hear directly and quickly from the customers we serve about all the good things we do and any areas where we could improve our service. The web based dashboard collects customer feedback in real-time allowing our customers to rate the services that we provide.

Since going live in 2015 we have received nearly 300,000 surveys back from customers rating our service provision. We've gained nearly 400,000 pieces of customer insight derived from customers' comments.

The great benefit of Rant and Rave is how easy it is to survey our customers and how the platform organises the returned data so that every customer-facing employee has their own feedback at their fingertips. Team Leaders and Managers also have an overview of their teams performance. If a low scoring contact is received we contact the customer to understand why. This allows us to take any additional steps required to ensure our customers' issues are fully resolved.

More importantly this helps to repair our relationship with the customer, helps rebuild their trust and also allows us to learn from what went wrong. This is so vital for us internally to fix processes or to use as feedback to empower our people who gain such a rich level of feedback that they have never had before.

In the past year, we received an average of 6,000 surveys back from customers each month with 82% of them scoring us 5/5.

**82%**  
**SCORE US 5/5**  
★★★★★

Examples of feedback include:

"The emergency team that got sent to my flat were brilliant and went above and beyond to get my water back on."

"The understanding, compassion and willingness to help me get through a difficult situation, which resulted in difficulty paying my bills, went way beyond anything I could have hoped to expect. Outstanding!"

"From the person who took the call, the follow up calls to the staff who came and sorted the blockage in my drain. First class all of them. Courteous, efficient, professional."

## CASE STUDY

# FLO

We have been travelling our regions, attending various events and popping up at key locations across our operating areas to gain customers insight and raise awareness of important campaign messages.

Flo, our customer engagement vehicle, helps to deliver customer participation and engagement activity, involving our customers in what we do. Getting into the heart of our communities provides the opportunity to have conversations that help us to improve what we do.

We have a strong team of more than 30 Customer Heroes delivering planned activities with customers, while out and about with Flo. Our Customer Heroes have meaningful one-to-one conversations with customers and attended 130 events last year.

Some of the conversations were about:

- BYOB (Bring your own bottle) encompassing 'Refill' - to help reduce plastic waste and encourage customers to drink our clear, great tasting tap water.
- 'Have Your Say' to support with PR19 research and business planning awareness.
- Water efficiency messages including 'Every Drop Counts'.

- Awareness of blockages.
- Asset investment schemes.
- Water quality.
- Waterside Parks and recreational facilities.

Flo also provided a 'water bar' to help keep runners hydrated during the Kielder Marathon weekend of events.

Using Flo helps to increase our level of inclusivity by continuing to speak to customers 'on their turf', face to face and in the hearts of communities. Flo gives us the opportunity to engage with customers who may not have online access or have not had the chance to engage with us previously through other channels.

We set out in our Business Plan that it is our ambition 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.





# WE PROVIDE A RELIABLE AND SUFFICIENT SUPPLY OF WATER

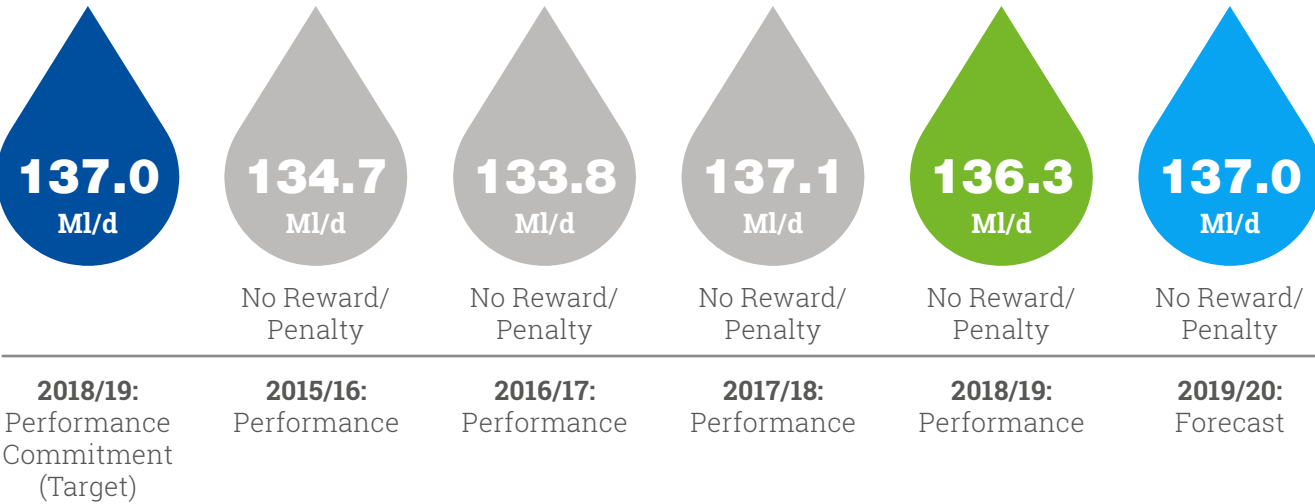
There are five Measures of Success for this outcome which are:

- LEAKAGE IN OUR NW OPERATING AREA
- LEAKAGE IN OUR ESW OPERATING AREA
- INTERRUPTIONS TO SUPPLY >3 HOURS (AVERAGE MINUTES AND SECONDS PER PROPERTY SERVED)
- THE NUMBER OF PROPERTIES AFFECTED BY LOW PRESSURE
- WATER MAINS BURSTS

To find out about your water supply in comparison to other water companies, please go to [www.discoverwater.co.uk](http://www.discoverwater.co.uk).

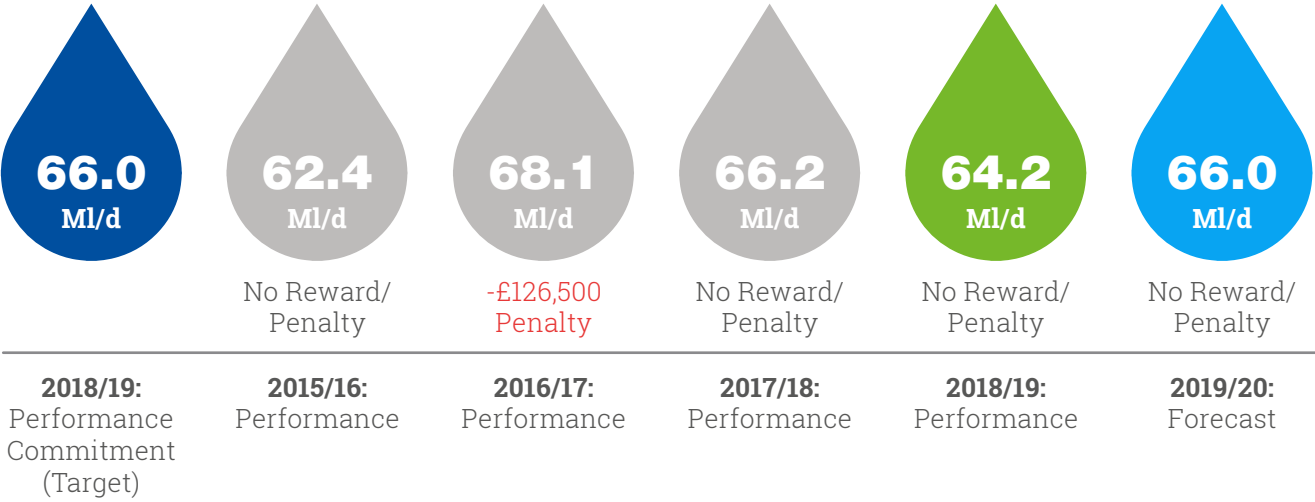
## LEAKAGE NW

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 NW, leakage averaged at 136.3 megalitres per day (ML/d) in 2018/19. This is better than our PC level of 137.0 ML/d and within the reward deadband.

## LEAKAGE ESW



In ESW, leakage averaged at 64.2 ML/d which was better than our PC level of 66.0 ML/d and within the reward deadband.

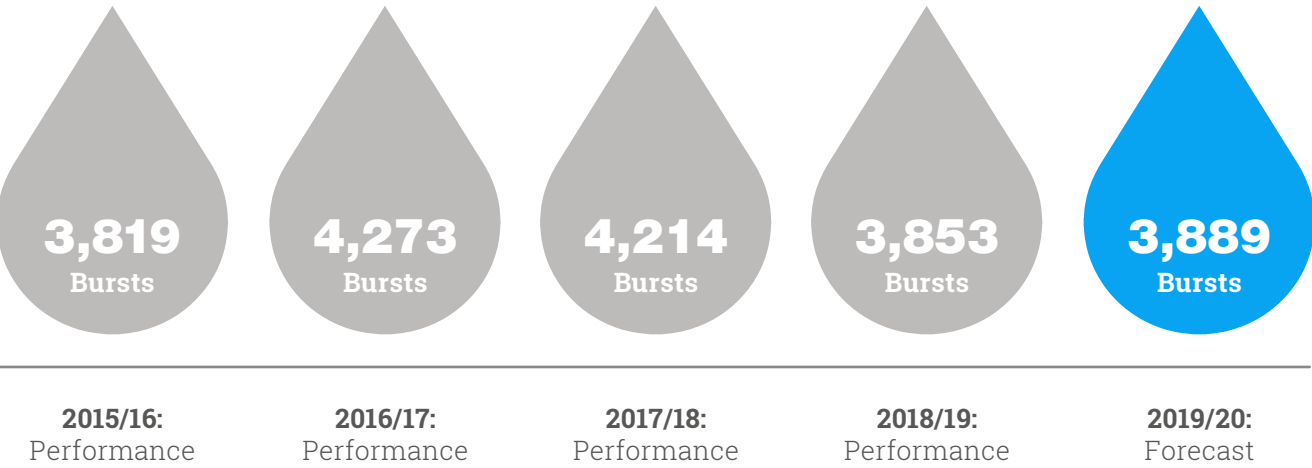
After a difficult year for leakage management in 2017/18, the good news is that thanks to some innovative actions taken (see case study on [page 52](#)), we are now operating with unusually low leakage levels.

We began the year with very high leakage levels in both of our operating areas. Extremely cold weather following the ‘Beast from the East’ during February and March 2018 caused a big spike in leakage because cold weather can cause water pipes to freeze and burst. This meant that we needed to drive leakage down further than normal during the summer months - something we do every year in anticipation of higher leakage levels in the unpredictable winter months which come at the year end.

However, additional challenge of 2018/19 was the very hot summer, another weather event that can cause bursts. Our leakage levels increased significantly through the summer because of an increase in mains bursts, but we are now in a healthy position for beginning a new year from April 2019.



WATER MAINS BURSTS (ANNUAL PERFORMANCE)



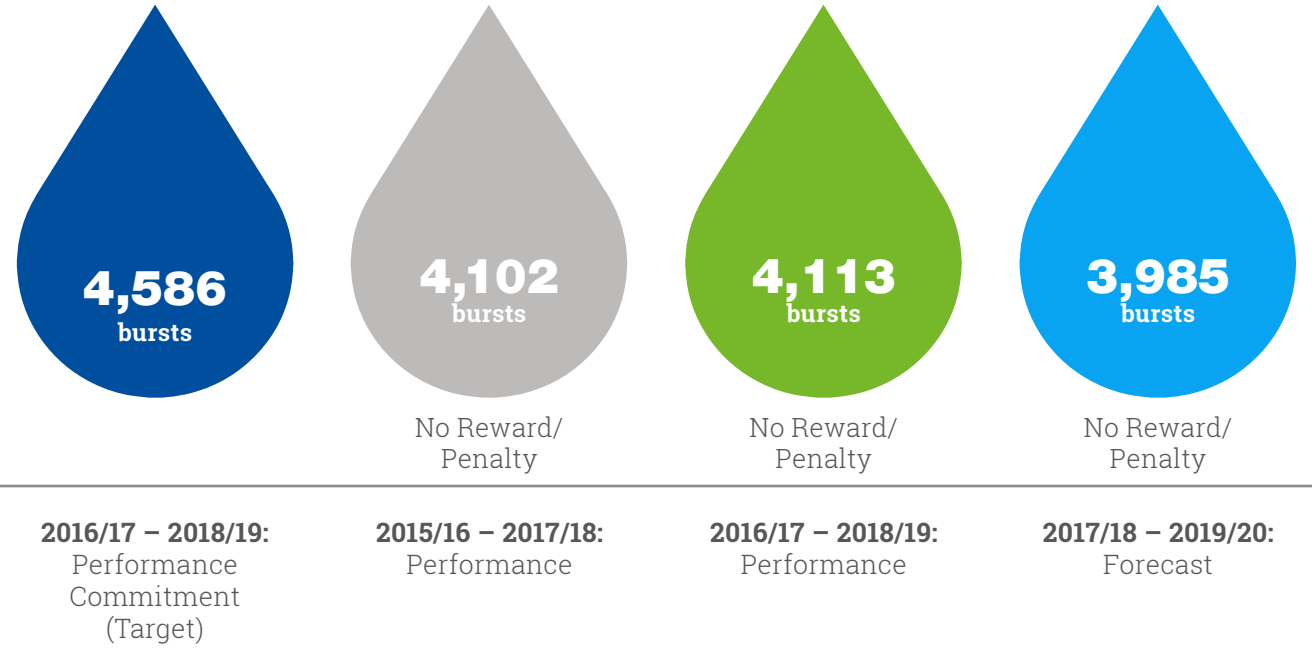
This is an asset health measure. We measure the number of mains bursts by the number of repairs we make to water mains each year.

To maintain a stable burst rate we invest in replacing sections of our vast network of water pipes each year. In 2018/19 we replaced 61.5km of distribution main in the north and 25km 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.

In 2017/18, we recognised that we could make improvements to the way in which we capture data about mains repairs making sure that other types of work are not incorrectly classed as mains repairs. This data cleansing exercise reduced the number of mains bursts recorded in 2018/19.

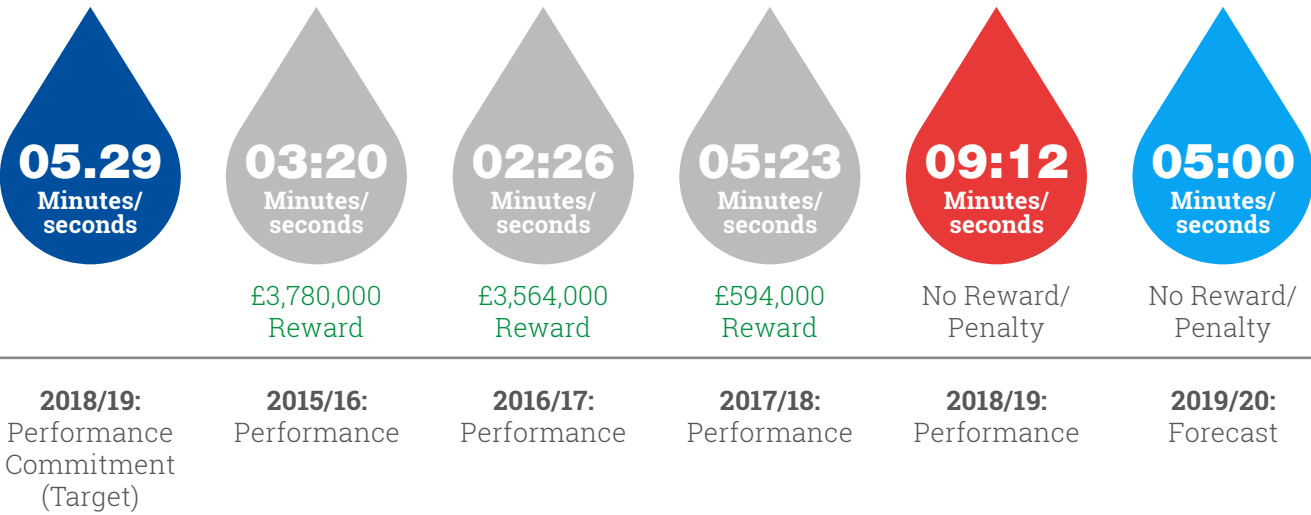
The infographic below shows our three-year average performance and these are the numbers that are shown in [Table 3A](#).

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 3,853 mains bursts brings our three-year average up slightly to 4,113 which is well below our PC of 4,586. This has not triggered any financial reward.

WATER SUPPLY INTERRUPTIONS



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.

We had a challenging year in 2018/19 with more big interruption events occurring in a single year than we have seen for some time. This means that the average interruption time per property we serve has increased to 9 minutes 12 seconds. This is above our target which is set at a stretching level because of our strong track record and desire to continually improve our service in this area.

We have reviewed all the factors behind performance deterioration last year and have a plan 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.

Despite missing our target 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. Having received a reward for excellent performance in the previous three years, and forecasting that we will meet our commitment next year, we forecast that we will receive a net reward of £7,938,000 between 2015–20.

WATER SUPPLY INTERRUPTIONS BETWEEN ONE AND THREE HOURS  
(New measure we committed to publishing from 2018/19)

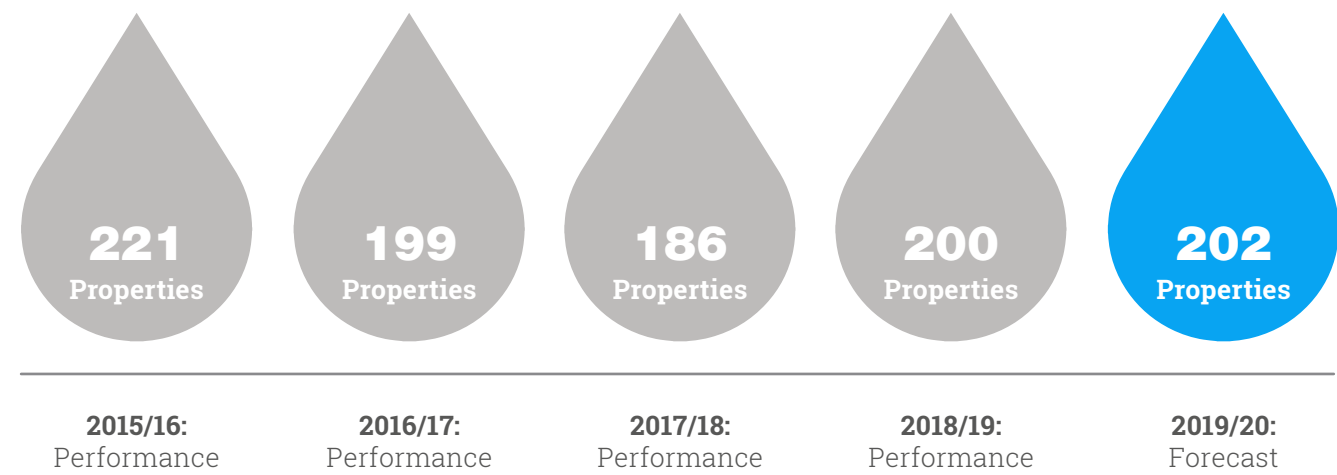
In addition to our longstanding measure of supply interruptions greater than three hours, we are introducing a new measure for the next regulatory period (2020-25) which calculates the average minutes and seconds our customers’ supplies are interrupted for between one and three hours. This will supplement the existing measure to effectively show the average minutes per property that our customers’ supplies are interrupted for one hour or longer, and in future we will review our performance against the two measures in combination to gain a broader sense of our performance in relation to supply interruptions.

As this measure is new, we are 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. We are reporting our first baseline year in this Annual Performance Report. This is to demonstrate that our approach to calculating performance on this measure is robust and has been subject to the same assurance activity as the standard measure of interruptions greater than three hours. From 2020/21 through to 2024/25 we are committed to delivering a 10% improvement in performance and this will be financially incentivised.

In 2018/19, the total impact of interruptions between one and three hours averaged 06:59 minutes per property.



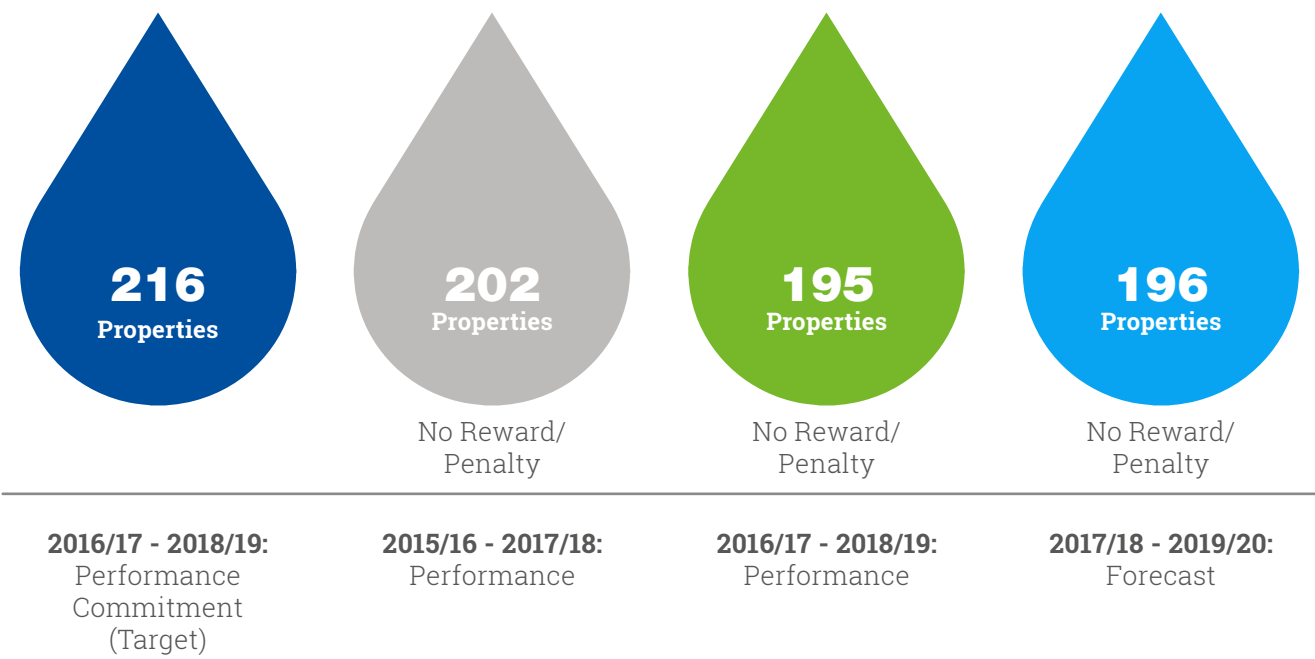
PROPERTIES EXPERIENCING POOR PRESSURE (ANNUAL PERFORMANCE)



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 2018/19 we have invested to increase the pressure for over a thousand customers leaving 200 properties on the LPR at the year end. This is an increase on the number of properties on the LPR at the end of 2017/18, but better than our PC.

The infographic below shows our three year average performance and these are the numbers that are shown in [Table 3A](#).

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 195. This is better than our PC of 216 and has not triggered a financial reward.





## CASE STUDY

## LEAKAGE INNOVATION

We are determined to bring down leakage across our network, and have been using a number of innovative new techniques to help us achieve our goal.

This includes harnessing the power of space satellites to help us spot leaks on the ground. Utilising the same technology that helps find water on other planets, we can capture detailed imagery that is sent to our leakage technicians so they can carry out further investigations.

The first phase of activity is primarily focused on large trunk mains that often run through rural areas. These are particularly difficult to identify leaks on due to the terrain and the geography of the region. The sheer speed of the process, the detail it gives and the distances the images cover will help us further improve our leakage.

We have also brought a four-legged friend on board to help us battle leakage. Denzel is a springer spaniel who has been trained to sniff out and locate leaks by recognising the tiniest traces of chlorine used to disinfect our water supplies.

Our customers can also be a great help by reporting leaks to us when they see them so we can investigate and fix them as quickly as possible. In 2018 we launched our new online interactive leak map, to make it easier than ever for customers to report leaks to us.

The simple online map allows customers to check if a leak has already been reported to us, and send us details if we don't already know about it. Customers can provide details on the type of leak and even upload their own photos so we can tell how urgent it is. Once a leak has been reported to us we provide updates on the action we are taking, so our customers can track the progress we are making on repairs.



## CASE STUDY

## LOUND TO GORLESTON PIPELINE

As part of a £1.1 billion pound investment plan a number of large scale projects were planned during 2015-20. In our Essex and Suffolk supply area, this includes the Lound to Gorleston pipeline and pumping station scheme.

The overall scheme involved the installation of 4.8km of new water main and the construction of a new booster pumping station at our Lound Water Treatment Works.

Working in partnership with the local council and Highways England, the works were completed well ahead of schedule and finished in December 2018.

The total investment of £4.5 million for the Lound to Gorleston Pipeline Project will increase the capacity of our existing water network in the area allowing us to provide a more efficient service to our customers.

The work will improve the drinking water supply network in the area which will improve reliability and safeguard supplies for many years to come.





## CASE STUDY

# WATER EFFICIENCY

Every Drop Counts is our largest ever water saving campaign and offers water saving schemes, initiatives and solutions to households, schools and community groups within targeted towns as part of our Whole Town Approach (WTA).

Now in its fifth year, we have completed 23,193 home water and energy saving retrofit visits within 2018, of which 5,084 were delivered in the towns of Barking in Essex and Washington in Tyne and Wear. Each participating household is now saving an average of 21.3 litres per day and up to £20 each year on their water and sewerage bill.

Our education play and workshop, Super Splash Heroes, engaged more than 33,000 pupils in 200 schools in 2018. The premise behind Super Splash Heroes is that every single child has the potential to be a Super Splash Hero and make little changes that will have a big impact on the world around them.

In addition in 2018 we:

- Delivered 3,000 home water and energy saving retrofits in collaboration with a housing association in the north east.
- Helped 414 customers struggling to pay their bills by delivering a free home water and energy saving retrofit visit.
- Identified and repaired approximately 1,000 leaking toilets and integrated the free repair service as part of our business as usual visits to customers.
- Ran a school community incentive programme encouraging schools to engage parents to participate in Every Drop Counts.

- Held a three day water efficiency sprint at our 2018 Innovation Festival which produced three concepts that are being developed, including an incentive / reward scheme.
- Delivered a number of customer engagement events at schools, town centres and high streets using our customer engagement vehicle, Flo.

“Our education play and workshop, Super Splash Heroes, engaged more than 30,000 pupils in 200 schools in 2018. Through our work promoting water efficiency in both NW and ESW supply areas, we delivered measured savings of 18.5 litres per person per day in 2018.”

Tim Wagstaff, Water Efficiency Manager



**5,084**  
**EVERY DROP COUNTS**  
 HOME VISITS COMPLETED IN 2018



**31,400**  
**PRIMARY SCHOOL PUPILS**  
 ENGAGED WITH THROUGH OUR SUPER  
 SPLASH HEROES PROGRAMME



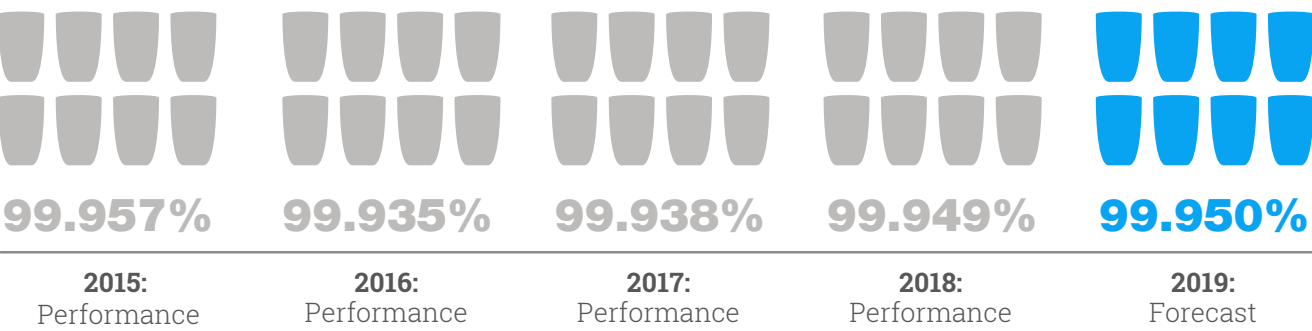
# WE SUPPLY CLEAN, CLEAR DRINKING WATER THAT TASTES GOOD

There are three MoS for this Outcome:

- **OVERALL DRINKING WATER QUALITY COMPLIANCE**
- **DISCOLOURED WATER COMPLAINTS**
- **SATISFACTION WITH TASTE AND ODOUR OF TAP WATER**

To find out how our water quality compares to other water companies, please go to [www.discoverwater.co.uk](http://www.discoverwater.co.uk).

## OVERALL DRINKING WATER QUALITY (ANNUAL PERFORMANCE)



This is an asset health measure. Very high quality drinking water is something we all benefit from. Clean, clear drinking water that tastes good is the outcome we aim to deliver. For 2015-20 we report performance as a compliance index and quality is extremely good, always surpassing 99.93%. The Drinking Water Inspectorate (DWI) is the regulator for drinking water quality. The DWI sets exacting standards for all water companies. These standards are important, by complying with them you can expect the water we supply to be free of colour and particles, free of poor tastes and smells and of course, it is safe to drink and helps keep us healthy.

This measure shows our compliance with these standards. In 2018 our performance was 99.949%, based on the results of 81,475 tests carried out in the year.

In comparison our annual performance in 2017 was 99.938%. Out of the 81,475 tests carried out there were 50 failures in 2018, compared to 45 in 2017.

We do expect some 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 are committed to improving water quality and have been delivering our 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.

The figures above represent our annual performance. Overall drinking water quality compliance is one of our asset health Performance Commitments (PC) and compliance with the PC is assessed on three year average performance. The infographic to the right shows our three-year average performance and these are the numbers that are shown in [Table 3A](#).

Looking forward, the DWI is to stop reporting water company performance using ODWQ. This measure has been in place for a long time and performance from water companies has stabilised. A weakness of the ODWQ measure is that it was primarily focused on samples taken from customer taps. It did not

include sample results from water treatment works, or networks on route to customers. We will continue to report performance using ODWQ to 2020.

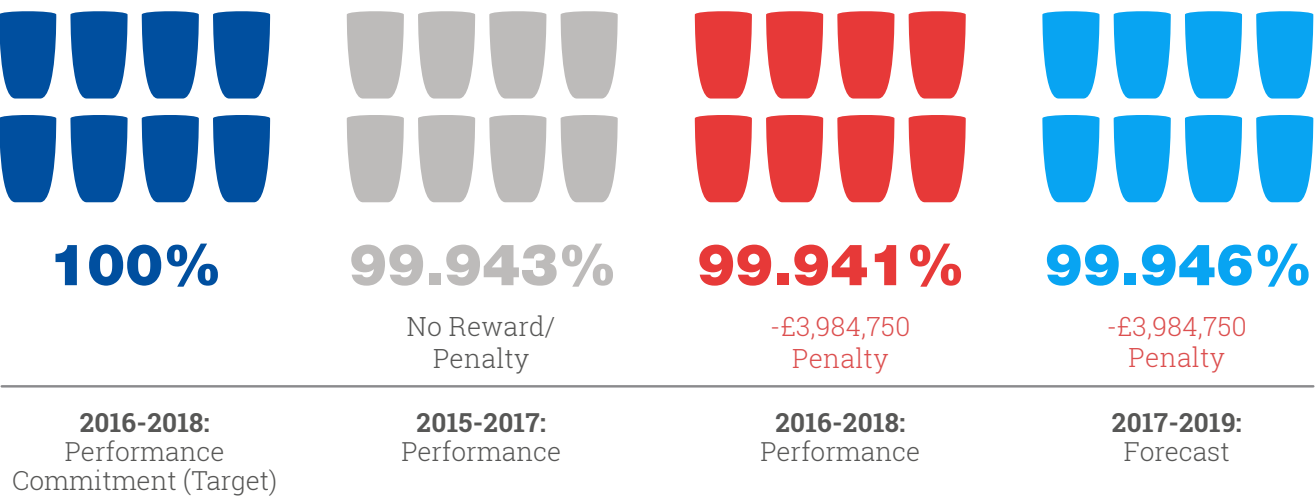
The DWI have introduced a new measure of drinking water quality in 2017 called the Compliance Risk Index (CRI). This uses information from the whole source to tap journey, through water treatment works, networks and customer taps, to make a more rounded assessment of water quality. The measure is also comparable between different asset groups and across water companies. We are adopting CRI as the lead water quality measure for the 2020-25 period and are in the process of agreeing how the performance commitment will work with Ofwat.

The CRI is a risk calculation and a perfect score is zero, indicating no failure of any standard within the entire water supply system. Our ambition is to drive towards a zero score.

The CRI calculation considers the way we respond to sample failures alongside the type of failure and where in the water supply system any failure occurs. Sample failures that affect larger water supply areas have a higher impact on the CRI score than those from small assets and supply zones. The sum of all failures within a calendar year is the CRI.

In response to the new measure, we have analysed historical performance and identified key risks at each point in the source to tap journey. We are now in the process of undertaking a detailed root cause analysis project to identify the sources of those risks so we can develop detailed plans to mitigate them, either through operational practice or asset improvements. Initial 2018 performance data confirms that we are performing better than the average position, with a result of 2.254, compared to an average of 3.874. We will report CRI performance alongside ODWQ performance next year as we transition to the new measure.

## OVERALL DRINKING WATER QUALITY (THREE-YEAR AVERAGE)



Our three-year average performance for the period 2016–2018 is 99.941%. This means we have incurred a penalty of -£3,984,750.





DISCOLOURED WATER COMPLAINTS (ANNUAL PERFORMANCE)



This is an asset health measure. 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.

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, carbon, potassium and iron. The levels of these chemicals are measured in millionths or billionths of a gramme 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 25% 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 2018 annual performance deteriorated slightly from 2,532 contacts in 2017 to 2,594 contacts in 2018 but for the fourth year in a row we have performed better than our PC.

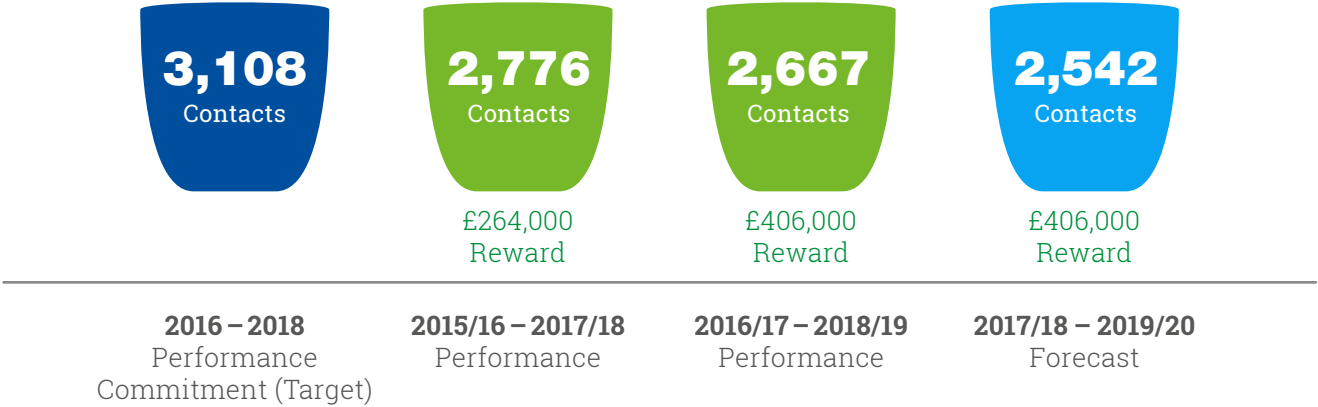
We have been working to improve discoloured water complaints for more than ten years now and the sustained good performance is due to culmination of this work. However, when industry comparisons are made we recognise there is still more to do.

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 Drinking Water Inspectorate (DWI) support for our plans for 2020–25.

Our plans include installing a new water main from Lartington Water Treatment Works to Darlington to replace a very old main which is a discolouration risk. They also include expanding the scale of our automatic control systems that manage network flows and reduce discolouration risk.

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. The infographic to the right shows our three-year average performance and these are the numbers that are shown in [Table 3A](#).

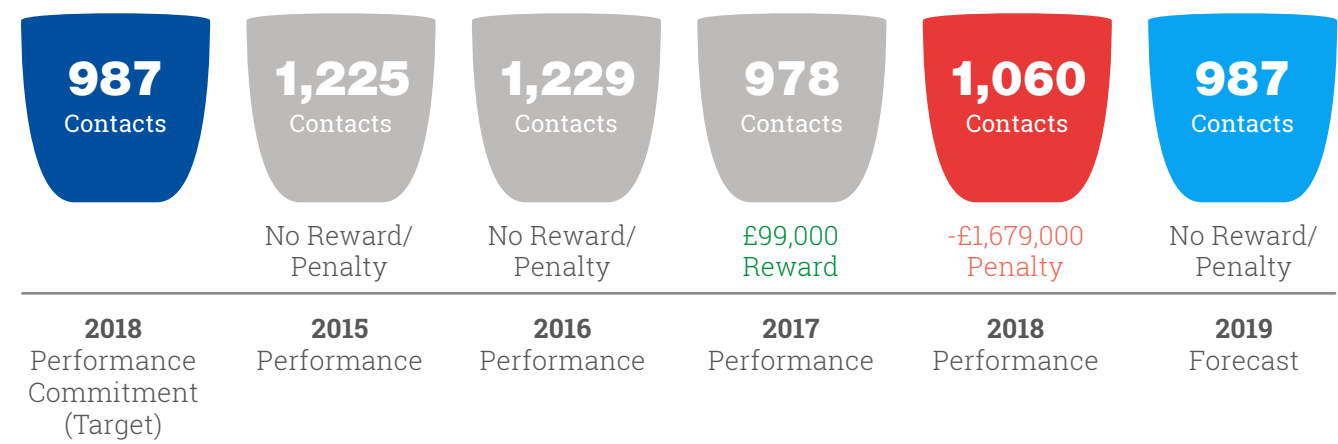
DISCOLOURED WATER COMPLAINTS (THREE YEAR AVERAGE)



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 ([page 57](#)). No reward or offset to that penalty will be claimed.



SATISFACTION WITH TASTE AND ODOUR OF 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.
- Issues with a customer's own plumbing, inside their home.
- A change in where a customer's water comes from, or how it is treated.
- A change in a customer's perception.

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

We received 1,060 taste and odour contacts in 2018 compared to 978 in 2016. This level of performance, while a small deterioration on 2017, is still better than the upper quartile (top 25%) threshold. Our stringent performance commitment is tighter than the upper quartile threshold of 1,263 contacts at 987 contacts. An underperformance penalty of £1,679,000 is payable for the measure. This is equivalent to 73 contacts at £23,000 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 smell and this is the main taste and smell factor that is, to some extent, within our control. Around 30% of customer taste and smell 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 rezoned 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 using customer communication 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.

In January 2019 we received a fine of £500,000 following an incident at South Moor service reservoir in County Durham. A contractor working on our behalf incorrectly applied a coating material to the inside of the service reservoir, as part of refurbishment activity, which caused a small number of customers to experience a chemical taste and odour when the reservoir was brought back into service. While this incident presented no risk to health, we pride ourselves on providing great quality drinking water and it is only right that the Drinking Water Inspectorate hold us to account when these standards slip. We have learned valuable lessons from the incident, which happened in 2016, and have carried out a full and comprehensive review of our procedures and processes and implemented our learnings from it. No similar incidents have occurred since.

CASE STUDY  
BARNACLE

The prototype of an innovative device that will help detect potential issues with a customer's water supply, and raise alerts before they are even aware there is a problem, is currently being trialled.

We're leading the project team that has been brought together to take forward an idea that came out of one of the 13 'Design Sprints' held at our Innovation Festival 2018.

The 'Smart Objectives' sprint - sponsored by global IT and business process services firm CGI - looked at ways to use Smart technology to help change and improve customers' lives. The result was "Barnacle" - an "Internet of Things (IoT)" sensor capable of monitoring changes in key water parameters, which may indicate problems with the supply.

An automated test rig has been purpose-built to help develop and perform rigorous performance testing of the first prototype version of Barnacle.

Flushing automatically every ten minutes using recycled water, researchers can alter the flow, pressure and temperature of the water in the test rig, to check if Barnacle, which gathers data at every flush, will detect a difference from the norm.

If it detects a difference, this could indicate there is a problem either with the customers' water supply, or potentially even a bigger issue on the wider water network, alerting customers before they're even aware there's a problem.

Barnacle will also check whether or not the toilet cistern is operating continuously, which would indicate that the toilet is leaking, as well as detecting discoloured water and identifying the risk of freezing pipes.

Following the successful testing process, we plan to work with other interested parties to help develop the prototype and identify an area in the north east to roll out a pilot project on a number of Barnacles.

Barnacle could prove an effective early warning system for other problems that could affect a home. There is so much great potential for doing exciting things with this technology that will really benefit our customers, subject to a successful proof of concept.





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

This Outcome has seven Measures of Success, 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)**

To compare our performance to other water companies, please go to [www.discoverwater.co.uk](http://www.discoverwater.co.uk).

Our sewerage system is an essential network of 30,000km of sewer pipes that lie unseen beneath virtually every street and road.

Sewer flooding can occur when rainfall is so heavy that there is more water than the sewers are designed to transport and they become 'overloaded'. It can also happen when sewers become blocked or broken. In either case sewage escapes from our network and finds its way into customers' gardens, homes and business premises.

We are wholly responsible for maintaining the performance of our sewer network in order to provide an effective sewerage service to our current and future customers. We also have a responsibility to work with other organisations to play our part in resolving wider drainage issues, including surface water flooding which can often lead to sewer flooding. This is particularly important as heavy rainfall is the predominant cause of surface water flooding.

On an aggregated basis, we are continuing to beat our PC levels for both internal and external flooding. However we have seen an increase in the proportion of flooding incidents related to the local (TDS) sewer network, resulting in narrowly missing those PCs.

This reflects the fact that the main cause of sewer flooding is now sewer misuse, and blockages caused by the wrong things being put down sinks and toilets have increased. These TDS pipes are closest to homes and other buildings. Significant further improvements will be required to achieve our future tighter targets from 2020-25, with a key aspect of our strategy focusing on customer behaviour change.

Our approach to managing the networks is the same and from 2020-25 we will report as a combined measure for internal and external sewer flooding. Until then, we will continue to report our performance for internal and external sewer flooding by public network and TDS (local) network. This is shown on the following pages.

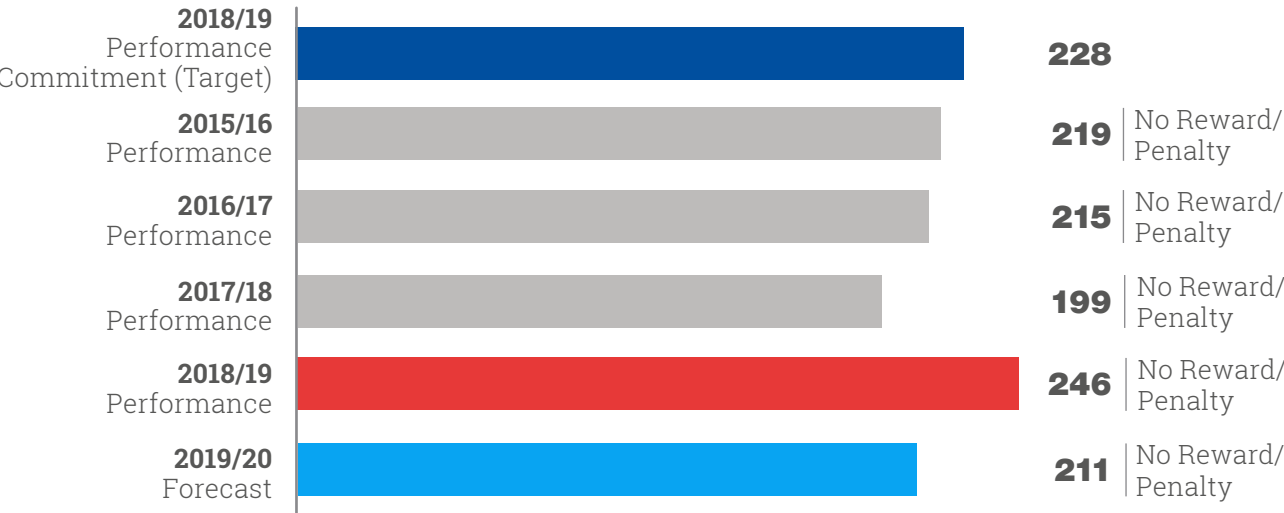


PROPERTIES FLOODING INTERNALLY (PUBLIC NETWORK)



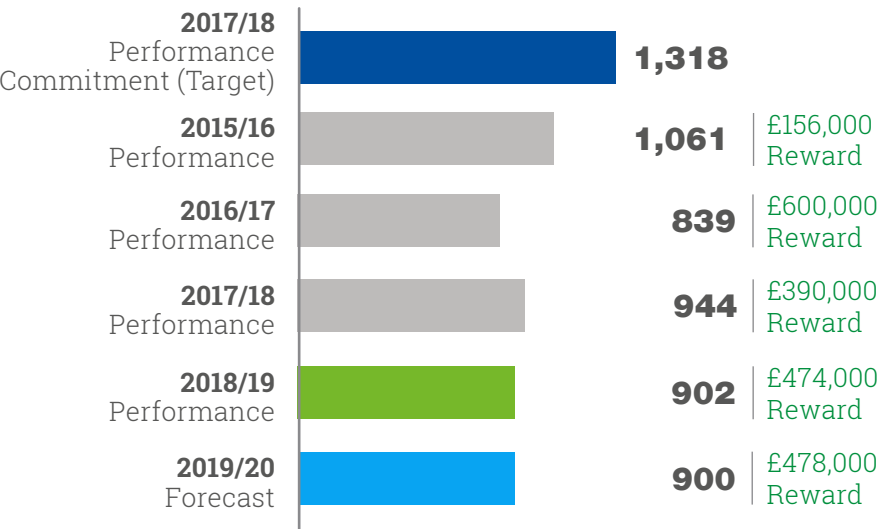
There was an increase in the number of properties flooded internally from our public network, from 96 properties in 2017/18, to 124 properties in 2018/19. This is significantly better than our PC of 186. Our performance in 2018/19 has resulted in a financial reward of £806,000.

PROPERTIES FLOODING INTERNALLY (TDS NETWORK)



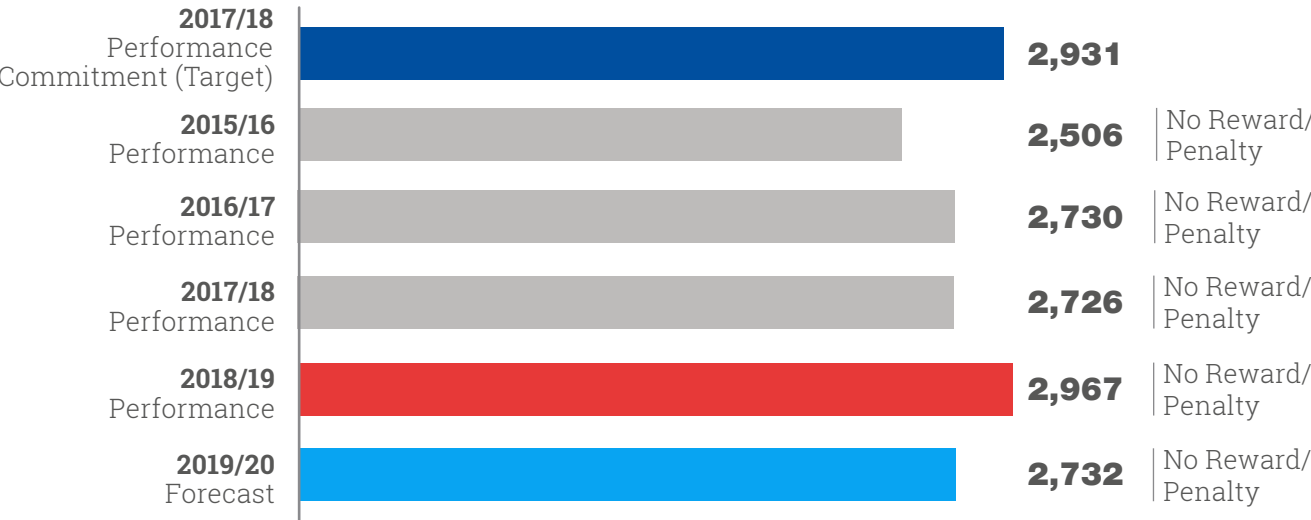
The number of properties flooded internally from our TDS network has risen from 199 properties in 2017/18 to 246 properties in 2018/19.

PROPERTIES FLOODING EXTERNALLY (PUBLIC NETWORK)



The number of properties flooded externally from the public network has dropped from 944 properties in 2017/18 to 902 properties in 2018/19. This is significantly better than our PC of 1,318. This has resulted in a financial reward of £474,000.

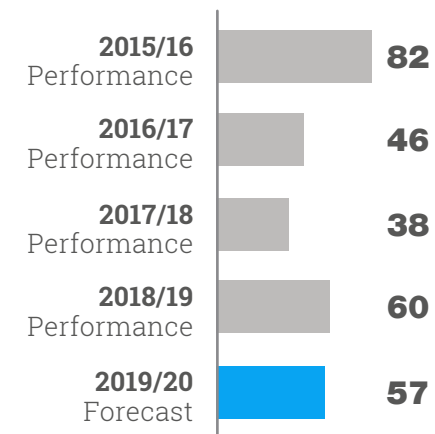
PROPERTIES FLOODING EXTERNALLY (TDS NETWORK)



The number of properties flooded externally from the TDS network has increased from 2,726 properties in 2017/18 to 2,967 properties in 2018/19.



### PROPERTIES SUBJECT TO REPEAT SEWER FLOODING (ANNUAL PERFORMANCE)

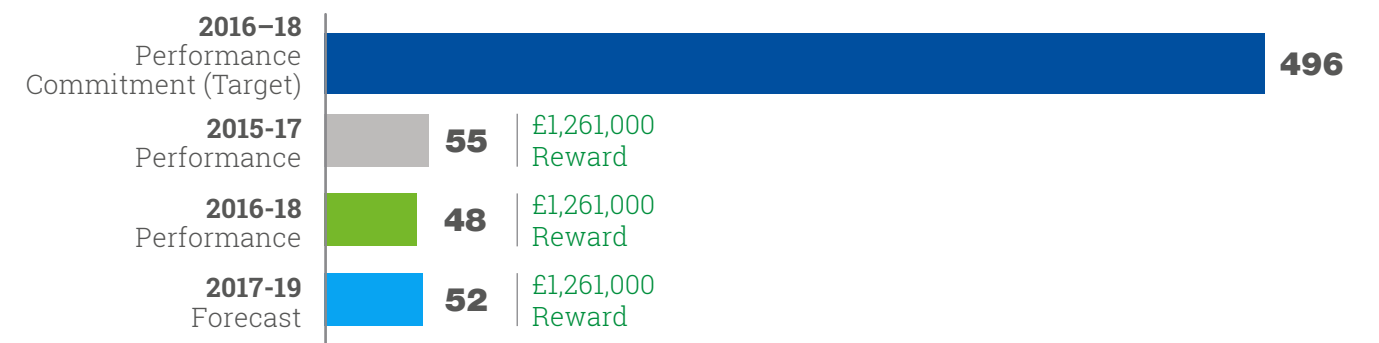


This is an asset health measure. Repeat sewer flooding measures the number of times during the year that properties have experienced sewer flooding where the property or its garden has flooded in the past ten years, including in severe weather.

The number of properties subject to repeat sewer flooding has increased from 38 properties in 2017/18 to 60 properties in 2018/19, however, is significantly lower than our PC of 496.

These figures relate to annual performance. Repeat sewer flooding 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 and these are the numbers that are shown in [Table 3A](#).

### PROPERTIES SUBJECT TO REPEAT SEWER FLOODING (THREE-YEAR AVERAGE)



The PC for this measure is based on a three year average and is 496 properties, meaning we continue to significantly outperform against it.

An outperformance payment of £1,261,000 has been earned for this measure for each of the last three years.

SEWER COLLAPSES (PUBLIC NETWORK) (ANNUAL PERFORMANCE)



This is an asset health measure. Occasionally the structure of a sewer pipe falls and the pipe ‘collapses’. This can be due to a number of reasons including the age and condition of the pipe and ground movement. These collapses can result in other problems such as sewer flooding or pollution. The number of sewer collapses has increased from 46 in 2017/18 to 49 in 2018/19. The figures above discuss annual performance. Sewer collapses (on the public network) 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 and these are the numbers that are shown in [Table 3A](#).

SEWER COLLAPSES (PUBLIC NETWORK) (THREE YEAR PERFORMANCE)



We have again met our PC. This has not triggered any financial reward.

SEWER COLLAPSES (TDS NETWORK)



There was an increase in the number of collapses on the TDS network, from 51 in 2017/18 to 59 in 2018/19. This is still significantly better than our PC of 84.





**CASE STUDY****KILLINGWORTH AND  
LONGBENTON**

We are working in partnership with North Tyneside Council and the Environment Agency to reduce the risk of flooding to more than 3,500 homes in the Killingworth and Longbenton area of North Tyneside.

The £6m scheme, which began in July 2016, uses natural solutions, such as grassed storage areas, as well as traditional infrastructure, to control the amount of surface water entering the sewer network and reducing flood risk. Instead of flooding back to the sewerage system, overflows from the lake will spill into natural grassed areas that run alongside it and drain back to a local watercourse.

As part of this project, we've worked with specialist contractors Biomatrix Water, to design and install three floating 'eco-systems' or islands on Killingworth lake, totalling 300 square metres. It's the first time that we have used floating eco-systems as part of a flood reduction project.

The islands, which will have plants and shrubs growing on them, will provide a home for wildlife, increasing the biodiversity in the area, and also help to keep the lake clear, with their plant roots absorbing nutrients and cleansing the water.

Children from West Moor Primary School helped to establish the floating islands with plants and shrubs, and learnt about biodiversity with a talk from Biomatrix Water.

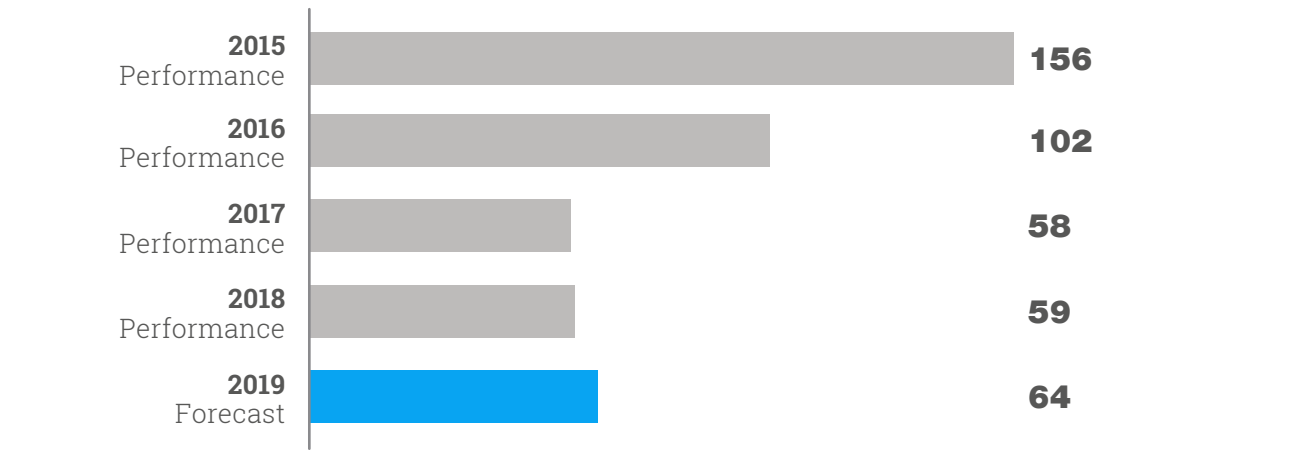
The scheme is due to be complete in the summer of 2019.

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

This Outcome has three MoS:

- POLLUTION INCIDENTS (CATEGORY 3)
- BATHING WATER QUALITY COMPLIANCE
- SEWAGE TREATMENT WORKS COMPLIANCE

## POLLUTION INCIDENTS (CATEGORY 3) (ANNUAL PERFORMANCE)



This is an asset health measure.

When we have issues in our wastewater system, such as from blockages and mechanical breakdowns, untreated sewage can sometimes escape into watercourses and the sea causing environmental harm. We can also experience problems with our water treatment and supply systems that can result in an impact on the environment. 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 all pollution and we have a MoS for category 3 incidents.

Numbers of Category 3 incidents had decreased significantly from 156 in 2015 to 58 in 2017, our lowest performance. This was due to the impact of our transformative pollution management programme that principally targets the reduction of wastewater pollution incidents. We have seen a continued decrease in our wastewater pollution numbers in 2018, however, incidents from our water treatment and supply systems have increased. This has resulted in a slight increase in our overall 2018 Category 3 number with 59 incidents, from 58 in 2017.

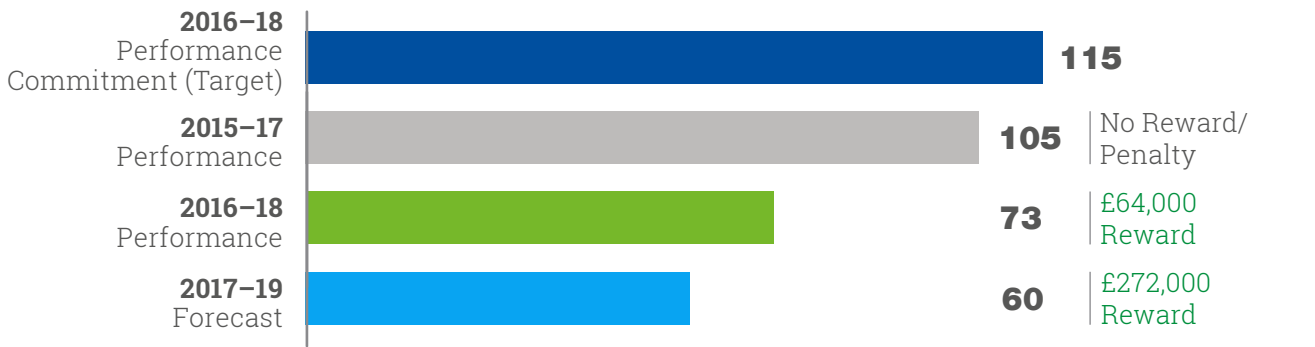
We are pleased that our number of more serious category 1 and 2 pollution incidents improved to 2, from 9 in 2016 and 4 in 2017. One was associated with a surface water sewer and the other from a water treatment works.

We continue to work hard with the EA, our operational teams and through our Pollution Best Practice Group, to make sure lessons are learnt and serious incidents aren't repeated. Our aim remains is to have zero serious pollution incidents by 2020.

The EA has an expectation 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. Our self-reporting performance in 2018 increased again to 83% from 78% in 2017, consistently achieving the EA's requirements.

The figures above discuss 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 and these are the numbers that are shown in [Table 3A](#).

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



We have been awarded four stars (leading) in the Environment Agency's annual performance assessment.

This is the best possible rating, in the most significant assessment of our environmental performance. We achieved a green rating in each of the six metrics assessed which include treatment discharge compliance, pollution performance and delivery of our commitments under the National Environment Programme (NEP).

This is only the second time a company has achieved this in the last six years. We were delighted to be leading in the industry.

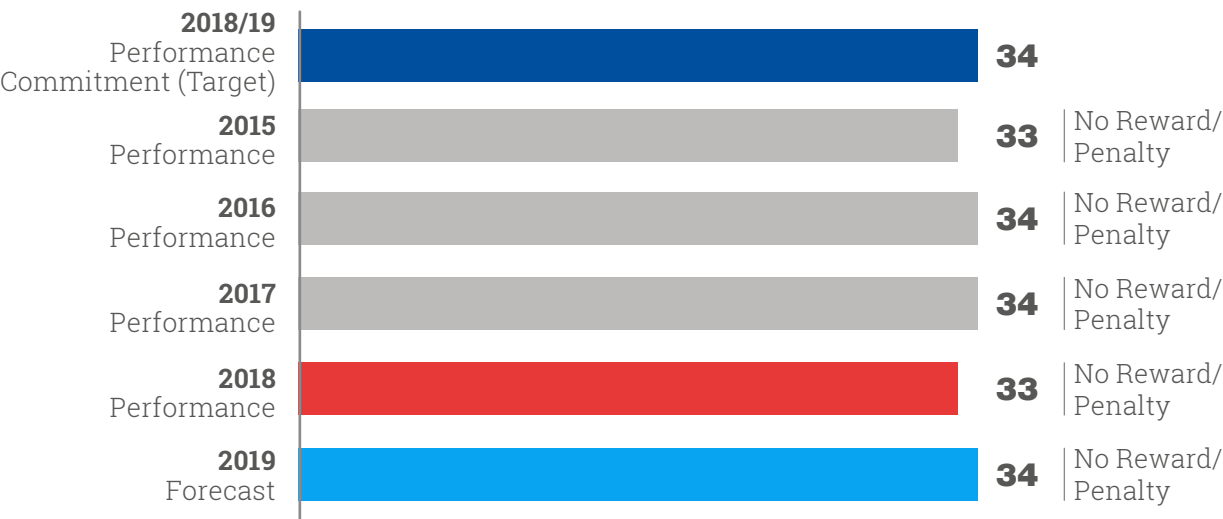


BATHING WATER QUALITY COMPLIANCE

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

Under the bathing water regulations, each bathing water is classified every year as either Excellent, Good, Sufficient or Poor. 'Sufficient' is the minimum acceptable standard.

Our aim is to contribute to all region's bathing waters being 'Sufficient or better'. Working in partnership is key to making this happen as seawater quality can be affected by a number of sources, such as run-off from agriculture and urban pollution. It can also be affected by birds or animals.



One of our bathing waters, Cullercoats in North Tyneside, deteriorated from Good in 2016, to Sufficient in 2017 and Poor in 2018. However, we attained the industry leading position for the highest percentage of Good (9) and Excellent (24) bathing waters in England, Wales and Scotland.

Since September 2017, we have been working in partnership with the EA and local authority to understand the reasons for the localised decline in bathing water quality at Cullercoats. These extensive investigations have already ruled out a number of potential factors and the joint investigations will continue until the cause is identified, and all remedial works that can be done, have been carried out. The joint investigations will continue until the cause is identified and any remedial work that can be done has been carried out. Already, activities have identified and allowed proactive measures to be taken on a number of third party sites, as well as on parts of our network.

Fiona Morris, Environment Manager at the Environment Agency in the north east, said: "We work closely with our partners at local authorities and Northumbrian Water to understand what impacts on a particular bathing water's quality and then carry out work to try to improve it; such work has already been done at Cullercoats and is continuing."

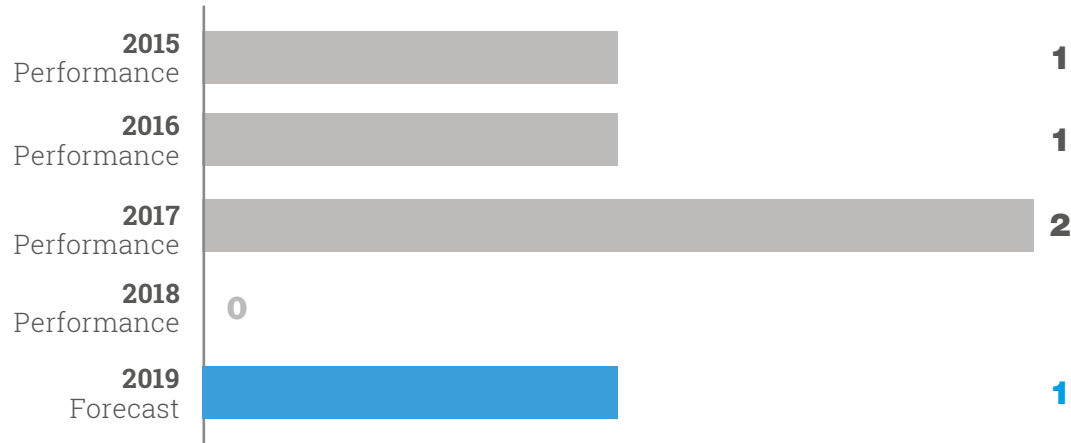
Spittal bathing water at Berwick-upon-Tweed, has carried on improving from being Poor in 2015, Sufficient in 2016 and 2017, to now being Good in 2018. This further confirms the forecast improvement from our previous investigations and investment in improving seawater quality. This bathing water is mainly affected by agricultural diffuse sources from the River Tweed catchment and was the focus of a diffuse pollution priority catchment investigation by the Scottish Environment Protection Agency (SEPA).

In support of the EA's Pollution Risk Forecasting (PRF) system, that notifies bathers of potential bathing water quality issues at 18 bathing waters in the region, we previously offered electronic matrix signs for our local authority partners to install. We continue to work with the EA national team to extend the PRF system to include other parameters.

SEWAGE TREATMENT WORKS DISCHARGE COMPLIANCE (ANNUAL PERFORMANCE)

The Environment Agency (EA) sets strict standards for effluent discharged into rivers, estuaries and the sea from water companies and industry. These standards specified in 'environmental permits' are set individually for each of our sewage treatment works (STWs) taking into account what is required to protect water quality and ecology. We make sure that our treatment works perform to meet the required discharge standards. These standards are assessed for compliance by taking regular samples that are analysed for the levels of substances, including phosphorous and ammonia, in meeting environmental river water quality objectives.

These numeric permits apply to 159 of our largest STWs, and 12 WTWs. Our ODI for the period 2015 to 2020 remains as the number of STWs where one or more samples failed these strict standards. However, we also report on total treatment works compliance (STW and WTW) as part of the annual Environmental Performance Report (EPA) for the EA.



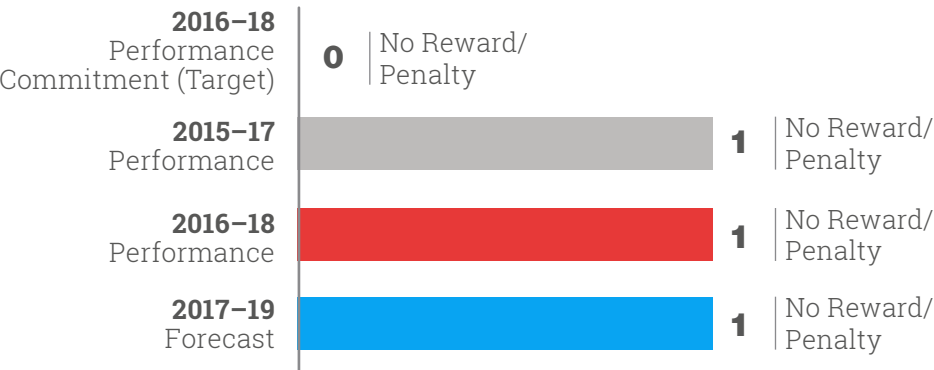
This is an asset health measure.

We have a very strong discharge compliance record and traditionally this has been an area where we have held an excellent industry position for all of our numeric STWs. Our performance in 2018 for STW discharge compliance was zero. Our aim is zero failures.

Maintaining zero failures will be challenging, but is important if we are to achieve our objective in remaining a 4 star company in the Environment Agency's Environmental Performance Assessment (EPA).

The infographic below shows our three year average performance and these are the numbers that are shown in [Table 3A](#).

SEWAGE TREATMENT WORKS DISCHARGE COMPLIANCE (THREE YEAR AVERAGE)



We know that future permits will tighten as legislation changes. We are also aware that the pressures of increasing population, new housing, industrial developments and climate change will challenge our performance. We must plan to meet these future new and tighter standards, and satisfy our obligations in working towards meeting 'Good' Water Framework Directive (WFD) status in our rivers.

To do this, we will build on our innovative operational management and early warning systems TriM (trigger management system) and DRIVE (Dynamic Risk Index and Visit Effectiveness) tool that allows us to understand real-time compliance risk across all of our treatment works. These systems have been adopted for both numeric and descriptive permit works, with considerable increased operational intervention being invested at our descriptive works in order to prevent permit non-compliance and potential resulting pollution incidents.

We are continually evolving our processes and continuing to work in partnership to attain the necessary sustainable improvements in river water quality, supporting a catchment-based approach to managing the water environment. We are working within four catchment partnerships across the north east; Northumberland, Tyne, Wear and Tees. A key aim is to ensure our customers' money is spent on well justified schemes that will deliver real improvements to water quality and ecology. Our customer research demonstrated that our customers expect us to work with others to achieve a high level of improvement to areas of the water environment beyond just water quality, such as, improved access to areas of high amenity value. In response, we developed our 'Improving the Water Environment scheme', and linked this to a new Performance Commitment.



CASE STUDY

# POLLUTION SOLUTION

Ensuring that we protect and enhance the environment in everything we do is a key part of our vision.

Our pollution performance in 2015/16 was below where we wanted it to be and not in line with the leading results we set ourselves.

We have entered into a further three agreements with the EA called 'Enforcement Undertakings' (EUs) to compensate for any environmental damage caused. The first one was for an incident in September 2015 relating to our combined sewer overflow at Long Beck near New Marske with a contribution of £210,000 to a number of local environmental charities.

We were prosecuted for a pollution incident that occurred at Bromley sewage treatment works in 2016 and ordered to pay £33,305 in fines and costs. Two further incidents were taken into account in sentencing.

Our second EU for £135,000 was for an incident that occurred in July/August 2016 concerning a sewer pipe in Hoppers Wood in Durham with donations being split between the local wildlife trust, rivers trust and the marine conservation society.

The third agreed EU was in connection with an incident at Wapping Burn, Peterlee in April 2016 where a compensation sum of £50,000 has been accepted.

To tackle this we brought together a specialist project team to generate a step change in our pollution performance and it has achieved fantastic results. The project team was focused on developing and then implementing ideas to improve pollution performance across our whole wastewater network and assets, including 30,000 km of sewers, 1,200 combined sewer overflows (CSOs) and 413 sewage treatment works (STWs).

We engaged with our people to form a 'blue-light' pollution response team that allowed a small group of individuals to become experts in how they respond to pollution and minimise the impacts. The teams also introduced weekly incident reviews and learning meetings and a new escalation protocol, all as part of a zero tolerance approach to pollution.

We also began to increasingly use data to promote proactive asset maintenance. For example, we targeted increased maintenance and inspection of sewers near watercourses and CSOs.

The project resulted in a clear step change in our performance. The Environment Agency's performance report for 2017 showed how we achieved an industry leading first place for category 1-3 pollution incidents in 2017 and third place in category 1-2 pollutions.

The number of category 1-2 pollutions had been reduced from nine to two and category 3 pollutions reduced from 102 to 48. Pollution performance for 2018 again improved over 2017 levels with 1 category 1-2s and 38 category 3 pollutions (EOY forecast 36).

CATEGORY 1

MAJOR, SERIOUS, PERSISTENT AND/OR EXTENSIVE IMPACT OR EFFECT ON THE ENVIRONMENT, PEOPLE AND/OR PROPERTY

CATEGORY 3

MINOR OR MINIMAL IMPACT OR EFFECT ON THE ENVIRONMENT, PEOPLE AND/OR PROPERTY

CATEGORY 2

SIGNIFICANT IMPACT OR EFFECT ON THE ENVIRONMENT, PEOPLE AND/OR PROPERTY

CATEGORY 4

SUBSTANTIATED INCIDENT WITH NO IMPACT



## CASE STUDY

# WATER RANGERS

Our award-winning Water Rangers community initiative continues to grow and help protect our environment. Volunteers are monitoring 56 public access routes next to streams, rivers, becks, burns and bathing waters across the north east.

Water Rangers patrol over 74 kilometres of waterways every week or fortnight, reporting their findings so that any potential pollution can be dealt with quickly. They also look out for any water leaks on our distribution network and operational issues assets such as blocked outfalls and missing or broken covers.

Volunteers receive thorough training about what to look out for and also report on issues such as fly tipping, fallen trees and missing life buoys. They have also received awareness training on flood risk to support the work of the Environment Agency Flood Warden service.

Since the start of the scheme in 2014 until December 2018, a total of 6,473 patrols were completed by volunteers with 380 issues reported to us. There are currently 78 Water Rangers and 22 assistant Water Rangers in the team. The assistants range from young children to teenagers to dogs who accompany our water rangers helping to patrol the designated routes.

In 2018/2019 we had the best performance to date in terms of issues reported to the Environment Agency since the launch of the scheme. River Guardians were introduced in Teesside where we trained 39 volunteers in pollution awareness; this was delivered in partnership with the River Tees Rediscovered and the Environment Agency.



**56 ROUTES**

**SINCE 2014 AND TO THE END OF DECEMBER 2018, A TOTAL OF 6,473 PATROLS WERE CARRIED OUT WITH 380 ISSUES REPORTED.**



**PATROLLED BY A TEAM OF 78 WATER RANGERS**





## CASE STUDY

# WASTE TO WEALTH COMMITMENT

We are proud to be taking a lead in changing the way resources are used. To show our commitment we joined over 90 signatories and signed the Waste to Wealth commitment, which is set to improve the way resources are used and eliminate avoidable waste by 2030.

We joined businesses including Sky, The Co-operative Bank and Marks & Spencer when we signed up to the commitment at a major conference organised by Business in the Community in November 2018.

By signing the Waste to Wealth Commitment, Northumbrian Water recognise the Intergovernmental Panel on Climate Change (IPCC) challenge that we only have 12 years to change our relationship with the resources we use, if we are to avoid catastrophic climate change and restore the health of our environment.

The signatories are committing to set targets; work collectively; redesign how resources are used; collaborate across industry; and reconvene and report on progress annually.

Our Business Plan for 2020–25 sets a target of eliminating avoidable waste by 2025 and being carbon neutral by 2027.

Chief Executive, Heidi Mottram, took part in a panel discussion at the Waste to Wealth Summit to talk particularly about how we convert sewage sludge into energy.

We are proud to be the only water company in the UK to use 100% of its wastewater sludge. Currently 88GWh of energy – enough to power 7,000 homes – is passed into the grid annually through our gas-to-grid plant at Howdon, North Tyneside. A second gas to grid plant at Bran Sands in Tees Valley is in development.

The event was attended by the HRH The Prince of Wales, who not only delivered a keynote address, but also got to see our LEGO 'Power from Poo' model which was exhibited by our Sludge Process Optimisation Controller, Tony.

"Northumbrian Water has demonstrated leadership and commitment to tackle systemic challenges by signing up to the Waste to Wealth Commitment.

2030 is a critical year if we are to ensure we have an environment in which business and communities can flourish. The risks of inaction are enormous, but so too are the opportunities that could be created from a prosperous and resilient, low carbon economy. We must make the most out of precious resources, waste as little as possible and find ways of turning the waste we do create into new wealth."

Gudrun Cartwright, Environment Director at Business in the Community.

**ONLY UK WATER  
COMPANY TO USE  
100%  
OF ITS  
WASTEWATER  
SLUDGE**





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

## Annual environmental performance and activity

We report on our influence and impact in the environment, the wider economy and society in [Our Contribution report](#).

### NORTHUMBRIA BATHING WATER CONFERENCE

Together with the EA, we organised a Bathing Water Conference in July 2018. Covering topics such as pollution risk forecasting, electronic signage and an impact assessment tool, and well attended by Local Authorities, this was the first such conference with plans in place to repeat it again in 2019.

### SUSTAINABLE WATER MANAGEMENT WORKSHOP

We jointly funded and planned a Catchment Based Approach workshop with the EA in our north east region, focusing on sustainable drainage schemes (SuDS). This session brought together more than 80 local and national partners from 36 organisations, including our Local Authorities, developers, environmental Non-Government organisations (eNGOs) and businesses. Collectively, stakeholders discussed the barriers and challenges of implementing more SuDS within our region, and activities that could be carried out in 2019 – the Year of Green Action - to support sustainable water management.

### WATER TREATMENT WORKS DISCHARGE CHLORINE ANALYSIS AND REPORTING

Following feedback from the EA over permit compliance performance in 2017, we reviewed our sampling and analysis methodology for measuring chlorine in WTW discharges. A new method was accredited by UKAS in June 2018 and has been shared with the EA and the Water Industry.

### PERMITTING AND CHARGING FOR DISCHARGES

We have built on our good working relationship with the EA National Permitting Team to make their application process effective. They have arranged a shared access data system to be available for the EA to view information required

for the completion of applications and also to ensure the correct charges are applied to permits.

### INNOVATION FESTIVAL 2018

At our second Innovation Festival in July 2018, we ran two special 'hackathons' where IT experts used our data to identify new solutions to flooding and leakage.

### THE WATER HUB

We've strengthened our partnership with Durham University, Durham County Council and the EA with the launch of a collaborative project 'The Water Hub'. The aim of the initiative is to engage with Small and Medium-sized Enterprises (SMEs) in the north east of England to identify and develop innovative, practical solutions to challenges in the region's water sector – including key issues like flooding and resilience.

### GREEN PARTNER APP

We're working with the Water Hub and the EA on the Green Partners app. The idea came out of the 'Year of Green Action' sprint at last year's Innovation Festival and has been developed further through follow-on meetings and discussions with partners. This would allow partners to communicate more easily about projects, opportunities, and activities so that we can work more effectively together to achieve individual and shared outcomes. Together we are developing a proposal to scope out what platforms and apps already exist, so that we can understand what would best meet needs in the north east.

### CATCHMENT BASED APPROACH

We continued our extensive engagement with the Catchment Based Approach (CaBA) and the Catchment Partnerships at a local, regional and national level. We worked with the EA national CaBA leads and Area Environment Programme team, supporting catchment-level steering groups and networks, and engaging closely with partners to develop and refine its approach to improving the water environment linked to ambitions for PR19.

Nationally, as well as representing Water UK on the CaBA National Support Group, and the

CaBA Urban Water Group, we contributed to action planning workshops, and led on a series of industry press articles to raise awareness of the approach. The next year will see us working even more closely with CaBA partners at national, regional and local level to understand how we can work together in partnership towards our environmental ambitious goals.

### IN OUR ESSEX & SUFFOLK WATER AREAS, OUR 2018 HIGHLIGHTS INCLUDED:

- The Farm Business Update meeting held in Lavenham in February with more than 100 farmer/landowner attendees. The guest speaker at this event was the well-known weather presenter Jim Bacon. This event is run in partnership with several other organisations including the Environment Agency, Country Land Owners Association (CLA), Natural England, National Farmers Union and Championing the Farmed Environment.
- In September we met up with a newly formed farmer group – the Langham Farm Cluster to consider what in-river and riparian options could be put in place by the farmers with support from other organisations.
- In November we hosted our annual Agrochemicals & Water workshop, in association with Farmacy – a local agronomy company. This year the main topics were soil health and precision farming combined with various presentations from some of the organisations listed above.

In 2018 the Chelmer and Blackwater Partnership has focused on the river Brain (sub-catchment of the Blackwater) through an initiative called 'Clean Streams'. The idea is to engage all farmers and landowners within the sub-catchment through a 1:1 visit, in which the catchment advisor will raise awareness of local issues and identify farm practices that could be improved to reduce the impact on downstream water bodies. The Brain was chosen for this project as a result of high levels of nitrate and phosphate being detected. There is currently ongoing work to prevent ecological/biological deterioration of the Blackwater estuary which has occurred partly as a result of an in-balance in nutrient availability and so this is a perfect example of how partnership working brings about the potential for a much wider impact than a single focus on drinking water protection.

We also see the value in working in partnership with companies that manufacture and distribute Plant Protection Products (PPPs) and fertilisers which have the potential to contaminate drinking water and harm the environment. An example of this is a workshop run last year in collaboration

with the distributor 'Agrii', which demonstrated ways in which farmers could improve the handling of PPPs and fertilisers to minimise the risk to neighbouring watercourses.

### REDUCING CARBON EMISSIONS

Our carbon management plan has the aim of reducing our greenhouse gas (GHG) emissions by 35% by 2020 against a 2008 baseline. We achieved this target, set in 2009. Our net emissions in the year totalled 148.2 ktonnes CO<sub>2</sub>e (31 March 2018: 163.5 ktonnes CO<sub>2</sub>e), less than half the 2008 figure of 303 ktonnes CO<sub>2</sub>e.

Improved energy efficiency and the development of renewable energy have contributed to the reduction along with lower emissions linked to grid electricity. We reported last year that the change of energy supplier to Ørsted in 2018 makes it possible to anticipate becoming carbon neutral within the next decade. We have now made a commitment to that ambition by 2027-28. The energy that Ørsted supplies comes from wind farms around the UK coastline 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 basis our emissions in 2018/19 are just 44 ktonnes CO<sub>2</sub>e.

Despite this success we remain focused on energy efficiency, not least because energy is our biggest controllable cost item after manpower. We are building on the relationship with Ørsted to improve our energy cost efficiency. We have entered into a long term Power Purchase Agreement (PPA), guaranteeing lower cost energy and are also looking to feed real time cost data into our management tools such as Aquadapt, which optimises pumping in the supply of water, avoiding the use of energy when costs are highest.

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.

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

## RENEWABLE ENERGY

We are leading the way in the use of green energy and have signed a long-term agreement with Danish renewable energy specialist Ørsted that will see us take almost a third of our renewable energy demand from an offshore wind farm.

The 10-year deal, the first Corporate Power Purchase Agreement (PPA) of its kind in the UK, is an expansion of a renewable electricity supply agreement between the companies, which started in April 2018.

From March 1, 2019, we will source 30% of our renewable electricity directly from the Race Bank Offshore Wind Farm, off the coast of Norfolk. The move further drives our sustainable and renewable energy strategy, building upon existing solar, hydro, gas to grid and advanced anaerobic digestion (AAD) power generation.

The Corporate PPA will deliver approximately 100 Gigawatt hour (GWh) per year of renewable electricity from the offshore wind farm to our consumption sites in the north east, Essex and Suffolk, amounting to approximately 1TWh across the term.

As well as supporting the growth of our renewable energy activity, the agreement will help drive down costs of operation through a long-term fixed price for electricity.

This PPA is not only a first of its kind in the UK; more importantly it aligns perfectly with our sustainability goals and our ambitions of creating a truly cohesive energy management strategy. The long-term stability this brings is fantastic for us, and great news for our customers and stakeholders, because it reduces operational costs without compromising our work.

Race Bank Offshore Wind farm is one of the newest operational wind farms in the UK with commissioning being achieved earlier this year. It is capable of generating up to 573 megawatts (MW) of green electricity from its 91 Siemens Gamesa 6 MW wind turbines. With the corporate PPA, we will purchase approximately 100Gwh (Gigawatt hour) a year for 10 years, corresponding to 23 MW of capacity from Race Bank.

**100 GWH**  
IS ENOUGH TO  
POWER MORE THAN  
25,000 HOMES





# 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.

The MoS in our water asset health basket are:

- DISCOLOURED WATER COMPLAINTS
- OVERALL DRINKING WATER QUALITY COMPLIANCE
- PROPERTIES EXPERIENCING POOR PRESSURE
- WATER MAINS BURSTS

The MoS in our wastewater asset health basket are:

- SEWAGE TREATMENT WORKS DISCHARGE COMPLIANCE
- POLLUTION INCIDENTS (CATEGORY 3)
- SEWER COLLAPSES (PUBLIC NETWORK)
- REPEAT SEWER FLOODING

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 are to be made at the end of 2017/18, 2018/19 and 2019/20. This is the first assessment point during our current 2015 – 2020 Business Plan period.

We have reviewed our baskets of PCs and can report that a reward has been triggered for excellent performance against a PC in each of our asset health baskets.

In our water asset health basket, a reward of £406,000 has been triggered for excellent performance for discoloured water complaints (page 59). However, as a strong protection for customers, any reward is switched off if any measure is in penalty. The water asset health reward has therefore been inactivated due to a linked measure failing.

Overall drinking water compliance performance was 99.941% against a target of 99.947%. The asset health penalty is fixed at £3,984,750.

In our wastewater asset health basket, a reward of £1,261,000 has been triggered on our repeat sewer flooding measures (page 67), as well as a reward of £64,000 on our pollutions measure (page 72).

## ASSET HEALTH SUMMARY

WATER	DISCOLOURED WATER COMPLAINTS	OVERALL DRINKING WATER 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 Forecast		-£3,984,750			-£3,984,750

WASTEWATER	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 Forecast		£272,000		£1,261,000	£1,533,000

## OUR RESILIENCE FRAMEWORK

We have a strong track record as a resilient company. Our water resources are very secure and we have a security of supply index of 100% in all of our water resource zones (WRZs) across the full 40-year planning period to 2060. Our sewer flooding performance for both internal flooding and repeat flooding incidents demonstrates a magnitude of improvement since 2015.

We understand that the uncertainties that exist in today's world will continue to challenge our business into the future. To build our resilience in the face of these pressures, we have created a Resilience Framework. This considers the entire business, encompassing corporate, financial and operational resilience, so that we can address resilience in the round. For more on this go to [www.nwgourplan.co.uk](http://www.nwgourplan.co.uk).

## CASE STUDY

# DIGITAL TWINS

We are working in partnership with Newcastle University on an exciting project to help protect communities from flooding and incidents through the use of pioneering software.

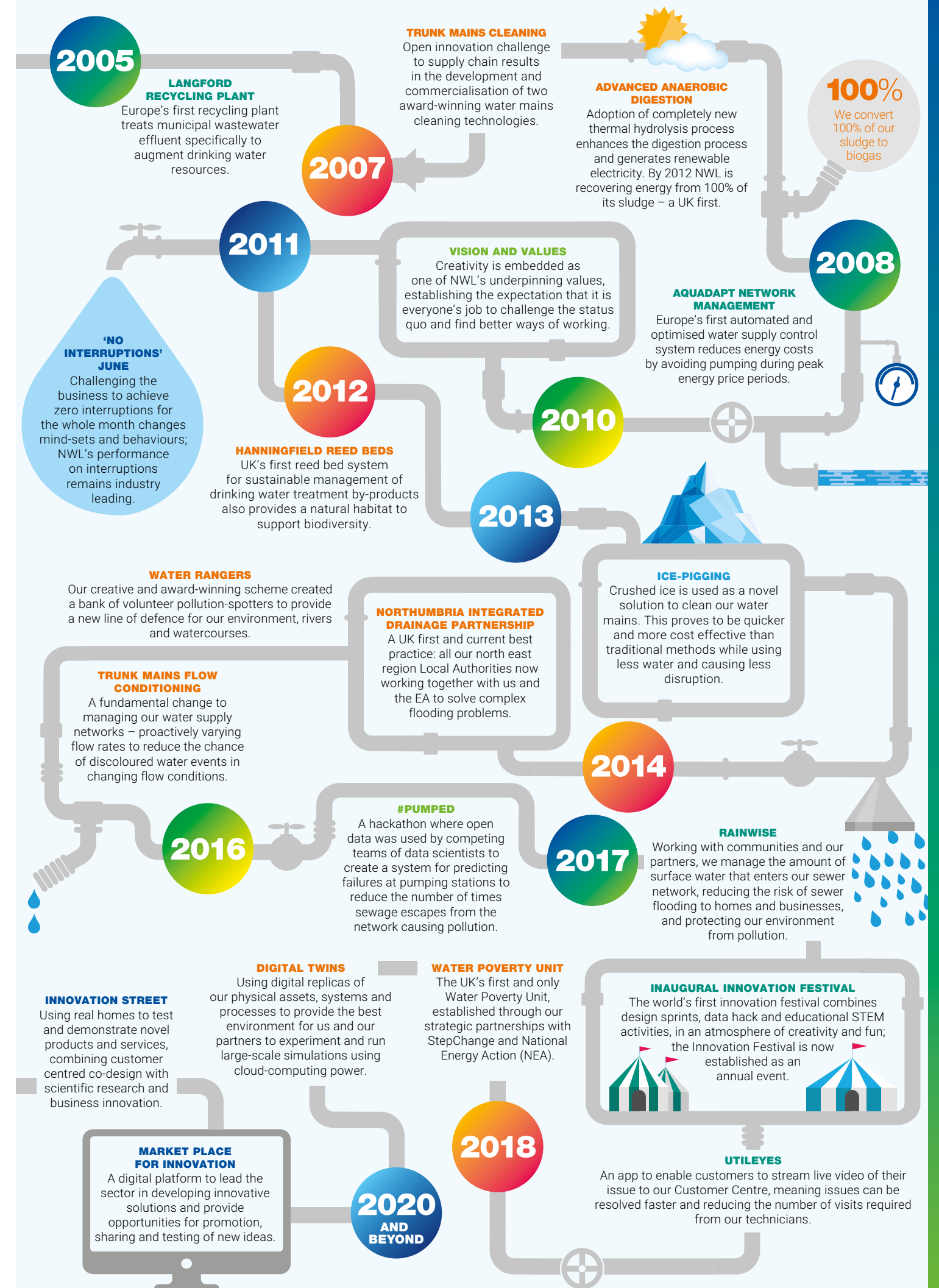
Together with four post-graduate students, we are exploring the use of 'digital twin' technology for the benefit of our customers and the environment.

A digital twin, is a virtual model of the real world. It will allow us to run computer-generated simulations of incidents such as burst pipes, heavy rainfall or serious flooding, to show what could happen to peoples' homes and local communities over a 24 hour period, in just a couple of minutes. This will help us to improve planning, decision-making and response times during real world incidents.

The students are currently helping to develop the 'Twincident' idea, gathering real time data from individual systems across the water and sewer network, and using them in a common framework. Part of this transformation is made possible due to water-modelling software tools developed from fundamental research at Newcastle University over the last six years.

The idea of using digital twin technology in the water industry, came out of our Innovation Festival in July 2018.

We will continue to work with the university to help with innovation solutions for business transformation, which will help with real life scenarios, sustainability and resilience.





# WE ARE AN EFFICIENT AND INNOVATIVE COMPANY

## INNOVATION

At our own annual festival, now in its third year, we gather some of the greatest and most innovative minds from the worlds of business, science, tech, engineering, utilities and customer services.

Our festival goes set about tackling real world problems together in a series of sprints. After five days they come up with ideas and solutions and present them back everyone. We throw in guest speakers, live music, comedy, tech demos, hackathons, face painting and much more.

We first ran it in 2017 which saw 1,000 people from 140 organisations join us at the site village we built at Newcastle racecourse. The results were amazing; 34 innovative ideas and solutions came from the festival and we've seen some of these grow into real life tangible projects that are out in the world right now and making a difference to peoples' lives – like our Moss Tree, the Refill campaign and using data to tackle leakage.

We did it all again in 2018 in both our NW and ESW operating areas; 14 sprint tents and teams, 2 data hacks, 2,000 attendees from 510 businesses and 750 school pupils generating 42 ideas and projects. We had data hacks, poetry, poo shows, yoga sessions, mindfulness seminars and video output through our social media channels that reached 5,669,518.

2018 saw our first ever Innovation event in the Essex & Suffolk Water area. Our 'Day of Innovation', that was held at our Hanningfield reservoir site, was attended by more than 250 innovation experts, scientists, engineers, designers, artists, customers and representatives from major global businesses come together to tackle 13 major social and environmental challenges. The day built on the ideas generated at Innovation Festival 2018 and allowed attendees to test and develop some of the big ideas that came out of the original event.

Some of the major ideas showcased and developed during the day included underground maps, wellbeing apps, travel assistance for the visually impaired, smart devices to monitor the water, 'dog bogs', self-sustaining homes and a 'drop swap' so people can save money as they save water. A team from the 'Blue Planet' sprint even took the event on tour and headed into Billericay to speak to around 40 local businesses about becoming Refill stations, with many signing up on the day.

Underground mapping, [Digital Twins](#) and [Barnacle](#) are all projects that came from the festival and are in development.



## CASE STUDY

# DEEPER UNDERGROUND

Knowing what is underground is vital when we are carrying out works. At our 2018 Innovation Festival we worked with Ordnance Survey (OS) to explore the possibility of creating a shared underground map system that would improve worker safety and reduce the time that the public are inconvenienced by roadworks.

Working with OS and others partners Northern Gas Networks, Northern Powergrid, Openreach, Newcastle City Council, Sunderland City Council and Durham County Council, we have pooled data to create an underground map of Sunderland, which covers around 140,000 properties. For the first time, a digital map shows the infrastructure that exists underground, detailing pipework and cables for water, gas, electricity or telecoms. The technology works on a PC, laptop, smartphone or tablet and is accessible for people out on the ground.

Clive Surman-Wells, Operational Solutions Manager said: "This is a really exciting piece of technology which could be a real game changer for a number of different industries; all our services together on the same map, at the same time, to give us a consolidated view.

"We all face the same issues when digging roads, so it makes sense for us to work together to overcome them, utilising the expertise of trusted advisors Ordnance Survey. Knowing what is underground before we start digging will really help to protect the safety of our workforce, and hopefully reduce the disruption and frustration we cause to our customers through roadworks."



"Knowing what is underground before we start digging will really help to protect the safety of our workforce, and hopefully reduce the disruption and frustration we cause to our customers through roadworks. If the project works successfully in our operating region we are keen to develop this as a national platform."

Clive Surman-Wells, Operational Solutions Manager.

In direct costs alone, this project will save us £1m every year, the water industry £11m every year, and utilities more widely £30m every year. If we consider the cost of damage due to lack of knowledge of the underground infrastructure, we expect this could save us a further £7.33m a year, the water industry £80m and the utilities sector £220m.



# WE ARE PROUD TO CONTRIBUTE TO THE SUCCESS OF LOCAL COMMUNITIES

Our customers tell us that supporting our local communities is an important part of water company life and something they want us to do.

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 and the economic wellbeing of the customers and communities we serve.

We use our skills, assets and experience to support communities in areas that our customers have told us are most important to them. Our activities have a 'ripple effect', going far beyond our direct investment through trade with local suppliers to benefit our regional economies.

We have a far reaching and extensive community programme that includes employee volunteering, supporting important local events, engaging and helping to educate young people around important issues and long standing partnerships that meet local community needs.

## EMPLOYEE VOLUNTEERING

Our people make a difference through our employee volunteering programme, Just an Hour. One of the main objectives is to add value to the community, and to realise this, each of our employees has been given the opportunity to take a minimum of 15 working hours a year to support community initiatives. Last year, 48.4% of our employees took part. 1,527 of our people gave their time to more than 600 organisations (13,992 hours).

## COMMUNITY FOUNDATIONS

In 2018 we donated £25,750 through our Community Foundation partnerships, supporting 20 different organisations. This includes a donation to the Durham City Youth Project to support their Aspiring Leaders scheme, and a grant for Just Ride Southend to help them purchase a wheelchair adapted bike for an inclusive cycling project.

## POWERED BY WATER

Our Powered by Water sporting partnerships were designed to benefit thousands of young people across our Northumbrian and Essex and Suffolk supply areas, teaching them the importance of staying well hydrated and avoiding sugary drinks.

Powered by Water is an interactive educational workshop delivered with our partners Newcastle Eagles Community Foundation, MFC Foundation in Teeside, Foundation of Light in Sunderland, Essex Cricket Foundation and Mowden Park Rugby Club in Darlington.

In 2018 over 27,500 young people participated in a Powered by Water workshop, and thousands more will have the opportunity to take part in 2019.





## IN 2018 WE ACHIEVED:

**£962,837**



FINANCIAL  
CONTRIBUTION TO  
ENVIRONMENTAL,  
COMMUNITY AND  
CHARITABLE NGOS



**1,638**

**CUSTOMERS**  
CUSTOMERS RECEIVING  
SUPPORT AND ADVICE TO  
MANAGE DEBT IN 2018



**962**

**REFILL STATIONS**



**13,000**

YOUNG PEOPLE  
SUPPORTED THROUGH OUR  
EMPLOYABILITY ACTIVITY



**955**

**ORGANISATIONS  
SUPPORTED**



**1,914**

**PATROLS**  
COMPLETED TO HELP  
PROTECT OUR RIVERS



**853,663**

**VISITORS**

TO OUR HISTORICAL AND  
ECOLOGICAL SITES

**12,000**

PEOPLE GIVEN ACCESS  
TO CLEAN WATER AND  
SANITATION THROUGH OUR  
FUNDRAISING FOR

**WaterAid**



**19,485**

NUMBER OF CUSTOMERS  
RECEIVING SUPPORT TO  
MAKE THEIR BILLS MORE  
AFFORDABLE



**174**

**EXISTING  
EMPLOYEES**

FURTHERING  
THEIR CAREERS

**48%**

**OF OUR PEOPLE**

VOLUNTEERED TO SUPPORT  
COMMUNITY PROJECT



**13,992**

**VOLUNTEER  
HOURS GIVEN  
BY OUR PEOPLE**



**56**

**WATER  
RANGER  
ROUTES**

WITH 78 VOLUNTEERS



## CASE STUDY

# GREAT EXHIBITION OF THE NORTH

When the River Tyne's water was launched into the sky by giant fountains as part of the Great Exhibition of the North launch event, onlookers could rest assured that they were seeing great quality H2O in action.

Once one of the dirtiest and most polluted rivers in the UK, the water quality in the Tyne has vastly improved over recent decades, having even become the best salmon fishing river in the UK.

And water sampling conducted by our team to support the event has shown that the industrial pollution of yesteryear remains firmly in the past.

More than 20 sets of samples were taken over the weeks leading up to the festival by our Scientific Services team, in preparation of the Great Exhibition of the North launch event, to make sure the water is as high quality as the 80 days of events that followed.

We were a Supporting Partner of the Exhibition, not only providing the water sampling service to the event, but also involved with and present at a number of the festival's events.

The Great Exhibition of the North was all about celebrating what is fantastic about the North of England, and we are happy to say that the water in the iconic River Tyne is something worth shouting about.

Our region's industrial history has, in the past, blighted rivers such as the Tyne and Tees, but work conducted by ourselves and partners such as the Environment Agency, has resulted in an amazing transformation over the past 30 years or so.

Also on show as part of the Great Exhibition was our industry-leading 'Power From Poo' which was built into the summer's activities as part of a special LEGO showcase!

LEGO artist Steve Mayes, who runs North Tyneside firm Brick This, created an interactive model representing our innovative Advanced Anaerobic Digestion (AAD) work, which uses sludge from wastewater treatment to create energy.

We're the only water company in the UK to use 100% of its wastewater sludge in this way at facilities in Howdon, in North Tyneside, and at Bran Sands, on Teesside.

The model was on display at the Mining Institute, on Newcastle's Westgate Road, throughout the Great Exhibition of the North, alongside more than 40 other displays that Steve has created to showcase innovation and industry across the North of England.

Visitors were able to drop LEGO 'poo' bricks into the model's toilet, lighting up a street scene and reflecting the Power From Poo process from start to finish.





# WE WORK IN PARTNERSHIP TOWARDS COMMON GOALS

Partnership working within our regions is an essential aspect of our approach. By working in partnership with others to deliver common objectives, we can deliver efficiencies and multiple benefits, and support others to achieve their goals too.

In 2018 we 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**.

## SUPPLIERS

In September we were celebrating after scooping two awards at CIPS (Chartered Institute of Procurement and Supply) awards. In recognition for our work in regards to Responsibility Procurement, we were awarded both the category Best Contribution to Corporate Responsibility and named as overall winners. The CIPS awards are recognised as a global benchmark for procurement excellence that any organisation or individual in the procurement and supply chain profession can achieve.

We will also power all 1,858 of our sites using renewable electricity for the next four years after signing a deal worth more than £100m with Danish energy supplier Ørsted.

The contract, one of the biggest we have ever awarded, will cover everything from our largest treatment works down to our smallest telemetry systems. The deal will help us achieve 125,000 tonnes of CO<sub>2</sub> savings each year – more than 600 times the weight of the Angel of the North.

Finally, it is the seventh time in eight years that we have topped British Water's annual list for supplier satisfaction. Each year, the survey measures suppliers' views on how the water and wastewater companies perform and compare with each other. It looks at ten different performance areas, including contract procurement, contractual approach, impact on the supply chain and

communication. Northumbrian Water came out on top, with an average overall score of 7.7 out of 10. We also scored the highest in nine out of ten of the categories.

## LEGACY CONFERENCE

In September 2018 we held our third large gathering with our framework partners and suppliers. Previous events covered Health & Safety and Customer Experience with this one covering another big issue, legacy; the lasting impact we leave behind after our projects.

We wanted to share what legacy means to us and why it's so important that all our projects are delivered with the community in mind. The focus was on developing a positive lasting legacy, leaving the places we work in better condition than how we found them, for the next generation and for more to come. Speakers (from NWG and external companies) talked about legacy in its broadest sense and we have adopted the Five Capitals as a framework for considering our impacts through projects.

Using a mini sprint exercise, teams worked collaboratively to come up with ideas about how we can leave a legacy on real life projects to then be taken forward. We know we can achieve a positive lasting legacy in all we do across the framework partnerships by working collaboratively and our framework partners and suppliers can directly influence how we all embed this concept.

The overall satisfaction from delegates who attended the event was 89%. We were pleased with the response and progress we have already made in these areas

## 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.

- NWG has strengthened its partnership with Durham University, launching an Innovate UK-funded Knowledge Transfer Partnership to develop solutions that will increase flood-resilience in communities, and continuing 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.
- Our partnership with Newcastle University has grown to include hosting a cohort of 15 third-year undergraduate placements from across science and engineering. We are also proud to be supporting three new doctoral training programmes with Newcastle, Northumbria, Cranfield, Sheffield and Nottingham universities: Water Resilience for Infrastructure and Cities (WRIC), Geospatial Systems and One Planet.
- Active working relationship with Innovation SuperNetwork, a north east not for profit SME that is a cross sector network of businesses and organisation. We have grown our network through this link and taken part in VentureFest 2018 which has grown our SME network.
- Strong collaboration with the North East Local Enterprise Partnership (NELEP) especially during our 2018 Innovation Festival through the joint sponsorship of SMEs to join the innovation festival design sprints.



- We have been working with Hedgehog Labs across the year to run design sprints and workshops and build our digital expertise during the innovation festival.
- We regularly work with inventor in residence, Andrew Turner Innovation Limited, on a number of early stage proof of concept projects.
- 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. During 2018 the group held a dissemination event to share the results of our collaborative project on the social cost of Streetworks. In June we held a joint event to share information and best practices on remote imaging (for example, satellites and drones).

## EDUCATIONAL PARTNERS

In 2018 we engaged with 13,000 young people in programmes to support their learning, development and readiness for work.

## ENVIRONMENTAL PARTNERSHIPS – BRANCH OUT

Our Branch Out fund helps to 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.

We supported 17 Branch Out projects in 2018 providing £60,271 in funding. This helped our partners bring in additional funds in excess of £1.8m (at the time of receipt of the applications) to put towards Branch Out projects in our local communities.



## CATCHMENT PARTNERSHIPS

Catchment Partnerships bring organisations together around the table to improve the water environment, and are supported by Defra's wider Catchment Based Approach (CaBA) initiative. By working together with others including the Rivers Trusts, Wildlife Trusts, Local Authorities the Environment Agency, Natural England, Groundwork, the National Trust and others, we can develop shared catchment plans and agree what needs to be done where. We can then pool our activity and funding, focusing our energy on shared goals which make a difference to the water environment for our customers.

Much of our work with the Catchment Partnerships this year has been strategic, in anticipation of the step change we will take in our approach to the environment and catchment management in our 2020-25 Business Plan, and the important role that we anticipate our Catchment Partnerships will play in this.

We have worked with the Catchment Partnerships to develop and refine our approach to improving the water environment, resulting in our new water environment improvements performance commitment, and a new partnership scheme, which we launched at the NWG Innovation Festival

in July 2019. This new approach will allow us to drive and support 'above and beyond' improvements to the areas of streams, rivers, lakes and reservoirs, wetlands coast and beaches which are important to our customers. Delivering wider catchment improvements through partnership working will also help us protect and enhance the natural capital and ecosystem services (healthy soils and clean and plentiful water) we rely on as a business.

We have been working with the Catchment Partnerships to consider catchment solutions as an alternative to removing phosphate from our sewage treatment works in a number of sub-catchments in the Wear and Tees. This innovative approach, called 'catchment nutrient balancing' may mean that instead of expensive end of pipe treatment, we could work with land managers and environmental NGOs to manage phosphate in catchments, through 'payments for ecosystem services'. We could improve catchments upstream through creating more and larger buffer strips, fencing of water courses, planting covers crops, or trapping pollutants in wetlands, with all the multiple benefits this would bring for the environment and our customers.

This year, in addition to planning for 2020, we have continued our extensive engagement with the nine Catchment Partnerships in our NW and ESW regions, including:

- Representing on catchment partnership steering groups and sub-groups from across the business.
- Working together to protecting drinking water, delivering on-farm improvements and hosting and funding events for farmers and land managers.
- Supporting catchment projects, including the EU INTERREG-funded Topsoil project, the Pennine-PeatLIFE project, and the National Lottery Heritage Fund Tees-Swale, Seascapes and Discover Brightwater projects.
- Linking catchment partnership projects to our Water Rangers activity.
- Supporting the development of CaBA through new groups, including in the South Tyne which will help us work towards holistic catchment management linked to our Business Plan ambitions.

Over the past year, we have also been driving and championing CaBA and the Catchment Partnerships through national level representation and engagement. NWL now represents the Water Industry on the CaBA National Support Group and the CaBA Urban Water Group, and have contributed to national workshops and lead on a series of articles in the industry press to raise awareness of the approach. This also draws attention and brings benefits to our region, for example, CaBA funding allowed our north east region to host a conference on Sustainable Urban Water Management in February 2019, bringing together over 80 partners with a challenge to implement more sustainable drainage schemes (SuDS) within our regions which can help take surface water out of our sewerage network, linked to Defra's 2019 Year of Green Action.

The next year will see us working even more closely with our catchment partnerships and CaBA at national, regional and local level to understand how we can work together towards the environmental ambitious goals we set out in our Business Plan.





## CASE STUDY

## RESPONSIBLE PROCUREMENT

Responsible procurement plays a vital role in ensuring we can achieve our vision. We are committed to ethically procuring goods, works and services in a way that generates maximum value, not only to our organisation but also to society and the economy while enhancing the environment.

As part of this, we developed the AIME programme which is our way of making a difference, driving continuous improvement and sharing best practice to instil responsible procurement in everything we do.

AIME stands for Awareness, Identification, Measurement and Enhancement, setting a consistent approach and objectives for all procurement activities. This has led to a series of creative approaches being adopted.

A Responsible Procurement Toolkit was developed to help non-procurement employees with purchasing authority understand key considerations when making procurement decisions. As part of our strategy, we not only actively address the impacts associated with our own procurement, we also give our supply chain the knowledge and tools needed to help them embed responsible procurement in their business activities. Our customer engagement vehicle Flo was used to visit key locations for local businesses, offering mentoring and guidance. Clauses were used in frameworks and contracts to ensure social value commitments were made by suppliers.

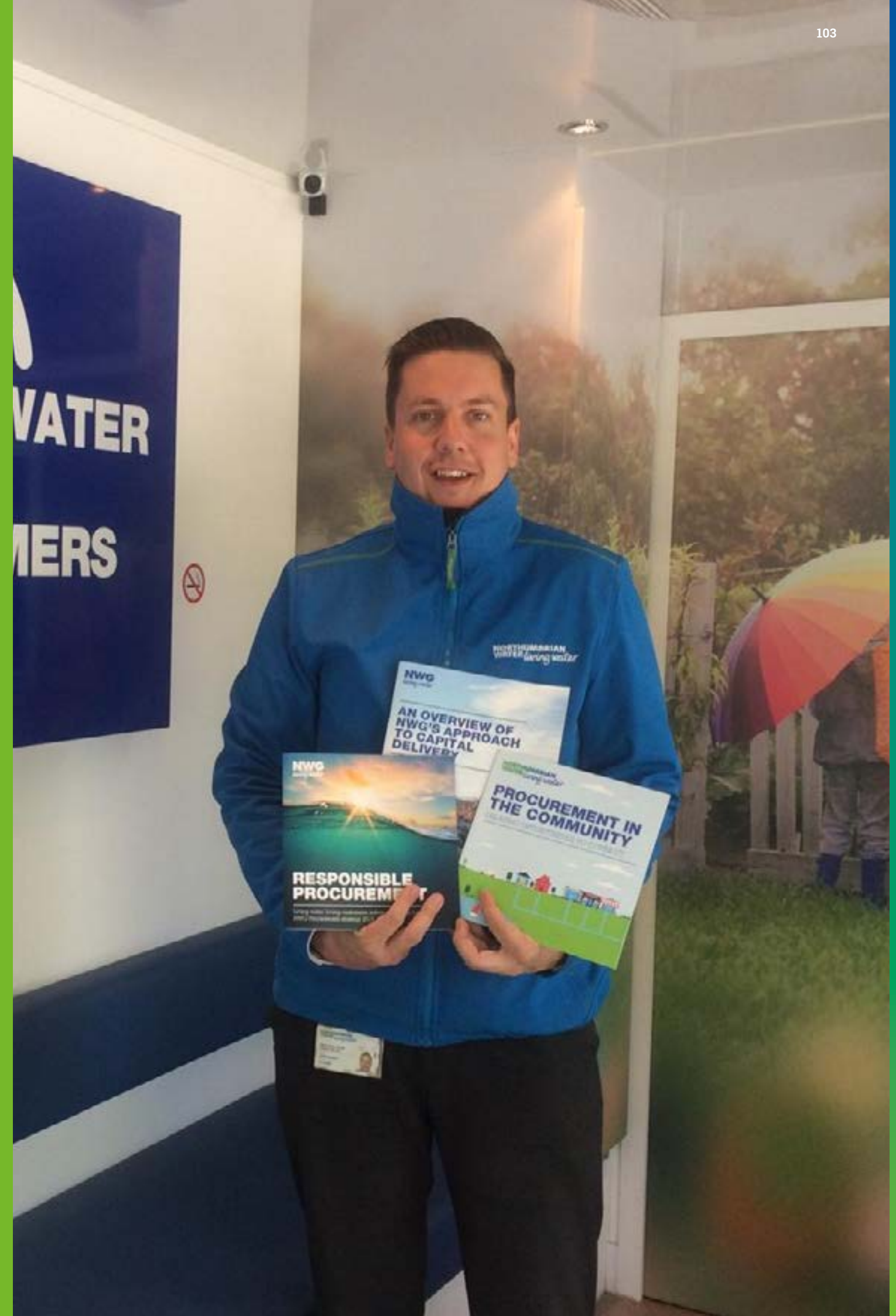
All of our procurement team have undertaken training delivered by the Ethical Trading Initiative, and have all passed the Chartered Institute of Procurement & Supply (CIPS) Ethical test.

An example of the impact of this approach is the recently awarded energy contract, which will mean all 1,858 Northumbrian Water Group sites will be powered by renewable electricity.

Our commitment to responsible procurement will also support our goal to spend 60p out of every £1 with suppliers in our operating areas, and it was recognised through winning the CIPS Supply Chain Management Awards 2018.



**ALL 1,858**  
**OF OUR SITES**  
TO BE POWERED BY  
RENEWABLE ELECTRICITY.





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

Our NWG Academy is a strategy and plan of activities to ensure we have the skills, knowledge and talent we need to continue to give our customers the service they expect and deserve, sustainably.

NWG Academy activities are focused to raise our profile as an industry and an employer with the future workforce, develop the talent already in the business to ensure everyone is fit for the future and retain knowledge as people retire.

The majority of our jobs need people to use Science, Technology, Engineering or Maths (STEM) skills to a greater or lesser extent. We also know that there is an increasing demand for people with these skills in organisations across our operating areas, and the UK in general, as technology advances, and no real increase in the numbers of young people choosing to study these subjects. We actively take opportunities to support national and local initiatives, and partner with other organisations to work with young people to try to spark their interest in a career using STEM skills.

The 2018 NWG Innovation Festival is one example. Partnering with the Life Science Centre in Newcastle and Oracle to give around 750 young people a fun and meaningful experience of STEM skills in action. We had them building vehicles from scratch, programming robots, learning about Bloodhound the supersonic land vehicle aiming to achieve a new world land speed record and designing solutions to address the problem of single use plastics in our oceans.

The WISE (Women Into Science and Engineering) Campaign aims to promote women in science, technology and engineering, and has an objective of reaching 200,000, 11–19 year old girls in the next five years and encouraging them to find

rewarding careers in STEM, where they will be happy and successful. A number of our people who are happy and successful in their STEM careers have volunteered to take the campaign into schools.

Many of the 17 undergraduate placements who are working with us during the 2018/19 academic year, have already committed to developing a career using STEM skills and are gaining valuable experience of work and a commercially valuable qualification in business intelligence, while progressing important projects for the business. Their projects include: identifying opportunities to improve customer service, optimising our current planning system, using intelligence to improve sewage treatment works performance, and improving service levels by identifying causes of failure for jobs.

The skills that make great customer interactions, are also in demand. There are some estimates that more than 75% of jobs in the UK now use these skills on a regular basis. They are certainly very important to us, and will become another area of focus for the NWG Academy's outreach activities with schools, colleges and universities.

Other NWG Academy activities are focused on people already working for us.

We have joined with other utility sector organisations in a Procurement Skills Accord. This collaboration will be a powerful way to address sector-wide skills gaps and shortages. In addition to developing the skills of our people,



we will use our procurement practices to encourage investment in training and skills across our supply chain. We have signed up to robust and challenging commitments which will be audited annually by Energy & Utility Skills. We encourage our suppliers to become signatories and agree training targets with them, as well as promoting relevant skills development across our supply chain.

We decided to view the Apprenticeship Levy as an opportunity when it was introduced in 2016. As a large business we pay 0.5% of the value of our payroll to Government each year and can make use of it as funding for the learning and assessment cost of apprenticeships. We've introduced apprenticeships for young people at the start of their career, in areas we've never had apprentices before, such as our Laboratories and Water Regulations team. We've also been

able to give people working for us the opportunity to build on their knowledge to support their career and professional development.

Continuous learning benefits both individuals and the organisation. Our Intelligent Asset Management project team has been trialling a simple process to get us all into the habit of sharing our learning when we do something different, large and small. This is now being rolled out across the business so we can all continually learn from each other.



## NWG EMPLOYEES LEADING THE WAY FOR THE WATER INDUSTRY

Northumbrian Water received national accreditation from the UK water industry competency body, Energy & Utility Skills, for securing the strict quality standards for water quality operations. In January 2018 we became one of the first water companies to be recognised for achieving high industry standards set out in the latest Competent Operator Scheme (COS) and awarded a certificate of recognition.

The nationwide scheme is a collaboration between Water UK, the Drinking Water Inspectorate (DWI) and Energy & Utility Skills and has been recently introduced as a new benchmark for UK water companies to ensure levels of operational excellence, good practice and compliance are met.

For individuals this has created opportunities to gain a deeper understanding of why they do what they do, to undertake projects and put forward their ideas for improvements and for some to gain an additional qualification. The framework for their learning programme has been the Water Engineering Trailblazer apprenticeship, with tailored learning approaches and packages to meet individuals' needs.

Northumbrian Water's Chief Executive Officer, Heidi Mottram, said: "It's fantastic for us to be recognised for our high standards and we're proud to be one of the first to receive this accreditation in the industry. We are committed to constantly improving and developing best practice across our business, to ensure the levels of service we provide to our customers is second-to-none.

"This recognition would not be possible without our amazing employees who we support to ensure they deliver the best possible service to our customers and provide great, clear tasting tap water."

Nick Ellins, Chief Executive of Energy & Utility Skills, said: "Congratulations to Northumbrian Water for being one of the first regulated water companies in the UK to deliver the necessary quality assurance standards required to secure this new Competent Operator Scheme certification. The scheme sets a nationwide benchmark of good practice that all the companies have signed up to. It is now an essential element of water quality assurance, with operator competence rightly embedded within the Principles of Water Supply Hygiene and water quality policy."

**"I congratulate Northumbrian Water on securing their Competent Operator certificate through the industry-led scheme. This award reflects a commitment to good practice and I support and encourage all companies to have competent operators at the core of their water quality operations."**

Marcus Rink, Chief Inspector of the Drinking Water Inspectorate





DIVERSITY AND INCLUSION

We continue to focus on creating an inclusive culture and attracting people from diverse backgrounds to come and work for us. Our aim is to support all of our people to be the best they can be in an environment where they can thrive at work. We are proud that 83% of respondents in our last employee survey agreed that they feel comfortable being themselves at work.

In March 2018 we published our first gender pay report. Since then we have been working hard to reduce our pay gap and create a better gender balance across all levels of the business.

We are taking positive steps to ensure that our roles are attractive to women as well as men. This has included reviewing the language, imagery and job titles we use when we recruit and highlighting our female role models in operational roles where we traditionally receive lower levels of applications from women.

In 2018 we shared our aspiration to achieve gender-balanced shortlists for senior roles, and for all apprentice and graduate recruitment, gender-balanced interview panels for senior roles and all other roles where possible. Our aim is to minimise the impact of unconscious bias and we have adjusted our adverts to encourage candidates to talk to us about how the role they are applying for can be worked flexibly.

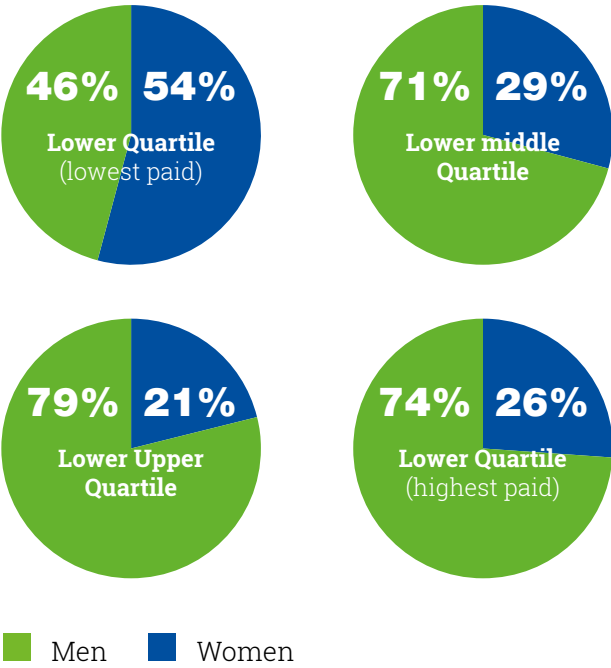
Our managers attend inclusion and unconscious bias training as part of our Leadership and Management Development Programme. This educates managers on the importance and business benefits of an inclusive and diverse workplace and explains how unconscious bias can affect our decision making. Our senior leaders have also attended an Extraordinary Leaders Programme which included coaching to develop emotional intelligence skills and understand how these can impact on creating an inclusive team. All of our new employees receive inclusion awareness as part of our corporate induction and we plan to continue to look for opportunities to enhance this programme over the next year.

Gender pay data

	MEAN		
	2017	2018	OFFICE FOR NATIONAL STATISTICS
Pay Gap	11.5%	12%	17.1%
Bonus Gap	13.93%	36.2%	N/A

	MEDIAN		
	2017	2018	OFFICE FOR NATIONAL STATISTICS
Pay Gap	17.2%	17.6%	17.9%
Bonus Gap	0%	0%	n/a

Proportion of men and women by pay quartiles



We are proud to have a female Chief Executive Officer who has been recently named as one of the Top 100 influential women in the Northern Power Women list and champions gender diversity both regionally and nationally. Over the past year we have highlighted a number of our female role models to demonstrate 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. Videos of our role models at all levels of the business have been shared through our internal and external communications channels including Facebook, Twitter and LinkedIn.

To drive real change in the industry 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. We're proud to be signatories of the WISE 10-steps and most recently the Tech Talent Charter which supports females in technology. 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.

In February 2019, along with 31 other utility companies, we led the launch of the Energy and Utility Skills Partnership inclusion commitment to drive change and work collaboratively to attract more diverse talent to the sector.

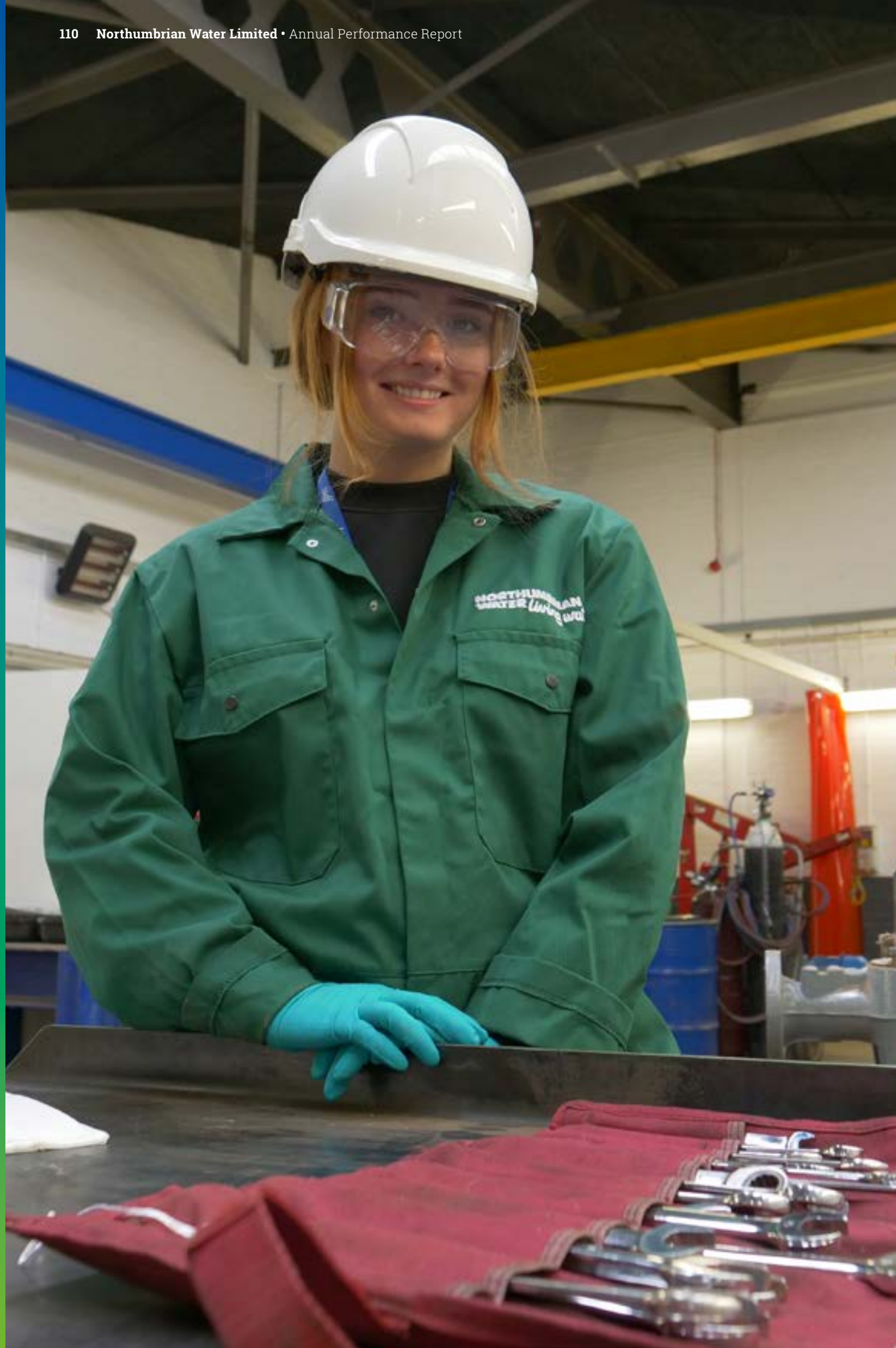
In April 2019 we started the process to sign up to the Social Mobility Pledge. Becoming a Social Mobility Pledge accredited demonstrates our commitment to accessing and progressing talent from all backgrounds, and highlights our work towards improving social mobility.

The three main areas we are committed to are:  
More partnerships with school and colleges, providing careers advice or coaching.

- Structured work experience and/or apprenticeship opportunities to people from disadvantaged backgrounds or circumstances.
- Adopting open employee recruitment practices which promote a level playing field for people from disadvantaged backgrounds or circumstances.







## CASE STUDY

# NATIONAL APPRENTICESHIP WEEK

Apprenticeships form a large part of our learning and development, but it's not all about young people. In fact, the majority of our people who are using an apprenticeship programme – more than 200 of them – are doing so having already been with us for a number of years, sometimes decades.

However, we used National Apprenticeship Week (NAW) 2019 as an opportunity to help parents understand the benefits of apprenticeships. After all, they are key influencers in the post-16 decision-making process.

We teamed up with the Apprenticeships Ambassador Network North East to kick off NAW 2019 with two events, one of which was aimed at parents and sharing the experience of existing apprentices and their parents.

As part of this, and of our wider National Apprenticeship Week activity, we took a step seen as unique and went out to meet some parents and ask them how their son or daughter's apprenticeship had changed their opinions of this route into employment.

"I'm thrilled that 20-somethings still have a role that they can go into, earn, learn, and really get a good understanding of the workplace, a full-time job, and it's really, really life changing. It sounds over the top, but it has been, for Dale, really life changing."

Mandy Cullen, whose son Dale is an Apprentice in our Corporate Communications team.

"Everybody always worries about the outcome at the end, no matter who you talk to. But now, I would say, that's always been our worry, of 'are you going to get a job?' but now I can see the benefits that you don't actually need to worry about that."

Claire Swift, mother of Information Services Degree Apprentice Amber.

We also hosted an event to help educate and encourage businesses that do not already take advantage of apprenticeships.





## 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 eighth year it is still as popular as ever with more than 1,250 employees in 2018 nominating teams and colleagues for demonstrating our values and behaviours.

There are two parts to our ViVa process – a simple thank you card, or a ViVa nomination, a more detailed submission which leads to the person being in with the chance of winning 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.

The evening in 2018 was attended by 140 employees and was 'The Greatest Showman' themed. It was live-streamed on a Facebook group, and after the event, winners are announced through our intranet, in our digital newsletter and on DVD through our face to face Teamtalk sessions.





## CASE STUDY

## MAKE MY DAY

A youngster with neuroblastoma, a charity that supports autistic people and their families, a hospice worker who had coped without a washing machine for nearly a year, and a group of litter pickers were among the recipients of special surprises and volunteering activity as part of our latest Make My Day campaign.

The initiative aims to celebrate our customers and people, and 2018 saw employees out and about delivering surprises and showing their love for the people they serve as Make My Day marked its third year.

Across the north east, Essex and Suffolk, more than 4,200 people were surprised, either as individuals or as members of community organisations.

As part of the campaign, which marks National Customer Service Week, the team:

- Sent a Darlington youngster battling high risk neuroblastoma to LEGOLAND Discovery Centre in Manchester with his family;
- Surprised a Yarm couple who support childrens' road safety with a trip away and some safety wear to pass on to a school;
- Helped set up Durham Scouts' Moor Farm site, near Rainton, ready for 1,200 Scouts arriving for their Confido event;
- Delivered a van full of bicycles to the Bike Stop charity in Darlington – and then left a team behind to maintain and upcycle them;
- Surprised Sunderland's Include In Autism organisation with some sensory pods and other equipment;
- Presented a Chelmsford hospice worker with a washing machine after we heard how she continued to work tirelessly for those under her care, despite her own personal difficulties;
- Called in to surprise employees and dogs at the Basildon Dogs Trust with donations of blankets, dog food and other vital items that had been collected by our people;
- Delivered an impromptu party pack of cakes, tea and biscuits to staff at an Essex hospital ward that had saved the lives of two of our colleagues, following a holiday accident.

'Make My Day' is aimed at showing appreciation and love for people and who contribute to making the communities we serve special, whether it is through their everyday kindness or by having done something nice for them.

We asked our customers to nominate people or organisations that they felt deserved a treat and hundreds of suggestions came in. A panel of judges then tackled the tough task of deciding who the lucky recipients should be. A vote followed for employees to determine further recipients of 'People's Choice' surprises.





# WE ARE SEEN AS A GREAT PLACE TO WORK

## GREAT PLACE TO WORK

We know from our last employee survey that for 81% of our people, work is an important part of their life and that 74% of our people feel proud to work here. Our aspiration is 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.



We were delighted to be awarded as one of the Top 25 Best Big Companies to Work for in the UK in February 2019, coming in at number 19 and being the only water company on the list. Our place in the Top 25 was based entirely on employee feedback through the Best Companies B-Heard survey which took place in October 2018, with 75% of our employees responding.

Our Great Place to Work journey has continued in 2018 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.

In 2018 we held a 'Teamtalk Takeover' where the whole session was focused on our Business Plan submission. This ensured everyone in the business understood how they would contribute to the 14 ambitious goals in the plan.

Our annual employee roadshows are another opportunity for our people to understand our vision and progress towards this. In 2018, Heidi spent more than 110 hours in roadshow sessions. Employees are always invited to discuss things with directors at the roadshows and this year we made it even more personal with groups of 12 having an open discussion with Heidi and their director. Topics ranged from how she balances family life to challenges with leakage.



### Our Values

Our Values are about everything we think, feel, say and do. As a result of feedback from our employee survey and roadshows, changes have been made in teams such as:

- Customer teams have introduced weekly huddles to improve senior manager visibility and communication.
- Our Leisure team made changes to rotas to improve work-life balance.
- Senior leaders in Information Services (IS) spend more time at different office locations, and made sure the office environment was improved and Commercial teams were involved in trialling new meter reading handhelds.

We have continued to embed 'Our Behaviours' through our annual appraisal process and mid-year reviews. These have also been updated to include Leadership behaviours which 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 2018 we took part in the Sunday Times Best Companies to Work survey where 75% of our people responded. Managers have received results for their teams and are involving employees in creating local action plans.

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. At our 2018 Innovation Festival, four Invest Quest finalists entered the Dragon's Den with their money saving ideas and took on our very own dragons.

Peter, lead process technician, and Marc, process technician, won the competition with their Smart Diffusion idea. The dragons were particularly impressed with how they took an operational issue at our sewage treatment plants and used their technical expertise and insight to develop a novel solution that has the potential to transform the effectiveness and efficiency of our treatment processes. The dragons were also excited about the scalability of the solution and its many wider applications.

Our online ideas platform is designed to make it easy for our people to make suggestions through a simple online form, as well as see all of the other submissions made. All submissions go through a review process which is totally transparent on the system. So far we have had 666 ideas and 92 of them have been implemented.



### 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. In 2018 we concluded our Extraordinary Leaders Programme (ELP), an 18-month senior leadership development programme launched in June 2017. It focused on developing emotional intelligence, applying up to date neuroscientific concepts and working with Stephen M R Covey to build relationship and organisational trust. A series of activities took place, including three conference style leadership events, interactive workshops and team and individual coaching. Through this programme our 80 Senior Leaders participated in 360 degree emotional intelligence (EQ) assessments. The programme delivered increases in the areas of empathy, self-knowing and relationship skill.

Our Engaging Leaders Programme is focused on directorate specific activities to address the specific areas required. For example, all of our people managers in customer have participated in a programme of team coaching focusing on how to be the very best leader and enhance self-awareness.

In 2018 we launched our Leadership and Management Development Programme (LMDP) for all new people managers within the Company. 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.



## HEALTH AND SAFETY

Our 'Live well, Work well, Be well' health and wellbeing programme continues to evolve and is driven by our top reasons for absence and feedback we receive from employees.

Our network of Wellbeing Champions support our people by ensuring their teams are aware of our internal wellbeing support such as our Employee Assistance Programme for mental health or our Physiotherapy service for physical health. Our Employee Assistance Programme is available to employees and family members. It offers online and telephone support, including counselling.

Over the last year we have trained more than 30 Mental Health First Aiders across the business who are available to have conversations with people who may be struggling with their mental health and require signposting to support. We have started a new programme for all people managers to receive mental health awareness training to equip them to have conversations with their people and spot signs and symptoms.

On our main sites we have designated quiet rooms if people want some time out and we encourage people to take their lunch breaks and provide access to lunchtime walking routes on our wellbeing intranet pages.

Every employee is invited to a personal resilience half day workshop which 92% have rated as excellent. This focuses on looking after your own wellbeing and if you are a people manager, that of your team too. New starters receive our personal resilience toolkit too, to help build resilience from their first day.

As part of annual wellbeing calendar we also hold a month-long wellbeing challenge twice a year for individuals or teams with challenges focusing on the physical (weight loss and physical activity) and mental (energy and resilience). We also hold quarterly wellbeing weeks, which include activities ranging from health checks to yoga and mindfulness, as well as monthly awareness campaigns.

At our 2018 Innovation Festival, one of our sprints was themed around creating happier, healthier and safer workplaces. One of the ideas from this sprint was how we could educate and raise awareness of the menopause with employees and managers. As a result of this we have held menopause awareness sessions and webinars and produced a menopause toolkit giving guidance and support.

At the end of 2018 we were re-awarded Continuing Excellence in the North East Better Health at Work Award, a partnership project between the local authorities, NHS and add Trade Union Congress (TUC), for our ongoing commitment to support the wellbeing of our employees.

We won the Constructing Excellence National award for health and safety in 2017 and have continued a more proactive approach to customer experience during projects in 2018 which has been recognised through a variety of awards and customer feedback.

Every year we hold roadshows to share our progress on our journey to national leader. In 2018 a third of the employee roadshow experience was dedicated to a Virtual Reality safety session. After hearing a voiceover of a colleague who had an accident, every colleague then put on their VR headset to experience different virtual spaces (including a treatment works and a roadside scenario). The session aimed for employees to look for hazards they'd see in their working day. In total 2,254 people attended over 60 events across seven venues. We had some positive feedback including from Our Independent Non-Executive Director who said: "NWG is really pushing the boundaries using virtual reality to communicate a really important message."

We've seen our leading safety indicators improve as a result of these events.

In our latest employee survey 87% of respondents agreed that we have a strong safety culture.





## CASE STUDY

## DIVERSITY AND INCLUSION

As a member of the Energy & Utilities Skills Partnership, we joined 31 other energy and utilities employers to launch a long-term commitment to attract more diverse and inclusive talent into our industry, reflecting the communities we serve.

The Partnership recognised in its Workforce Renewal Skills Strategy: 2020 that its current workforce fails to fully represent the 65 million people it serves every day. It has been joined by an additional four organisations in making the pledge.

83% of the sector's workforce are male, compared with 47% for all sectors nationally. Women, people with disabilities, the BAME community and under 24s have traditionally been under-represented in the energy and utilities sector, compared with national averages.

We are passionate about attracting, supporting and retaining a diverse workforce. Being truly inclusive and representative of our communities is essential if we are to achieve the ambitious goals we have set ourselves for the future, in areas including customer experience, affordability and innovation.

This is an important commitment working with others in the sector to really drive change and we look forward to continuing to see improvements in the diversity of the water industry and beyond.

To tackle this challenge, and to build a resilient workforce for the future, the 32 leading employers have committed themselves to drive change and work collaboratively to attract, recruit and retain a more diverse talent to the sector. Employing around 566,000 people across the UK, the sector will need over 221,000 new recruits to fill its expected skills gap by 2027.

The commitment will challenge the sector to act and think differently and aims to inspire and connect with underrepresented groups, attracting new talent and ideas into the energy and utilities industry.



## OUR WORKPLACES ARE HEALTHY AND SAFE

It is our aspiration and ethical responsibility to make sure that everyone goes home safe every day.

Looking after our people, supply partners, suppliers, customers, communities and the environment is part of who we are and is reflected in what we think, feel, say, and do.

When looking at Lost Time Accidents (LTA) as our main measure, the overall performance continued to be disappointing. However, this needs to be looked at through the context of significantly increased awareness and focus on safety within the business, culminating in over 6,445 voluntary 60 Second Checks being completed by employees through their working days. (60 Second Checks

are done either using cards, or a phone app, employees answer simple questions that check to see if it's safe to proceed with their job or not.) During these checks 235 jobs were stopped as employees deemed it was not safe to continue, which is another positive measure.

In 2018 we started to revamp many of our safety systems and procedures with an emphasis on rationalising and simplification of processes. These processes and procedures launched in Spring 2019.

**OVER  
6,445  
VOLUNTARY 60  
SECOND CHECKS  
COMPLETED**



## CASE STUDY

# EVERYONE HOME SAFE EVERY DAY

Whether it's replacing valves, working with chlorine, digging holes or working underground, our people put themselves in hazardous situations every day to deliver clean, clear water that tastes great to our customers. Our aspiration is simple – we want to get *Everyone Home Safe Every Day*.

Engaging our people is central to achieving to this. Our engagement activity through the Everyone Home Safe Every Day campaign is about more than reducing accident levels – it's ultimately about saving lives. Our innovation is about bringing people together, using technology and conversation hand in hand so our people go home to their family every day.

With lots of our employees having worked for the organisation for years, we've explored new ways to communicate and engage with our workforce. We've shaken things up to try show people they have a part to play, no matter how long they've worked here or how much experience they may have.

Taking a different approach to the way we engage with our people about safety has made people sit back and take more notice about the things they do every day.

In the past year, nearly 2,000 employees have attended an Everyone Home Safe Every Day half day workshops and more than 650 safety conversations were held. Our weekly Everyone Home Safe Every Day learning calls, open to everyone in the company to attend, have discussed and shared learnings from 285 events and incidents and our employees have submitted 518 'Spot Its' to prevent dangerous occurrences turning into accidents.

Finally we incorporated our Everyone Home Safe Every Day principles into our Executive Leadership Team's 2018 roadshow program, with a large focus on safety, which included an award winning virtual reality (VR) session exploring scenarios and hazards within NWG. By using innovation and technology, such as VR, and smartphone apps with a real purpose, and making it part of a wider engagement campaign to drive behavioural changes, we've helped people understand the vital role they all play to stay safe at work.

Our employee survey scores in December 2018 showed a 3% increase in the score for 'I feel we have a strong safety culture' over a 12 month period, so a good step up in a short space of time.



OVER  
**650**

**SAFETY CONVERSATIONS  
WERE HELD**





# WE ARE A COMPANY THAT CUSTOMERS TRUST

We work in partnership with customers all year round so that they can trust we have their best interests at heart in everything we do. What better way than to have conversations with our customers to make sure we are working in partnership with them to co-create the services they want and need.

Throughout 2018 we carried out customer research as part of our PR19 Business Plan and were delighted that 91% of customers involved accepted our plan.

We believe we received such excellent levels of customer support for our plan, because it was shaped by the views of more than 400,000 customers, as well as by other stakeholders.

Also co-created by customers is our Inclusivity Strategy which we launched in May 2018 to bring Water without the Worry to all our customers. The strategy includes our ambition to eradicate water poverty across our regions by 2030. It also benefited from the challenge and scrutiny of members of the Water Forums who were able to provide expert advice and guidance. The strategy reflects what is most important to our customers when it comes to the services we provide and the extra help we offer.

As we developed our PR19 Business Plan, we made sure that around a quarter of the customers that were involved were those who may benefit from extra support.

Historically we have always had a strong track record in this area and were named Most Trusted Water Company seven times previously in CCWater's Water Matters report that surveys customers. In CCWater's most recent "Water Matters" report, our trust score in Essex and Suffolk has improved slightly but is just below industry average. In our Northumbrian region our score is above average.

Our track record for trust is further supported by our continued presence (and being the only water company) on Ethisphere's Most Ethical Companies list (see case study on [page 126](#)).

We also carry out our own continuous customer research to understand trends in customer satisfaction. This includes our quarterly tracking surveys with both customers and stakeholders. Our tracking research engages with more than 6,000 household and non-household customers and stakeholders each year. This research measures our customers' perceptions of service, satisfaction with value for money, experience of our campaigns as well as general 'brand' perceptions.

Our tracking research helps us to understand our performance from our customers' perspectives and to respond to any changes in satisfaction by looking into these further and making improvements. We're delighted that in the first quarter of 2019, our customer trust score is 8.9 and our stakeholder trust score has increased from 8.2 to 8.3.

Further evidence of the level of trust that customers place in us can be seen in our strong NPS (Net Promoter Score) that compares well to other companies in our sector, as well as other companies recognised as leading brands by customers (we know this because of information published by Satmetrix, the independent company who conduct NPS surveys throughout the country).

On 31 January 2019, Ofwat published its Company monitoring framework: 2018 assessment. Ofwat assessed each company under 12 areas. We were delighted that we continued to 'exceed expectations' for our [Assurance Plan](#).

For two of the other areas assessed (Water Resources Management Plan and market information, and Cost Assessment) Ofwat raised minor concerns. We had already recognised that we had weaknesses in these areas and have put in place arrangements to make sure that all of the minor concerns are addressed.

We were disappointed that because of the minor concerns, Ofwat re-categorised our 'self assured' status to 'targeted'. Our desire to continually improve, which helps to maintain trust and confidence with our customers and stakeholders, remains and we will work hard to regain 'self assured' status in 2019.

Our Governance and Assurance framework also builds upon our integrated management system and commitment to quality assurance. We have companywide certification to the following standards:

- ISO 9001. A quality management system;
- ISO 14001. An environmental management system;
- OHSAS 18001. An occupational health & safety management system;
- ISO55001. Asset management.

In addition, our sampling and laboratory analysis are accredited to the demanding ISO 17025 standard.





## CASE STUDY

# ETHISPHERE AND BEST COMPANY

We are proud to have been recognised in a number of prestigious awards this year. Most recently, we have been named as one of the 'most ethical companies' in the world. It's the eighth time that we've received this global recognition from the Ethisphere institute.

We're the only water company in the world to be included in this year's World's Most Ethical Company® list and one of only two UK based companies on the list.

Alongside this, we were also recently named as one of the 'best companies' to work for in the UK, securing a spot in the 2019 Sunday Times 25 Best Big Companies to Work For list. The list is compiled using a survey that measures employee engagement across a range of factors, including wellbeing, pay and benefits, personal growth and leadership. The independent survey gives employees the chance to rate their employer and over 75% of our employees took part in the survey giving their views.

We scored particularly well for encouraging employees to 'give something back' to their local communities, with 91% of respondents agreeing that we encourage charitable activities. This is our Just an Hour scheme, where all employees are given a minimum of 15 hours paid time to volunteer in their local communities.

85% of respondents also believed they could make a valuable contribution to the success of the organisation and 82% agreed that people in their team go out of their way to help them. Not only were we recognised nationally as a top employer, we were the only UK water company to feature in the latest Sunday Times list.







## REGULATORY ACCOUNTS



# DIRECTORS' RESPONSIBILITIES AND DECLARATIONS

for the year ended 31 March 2019

## 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 2019, 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 2019;
- 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 2023), of which £440m was undrawn at 31 March 2019; and
- the Company's formal governance and risk management arrangements which are monitored by the Audit Committee, Risk & Compliance Committee and Board.

## CONDITION I30 (CREDIT RATING)

The Directors also confirm that throughout 2018/19 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

The Directors believe that the Appointed Business is well placed to manage its business risks and expect that the business can continue to operate effectively and meet its financial obligations over the six years to March 2025, and over the long term beyond this time horizon.

Further information in respect of this statement is provided in the Company's [Financial Statements](#) for the year ended 31 March 2019, on pages 95 and 96 of the Governance Report. The Financial Statements are available on the Company's websites.

## APPLICATION OF DIVIDEND POLICY

As required by UK legislation for all companies, dividends can only be paid out of distributable profits, either from the current year or accumulated from previous years. Profits are what remains from the revenue received from our customers after deducting the costs of operating our business to meet our obligations to customers, suppliers and employees, payments to government through various types of taxation, and interest payable on loans provided to finance the business.

Expenditure includes any amounts payable to customers where agreed service levels have not been met, any penalties payable to regulators, and investments required in our assets to ensure that performance will meet the required levels in the future.

Expenditure on employees includes remuneration, national insurance and pension contributions payable to pension schemes as agreed with the pension schemes trustees, including amounts related to making good pension scheme deficits.

The Board makes all decisions 'in the round' and, when declaring dividends, takes a holistic view of business performance, the prospects of the Company and the principal risks facing the business, as well as having regard to levels of operational performance, investment requirements, customer service and our employee pension obligations.



In deciding upon the level of dividends to pay in any year, the Directors consider the future investment and financing needs of the Company as set out in our detailed five year plan, and take account of the sensitivity of those plans to the principal risks facing the Company. Less detailed projections are used to consider periods beyond the next five years.

The five year plan reflects all our expenditure plans to deliver excellent levels of service to our customers and our commitments to customers, regulators and other stakeholders, as well as investment to maintain the health and long term resilience of our assets. The Directors also take account of prospects of future performance against these commitments.

In considering the future financing requirements, the Directors consider the requirement in the five year plan to raise new financing to continue to finance the business. Providers of finance have particular regards to the credit rating of a company as determined by reputable credit rating agencies. The Directors therefore ensure that before paying any annual dividend, there is a reasonable expectation of the targeted level of credit rating being achieved and the assumed level of financing being available. The Directors target maintaining the Company's investment grade credit ratings and a gearing level of the regulated business of less than 70%. Dividends are therefore constrained by the availability of profits, and the availability of finance to meet the needs of the business while maintaining targeted credit ratings and gearing levels.

Finally, after taking account of all the above factors, the Directors, in common with all UK companies, have regard to the expectations of the shareholders in setting dividend levels. Our shareholders have provided the necessary capital and financial backing required to run the business and in return receive a dividend return on the capital they have invested. The returns to shareholders are not guaranteed as the shareholders bear many of the significant risks associated with the business. The Board has very clear communication routes with shareholders. As well as having a clear view of their expectations, the Board manages those expectations carefully in line with how the Company is performing and the Board's view of future prospects.

By order of the Board



**Andrew J Hunter**  
Chairman  
12 July 2019



**Heidi Mottram**  
CEO  
12 July 2019



**Paul Rew**  
Senior Independent  
Non-Executive Director  
12 July 2019

# REGULATORY ACCOUNTING POLICIES AND DISCLOSURES

for the year ended 31 March 2019

## (A) REGULATORY ACCOUNTS – BASIS OF ACCOUNTING

The Regulatory Accounting Statements, on [pages 138 to 151](#) 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 disappplied 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 2018 of £55.4m was marginally lower than the amounts subsequently billed to customers of £56.5m, the increase reflecting higher 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. All debt greater than 48 months old is fully provided for. 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. The provision has increased from £79.9m at 31 March 2018 to £85.5m at 31 March 2019. This reflects the additional provision made in the year as outstanding debt has aged, less debt written off and the reduction made as a result of the comparison to historical collection rates.

### (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 2019, in the Remuneration Committee Report on pages 82 to 93. 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.





## **SECTION 1:**

# **REGULATORY FINANCIAL REPORTING**





## 1A INCOME STATEMENT

### Financial performance for the 12 months ended 31 March 2019

	STATUTORY	ADJUSTMENTS			TOTAL APPOINTED ACTIVITIES
		DIFFERENCES BETWEEN STATUTORY AND RAG DEFINITIONS	NON-APPOINTED	TOTAL ADJUSTMENTS	
	£'m	£'m	£'m	£'m	£'m
Revenue	869.1	(22.0)	(23.3)	(45.3)	823.8
Operating costs	(530.3)	10.4	16.7	27.1	(503.2)
Other operating income	-	2.8	-	2.8	2.8
<b>Operating profit</b>	<b>338.8</b>	<b>(8.8)</b>	<b>(6.6)</b>	<b>(15.4)</b>	<b>323.4</b>
Other income	-	10.4	(1.2)	9.2	9.2
Interest income	3.2	0.3	(2.9)	(2.6)	0.6
Interest expense	(120.4)	(8.8)	0.3	(8.5)	(128.9)
Other interest expense	(2.2)	-	-	-	(2.2)
<b>Profit before tax and fair value movements</b>	<b>219.4</b>	<b>(6.9)</b>	<b>(10.4)</b>	<b>(17.3)</b>	<b>202.1</b>
Fair value gains/(losses) on financial instruments	(11.5)	-	-	-	(11.5)
<b>Profit before tax</b>	<b>207.9</b>	<b>(6.9)</b>	<b>(10.4)</b>	<b>(17.3)</b>	<b>190.6</b>
UK Corporation tax	(33.6)	-	1.2	1.2	(32.4)
Deferred tax	(5.5)	1.2	(0.1)	1.1	(4.4)
<b>Profit for the year</b>	<b>168.8</b>	<b>(5.7)</b>	<b>(9.3)</b>	<b>(15.0)</b>	<b>153.8</b>
<b>Dividends</b>	<b>(130.0)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(130.0)</b>
<b>Tax analysis:</b>					
Current year	(34.9)	-	1.2	1.2	(33.7)
Adjustments in respect of prior years	1.3	-	-	-	1.3
<b>UK Corporation tax</b>	<b>(33.6)</b>	<b>-</b>	<b>1.2</b>	<b>1.2</b>	<b>(32.4)</b>
<b>Analysis of non-appointed revenue:</b>					
Imported sludge	0.1				
Tankered waste	1.6				
Other non-appointed revenue	21.6				
<b>Revenue</b>	<b>23.3</b>				

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 2019

	STATUTORY	ADJUSTMENTS			TOTAL APPOINTED ACTIVITIES
		DIFFERENCES BETWEEN STATUTORY AND RAG DEFINITIONS	NON-APPOINTED	TOTAL ADJUSTMENTS	
	£'m	£'m	£'m	£'m	£'m
Profit for the year	168.8	(5.7)	(9.3)	(15.0)	153.8
Actuarial losses on post employment plans	(17.1)	-	0.1	0.1	(17.0)
Other comprehensive income	1.7	-	-	-	1.7
<b>Total Comprehensive income for the year</b>	<b>153.4</b>	<b>(5.7)</b>	<b>(9.2)</b>	<b>(14.9)</b>	<b>138.5</b>



## 1C STATEMENT OF FINANCIAL POSITION

### Financial performance for the 12 months ended 31 March 2019

(Registered number 02366703)

	ADJUSTMENTS				
	STATUTORY	DIFFERENCES BETWEEN STATUTORY AND RAG DEFINITIONS	NON-APPOINTED	TOTAL ADJUSTMENTS	TOTAL APPOINTED ACTIVITIES
	£'m	£'m	£'m	£'m	£'m
<b>Non-current assets</b>					
Fixed assets	4,452.3	(38.9)	(100.0)	(138.9)	4,313.4
Intangible assets	74.7	(3.7)	(0.2)	(3.9)	70.8
Investments – loans to group companies	160.9	-	(160.9)	(160.9)	-
Investments – other	-	-	-	-	-
<b>Total non-current assets</b>	<b>4,687.9</b>	<b>(42.6)</b>	<b>(261.1)</b>	<b>(303.7)</b>	<b>4,384.2</b>
<b>Current assets</b>					
Inventories	3.6	-	(0.5)	(0.5)	3.1
Trade & other receivables	182.9	4.2	(7.4)	(3.2)	179.7
Cash & cash equivalents	5.0	16.7	-	16.7	21.7
<b>Total current assets</b>	<b>191.5</b>	<b>20.9</b>	<b>(7.9)</b>	<b>13.0</b>	<b>204.5</b>
<b>Current liabilities</b>					
Trade & other payables	(145.9)	(4.2)	3.8	(0.4)	(146.3)
Capex creditor	(24.7)	-	0.6	0.6	(24.1)
Borrowings	(51.2)	(16.7)	17.2	0.5	(50.7)
Current tax liabilities	(7.1)	-	0.6	0.6	(6.5)
Provisions	(0.2)	-	-	-	(0.2)
<b>Total current liabilities</b>	<b>(229.1)</b>	<b>(20.9)</b>	<b>22.2</b>	<b>1.3</b>	<b>(227.8)</b>
<b>Net current assets / liabilities</b>	<b>(37.6)</b>	<b>-</b>	<b>14.3</b>	<b>14.3</b>	<b>(23.3)</b>

	ADJUSTMENTS				
	STATUTORY	DIFFERENCES BETWEEN STATUTORY AND RAG DEFINITIONS	NON-APPOINTED	TOTAL ADJUSTMENTS	TOTAL APPOINTED ACTIVITIES
	£'m	£'m	£'m	£'m	£'m
<b>Non-current liabilities</b>					
Trade & other payables	-	-	-	-	-
Borrowings	(2,824.3)	-	-	-	(2,824.3)
Financial instruments	(42.2)	-	-	-	(42.2)
Retirement benefit obligations	(108.5)	-	2.0	2.0	(106.5)
Provisions	(0.9)	-	-	-	(0.9)
Deferred income – grants and contributions	(387.4)	-	107.2	107.2	(280.2)
Deferred income – adopted assets	(102.9)	-	-	-	(102.9)
Deferred tax	(409.0)	7.3	2.1	9.4	(399.6)
<b>Total non-current liabilities</b>	<b>(3,875.2)</b>	<b>7.3</b>	<b>111.3</b>	<b>118.6</b>	<b>(3,756.6)</b>
<b>Net assets</b>					
	<b>775.1</b>	<b>(35.3)</b>	<b>(135.5)</b>	<b>(170.8)</b>	<b>604.3</b>
<b>Equity</b>					
Called up share capital	122.7	-	(30.6)	(30.6)	92.1
Retained earnings & other reserves	652.4	(35.3)	(104.9)	(140.2)	512.2
<b>Total Equity</b>	<b>775.1</b>	<b>(35.3)</b>	<b>(135.5)</b>	<b>(170.8)</b>	<b>604.3</b>

Approved by the Board of Directors on 12 July 2019 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 FOR THE APPOINTED BUSINESS

Financial performance for the 12 months ended 31 March 2019

	TOTAL APPOINTED ACTIVITIES
	£'m
Operating profit	323.4
Other income	9.2
Depreciation	134.1
Amortisation of grants and contributions	(5.3)
Changes in working capital	(31.1)
Pension contributions	(27.1)
Movement in provisions	45.3
Profit on sale of fixed assets	(2.8)
<b>Cash generated from operations</b>	<b>445.7</b>
Net interest paid	(96.7)
Tax paid	(37.9)
<b>Net cash generated from operating activities</b>	<b>311.1</b>
<b>Investing activities</b>	
Capital expenditure	(251.7)
Grants & contributions	11.6
Disposal of fixed assets	3.3
Other	-
<b>Net cash used in investing activities</b>	<b>(236.8)</b>
<b>Net cash generated before financing activities</b>	<b>74.3</b>
<b>Cashflows from financing activities</b>	
Equity dividends paid	(130.0)
Net loans received	56.1
Cash inflow from equity financing	-
<b>Net cash generated from financing activities</b>	<b>(73.9)</b>
<b>Increase in net cash</b>	<b>0.4</b>

## 1E NET DEBT ANALYSIS AS AT 31 MARCH 2019

Appointed Business only

	INTEREST RATE RISK PROFILE			
	FIXED RATE	FLOATING RATE	INDEX LINKED	TOTAL
	£'m	£'m	£'m	£'m
Borrowings (excluding preference shares)	1,812.8	43.1	1,019.1	2,875.0
Preference share capital				-
<b>Total borrowings</b>				<b>2,875.0</b>
Cash				(16.7)
Short term deposits				(5.0)
<b>Net Debt</b>				<b>2,853.3</b>
Gearing %				66.8%
<b>Adjusted gearing</b>				<b>66.8%</b>
Full year equivalent nominal interest cost	81.6	0.8	39.3	121.7
Full year equivalent cash interest payment	81.6	0.8	13.9	96.3
<b>Indicative interest rates</b>				
Indicative weighted average nominal interest rate	4.44%	1.71%	3.84%	4.19%
Indicative weighted average cash interest rate	4.44%	1.71%	1.36%	3.32%
Weighted average years to maturity	10.7	7.9	18.7	13.5



## 1F FINANCIAL FLOWS

For the 12 months ended 31 March 2019 and for the price review to date (Price Base 2012/13 RPI average)

	12 MONTHS ENDED 31 MARCH 2019					
	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
	%	%	%	£'m	£'m	£'m
Return on regulatory equity	5.64	5.05	5.64	77.7	69.6	69.6
Actual performance adjustment 2010–2015	1.30	1.17	1.30	17.9	16.0	16.0
<b>Adjusted Return on regulatory equity</b>	<b>6.94</b>	<b>6.22</b>	<b>6.94</b>	<b>95.6</b>	<b>85.6</b>	<b>85.6</b>
<b>Regulatory equity (£m)</b>	<b>1,376.9</b>	<b>1,376.9</b>	<b>1,233.2</b>			
<b>Financing</b>						
Gearing	-	0.45	0.51	-	6.3	6.3
Variance in corporation tax	-	0.04	0.04	-	0.6	0.6
Group relief	-	-	-	-	-	-
Cost of debt	-	1.28	1.52	-	17.6	18.7
Hedging instruments	-	0.23	0.27	-	3.2	3.4
<b>Financing total</b>	<b>6.94</b>	<b>8.22</b>	<b>9.28</b>	<b>95.6</b>	<b>113.3</b>	<b>114.6</b>
<b>Operational Performance</b>						
Totex out / (under) performance	-	(0.71)	(0.79)	-	(9.8)	(9.8)
ODI out / (under) performance	-	(0.22)	(0.25)	-	(3.1)	(3.1)
Retail out / (under) performance	-	(0.20)	(0.23)	-	(2.8)	(2.8)
Other exceptional items	-	-	-	-	-	-
<b>Operational performance total</b>	<b>-</b>	<b>(1.13)</b>	<b>(1.27)</b>	<b>-</b>	<b>(15.7)</b>	<b>(15.7)</b>
<b>Total earnings</b>	<b>6.94</b>	<b>7.09</b>	<b>8.01</b>	<b>95.6</b>	<b>97.6</b>	<b>98.9</b>
<b>RCV growth from RPI inflation</b>	<b>3.06</b>	<b>3.06</b>	<b>3.06</b>	<b>42.1</b>	<b>42.1</b>	<b>37.7</b>
<b>Total shareholder return</b>	<b>10.0</b>	<b>10.15</b>	<b>11.07</b>	<b>137.7</b>	<b>139.7</b>	<b>136.6</b>
<b>Net dividend</b>	<b>4.00</b>	<b>8.15</b>	<b>9.10</b>	<b>55.1</b>	<b>112.3</b>	<b>112.3</b>
<b>Retained Value</b>	<b>6.00</b>	<b>2.00</b>	<b>1.97</b>	<b>82.6</b>	<b>27.4</b>	<b>24.3</b>
<b>Dividends reconciliation</b>						
Gross Dividend	4.00	8.15	9.10	55.1	112.3	112.3
Interest Receivable on Intercompany loans	-	-	-	-	-	-
<b>Net dividend</b>	<b>4.00</b>	<b>8.15</b>	<b>9.10</b>	<b>55.1</b>	<b>112.3</b>	<b>112.3</b>

AVERAGE 2015–19					
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
%	%	%	£'m	£'m	£'m
5.68	4.91	5.68	77.6	67.1	67.1
1.35	1.17	1.35	18.5	16.0	16.0
<b>7.03</b>	<b>6.08</b>	<b>7.03</b>	<b>96.1</b>	<b>83.1</b>	<b>83.1</b>
<b>1,366.6</b>	<b>1,366.6</b>	<b>1,181.0</b>			
-	0.64	0.75	-	8.8	8.8
-	0.61	0.71	-	8.3	8.3
-	0.04	0.05	-	0.6	0.6
-	0.60	0.73	-	8.2	8.6
-	0.05	0.06	-	0.7	0.7
<b>7.03</b>	<b>8.02</b>	<b>9.33</b>	<b>96.1</b>	<b>109.7</b>	<b>110.1</b>
-	1.40	1.63	-	19.2	19.2
-	0.19	0.21	-	2.5	2.5
-	0.17	0.20	-	2.3	2.3
-	-	-	-	-	-
<b>-</b>	<b>1.76</b>	<b>2.04</b>	<b>-</b>	<b>24.0</b>	<b>24.0</b>
<b>7.03</b>	<b>9.78</b>	<b>11.37</b>	<b>96.1</b>	<b>133.7</b>	<b>134.1</b>
<b>2.51</b>	<b>2.51</b>	<b>2.51</b>	<b>34.2</b>	<b>34.2</b>	<b>29.6</b>
<b>9.54</b>	<b>12.29</b>	<b>13.88</b>	<b>130.3</b>	<b>167.9</b>	<b>163.7</b>
<b>4.00</b>	<b>10.84</b>	<b>12.54</b>	<b>54.7</b>	<b>148.1</b>	<b>148.1</b>
<b>5.54</b>	<b>1.45</b>	<b>1.34</b>	<b>75.6</b>	<b>19.8</b>	<b>15.6</b>
4.00	10.84	12.54	54.7	148.1	148.1
-	-	-	-	-	-
<b>4.00</b>	<b>10.84</b>	<b>12.54</b>	<b>54.7</b>	<b>148.1</b>	<b>148.1</b>



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 2018/19 and cumulative performance for the four years from 2015/16 to 2018/19. 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 5.64% in 2018/19 and 5.68% average for 2015-19.

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 6.94% in 2018/19 and 7.03% average for 2015-19.

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 £1,377m at March 2019. NWL's average gearing in 2018/19 was 66.4%, resulting in actual regulatory equity of 33.6% of RCV, or £1,233m.

### 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 66.4% in 2018/19, remaining above Ofwat's notional structure assumption of 62.5%. This has generated an average benefit of £8.8m per annum over AMP6 to date.

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 a small outperformance of £0.6m in 2018/19. The average performance for 2015-19 of £8.3m 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 proposed that we would share the benefit with customers through using interest gained on the unutilized 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, 63% of the Company's debt is at fixed rate and not impacted by indexation. In 2018/19, RPI indexation was higher than assumed in the FD, resulting in NWL reporting a lower real cost of debt and a financing outperformance of £18.7m.

Hedging instruments shows the impact of interest rate swaps on the cost of debt reported in the year, and equates to a benefit of £3.4m in 2018/19.

The net effect of financing and tax in the year was an outperformance of FD allowance by £29.0m, or 2.34% of regulatory equity.

### Operational Performance

This section of the report explains how our strong operational performance 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 £19.2m on average over AMP6 to date. The remainder of the outperformance is returned to customers through a reduction in RCV at the next price review.

ODI performance against our PCs is reported in table 3A, with a net penalty in 2018/19 of £3.2m, though a net cumulative reward for 2015-19 of £10.0m. The rewards relate mostly to strong performance on sewer flooding and interruptions to supply, partially offset by smaller penalties on drinking water compliance and satisfaction with taste and odour. 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 the implementation of our new customer contact and billing system in the year.

The net effect of operational performance in the year was an underperformance of FD allowance by £15.7m, or 1.27% of regulatory equity. For 2015-19, on average we have outperformed FD by £24.0m per annum, or 2.04%.

### Total Shareholder Return

The total shareholder return comprises adjusted RORE, outperformance in respect of financing, tax and operational performance and growth in the RCV as allowed in the FD. Our performance generated a total shareholder return of £136.6m in 2018/19, or 11.07% return on regulatory equity. Of this return, 9.1% was paid as dividend with 1.97% being value retained within the business.

Our dividend policy is set out on [page 167](#) and we explain how this dividend policy is applied on [pages 131 to 132](#).



APPOINTED BUSINESS TAXATION

The rate of UK corporation tax for the current year was 19%. It is expected that this rate will apply for the remainder of AMP6. Finance Act 2016 provides for a reduction in the rate to 17% with effect from 1 April 2020 (which coincides with the start of AMP7).

The current tax charge for the Appointed business is derived by reducing the Company's statutory charge (£33.6m) by the amount relating to the activities of the Non-appointed business (£1.2m). The Appointed business charge of £32.4m includes £15.7m 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 £1.3m mainly reflects the benefit of prior year R&D claims and revisions to prior year capital allowance claims.

The current tax charge for the Appointed business has increased by £2.0m compared to 2017/18. This is mainly due to the £9.5m increase in profit before tax and fair value movements, but also reflects relatively small changes in capital allowances (decrease) and non-allowable expenses (increase) offset by an increase in allowable pension contributions.

The deferred tax charge for the Appointed business is derived by adjusting the Company's statutory charge (£5.5m) by amounts relating to accounting differences (i.e. capitalised interest charge of £1.2m) and the activities of the Non-appointed business (credit of £0.1m). Deferred tax at the balance sheet date is all provided at 17%, 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 following table:

CURRENT TAX RECONCILIATION

For the 12 months ended 31 March 2019

	TOTAL APPOINTED ACTIVITIES
	£'m
Profit before tax and fair value movements	202.1
Profit before tax and fair value movements multiplied by standard rate of corporation tax of 19%	38.4
Effects of:	
Expenses incurred that are not deductible for tax purposes	0.8
Non-taxable income and other tax reliefs	(0.5)
Depreciation in respect of non-qualifying items	1.1
Tax reliefs claimed for capital expenditure in excess of accounts depreciation	(6.3)
Grants and contributions received in excess of accounts amortisation	2.8
Pension contributions paid in excess of accounts service and finance costs	(2.2)
Other temporary differences	0.2
Deferred tax movements not at the standard rate for the year	(0.6)
Adjustments in respect of prior periods	(1.3)
UK:UK transfer pricing adjustments	(0.8)
Balancing payment payable	0.8
Current tax charge	32.4



FACTORS AFFECTING FUTURE TAX CHARGES AND OTHER SIGNIFICANT MATTERS

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

The Appointed business expects to continue to incur high levels of capital expenditure during the remainder of the 2015–20 regulatory review period and in 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	40.4
Remove Non-Household included above following exit from market	(0.6)
Impact of actual RPI	(1.4)
Impact of reduction in tax rate to 19%	(1.9)
	36.5
Net increase in profit before tax and depreciation	(1.6)
Increase in allowable pension contributions	(1.7)
Decrease in tax reliefs claimed for capital expenditure	1.6
Increase in amortisation of grants and contributions	(0.9)
Other	(0.2)
Adjustment in respect of prior years	(1.3)
Current tax charge	32.4

APPOINTED BUSINESS TAX STRATEGY

Scope

The Company is required, by section 3.11 of RAG 3.11, 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 2019 and is consistent with that published by its ultimate parent company, CK Hutchison Holdings Limited, 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 & Compliance 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 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 the applicable 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.

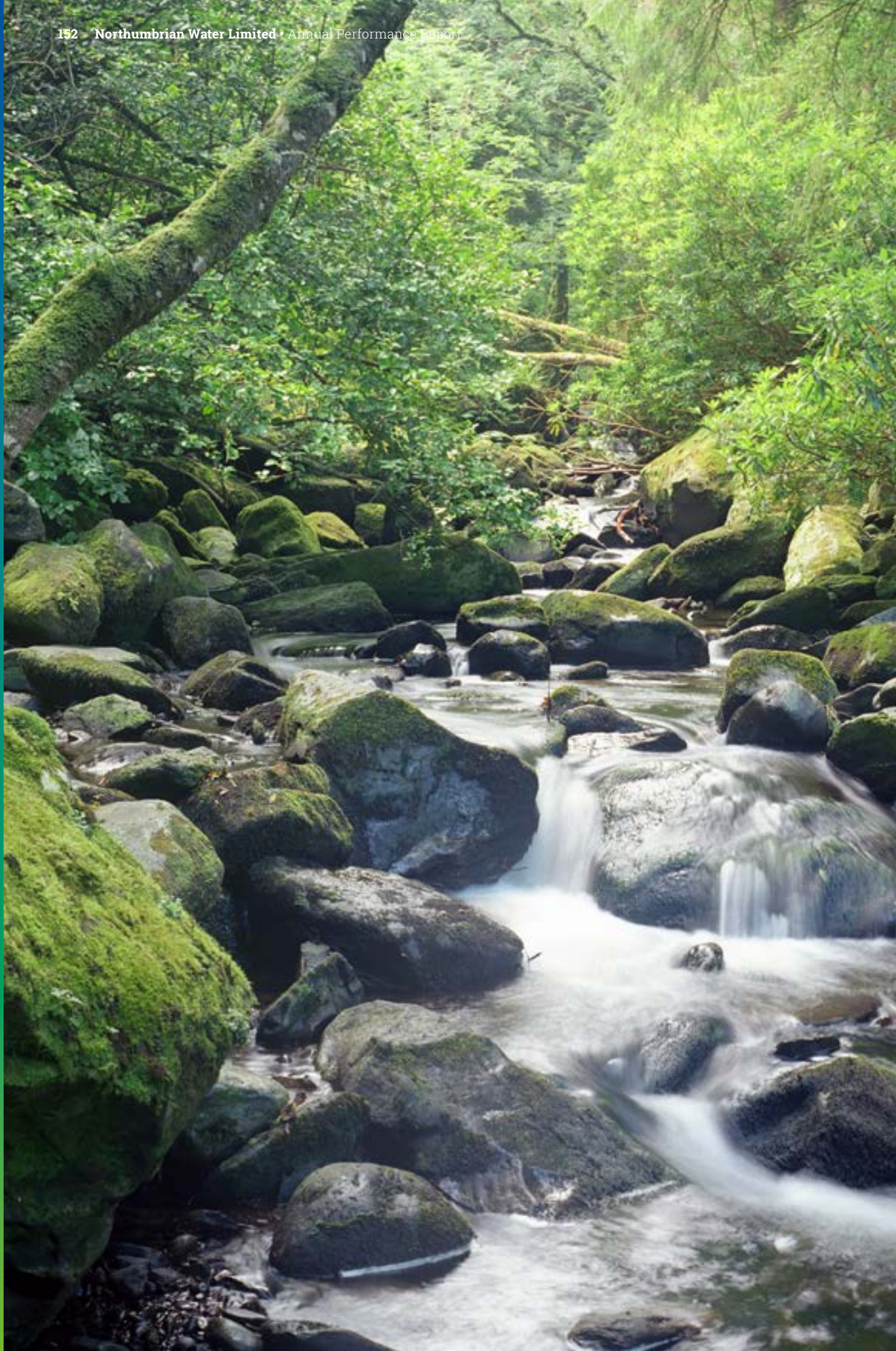
The Company takes an active role in the development of the UK's legislative framework through participation at company or industry level in Government consultations on significant new tax laws.

Publication date: 12 July 2019.



## **SECTION 2:**

# **PRICE REVIEW AND OTHER SEGMENTAL REPORTING**





2A SEGMENTAL INCOME STATEMENT

For the 12 months ended 31 March 2019

	RETAIL	
	HOUSEHOLD	NON-HOUSEHOLD
	£'m	£'m
Revenue – price control	59.6	-
Revenue – non price control	0.4	0.2
Operating expenditure	(53.0)	(0.1)
Depreciation – tangible fixed assets	(2.5)	-
Amortisation – intangible fixed assets	(1.1)	-
Other operating income	-	-
Operating profit before recharges	3.4	0.1
Recharges from other segments	(4.1)	-
Recharges to other segments	0.2	-
Operating profit	(0.5)	0.1
Surface water drainage rebates		

WHOLESALE						TOTAL
WATER RESOURCES	WATER NETWORK+	WATER TOTAL	WASTE WATER NETWORK+	SLUDGE	WASTEWATER TOTAL	
£'m	£'m	£'m	£'m	£'m	£'m	£'m
	436.6	436.6	316.7		316.7	812.9
	10.0	10.0	0.3		0.3	10.9
(54.3)	(165.8)	(220.1)	(88.9)	(7.0)	(95.9)	(369.1)
(3.0)	(65.9)	(68.9)	(47.6)	(7.3)	(54.9)	(126.3)
-	(6.6)	(6.6)	(0.1)	-	(0.1)	(7.8)
0.2	2.4	2.6	0.1	0.1	0.2	2.8
		153.6			166.3	323.4
(0.6)	(0.1)	(0.7)	(3.8)	(0.5)	(4.3)	(9.1)
-	8.9	8.9	-	-	-	9.1
		161.8			162.0	323.4
						0.6



## 2B TOTEX ANALYSIS: WHOLESALE WATER AND WASTEWATER

For the 12 months ended 31 March 2019

	WATER RESOURCES	WATER NETWORK+	WASTEWATER NETWORK+	SLUDGE	TOTAL
	£'m	£'m	£'m	£'m	£'m
<b>Operating expenditure</b>					
Power	6.8	21.1	20.3	0.2	48.4
Income treated as negative expenditure	(0.2)	(0.3)	-	(9.8)	(10.3)
Abstraction charges/discharge consents	28.0	0.3	3.7	-	32.0
Bulk supply/Bulk discharge	1.0	-	-	-	1.0
Other operating expenditure – renewals expensed in year (Infrastructure)	1.2	2.6	6.2	-	10.0
Other operating expenditure – renewals expensed in year (Non-Infrastructure)	-	0.7	0.2	-	0.9
Other operating expenditure – excluding renewals	7.4	104.7	51.0	15.1	178.2
Local authority and Cumulo rates	5.2	32.8	7.3	1.5	46.8
<b>Total operating expenditure excluding third party services</b>	<b>49.4</b>	<b>161.9</b>	<b>88.7</b>	<b>7.0</b>	<b>307.0</b>
Third party services	4.9	3.9	0.2	-	9.0
<b>Total operating expenditure</b>	<b>54.3</b>	<b>165.8</b>	<b>88.9</b>	<b>7.0</b>	<b>316.0</b>
<b>Capital Expenditure</b>					
Maintaining the long term capability of the assets – infra	0.3	38.0	19.6	-	57.9
Maintaining the long term capability of the assets – non-infra	4.6	83.1	36.4	8.0	132.1
Other capital expenditure – infra	1.2	21.0	9.6	-	31.8
Other capital expenditure – non-infra	1.7	13.9	13.9	-	29.5
Infrastructure network reinforcement	-	0.7	0.4	-	1.1
<b>Total gross capital expenditure excluding third party services</b>	<b>7.8</b>	<b>156.7</b>	<b>79.9</b>	<b>8.0</b>	<b>252.4</b>
Third party services	-	-	-	-	-
<b>Total gross capital expenditure</b>	<b>7.8</b>	<b>156.7</b>	<b>79.9</b>	<b>8.0</b>	<b>252.4</b>
Grants and contributions	-	(12.8)	(4.4)	-	(17.2)
<b>Totex</b>	<b>62.1</b>	<b>309.7</b>	<b>164.4</b>	<b>15.0</b>	<b>551.2</b>
<b>Cash Expenditure</b>					
Pension deficit recovery payments	0.4	6.1	2.6	0.4	9.5
Other cash items	-	-	-	-	-
<b>Total</b>					
<b>Totex including cash items</b>	<b>62.5</b>	<b>315.8</b>	<b>167.0</b>	<b>15.4</b>	<b>560.7</b>

## 2C OPERATING COST ANALYSIS: RETAIL

For the 12 months ended 31 March 2019

	HOUSEHOLD	NON- HOUSEHOLD	TOTAL
	£'m	£'m	£'m
<b>Operating expenditure</b>			
Customer services	17.4	-	17.4
Debt management	3.3	-	3.3
Doubtful debts	19.1	(0.1)	19.0
Meter reading	2.3	-	2.3
Services to developers	-	0.2	0.2
Other operating expenditure	10.9	-	10.9
<b>Total operating expenditure excluding third party services</b>	<b>53.0</b>	<b>0.1</b>	<b>53.1</b>
Third party services operating expenditure	-	-	-
<b>Total operating expenditure</b>	<b>53.0</b>	<b>0.1</b>	<b>53.1</b>
Depreciation – tangible fixed assets	2.5	-	2.5
Amortisation – intangible fixed assets	1.1	-	1.1
<b>Total operating costs</b>	<b>56.6</b>	<b>0.1</b>	<b>56.7</b>
<b>Debt written off</b>	<b>8.9</b>	<b>-</b>	<b>8.9</b>

### Retail revenue and cost reconciliation to FD

#### Household

Household retail revenue, reported in table 2I, was £59.6m, which was £0.2m lower than allowed in the FD. Household retail costs, in table 2C above, were £56.6m, which was £3.3m higher than allowed in the FD. This generated a household retail margin of 0.5%, reported in table 4H, compared to a margin of 1% assumed in the FD.

The higher operating costs are related to the implementation of our new customer contact and billing system during the year. This has resulted in an increase of c.£2m in enduring costs, from higher depreciation and third party licence and hosting costs, and c.£1m of additional costs of transitioning to the new system and processes.

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 2019

	WHOLESALE			
	WATER RESOURCES	WATER NETWORK+	WASTEWATER NETWORK+	SLUDGE
	£'m	£'m	£'m	£'m
Cost				
At 1 April 2018	82.5	3,145.3	2,672.7	179.7
Disposals	-	(3.1)	(1.2)	(0.7)
Additions	7.8	145.2	80.8	6.9
Adjustments	-	0.3	-	-
Assets adopted at nil cost	-	-	12.3	-
At 31 March 2019	90.3	3,287.7	2,764.6	185.9
Depreciation				
At 1 April 2018	(20.9)	(1,076.9)	(693.6)	(113.5)
Disposals	-	2.9	0.9	0.7
Adjustments	-	-	-	-
Charge for the year	(3.0)	(65.9)	(47.6)	(7.3)
At 31 March 2019	(23.9)	(1,139.9)	(740.3)	(120.1)
Net book amount at 31 March 2019	66.4	2,147.8	2,024.3	65.8
Net book amount at 1 April 2018	61.6	2,068.4	1,979.1	66.2
Depreciation charge for year				
Principal services	(3.0)	(65.6)	(47.6)	(7.3)
Third party services	-	(0.3)	-	-
Total	(3.0)	(65.9)	(47.6)	(7.3)

RETAIL		TOTAL
HOUSEHOLD	NON-HOUSEHOLD	
£'m	£'m	£'m
23.8	3.6	6,107.6
(0.2)	-	(5.2)
0.7	-	241.4
3.6	(3.6)	0.3
-	-	12.3
27.9	-	6,356.4
(16.5)	-	(1,921.4)
0.2	-	4.7
-	-	-
(2.5)	-	(126.3)
(18.8)	-	(2,043.0)
9.1	-	4,313.4
7.3	3.6	4,186.2
(2.5)	-	(126.0)
-	-	(0.3)
(2.5)	-	(126.3)

2E ANALYSIS OF CAPITAL CONTRIBUTIONS AND LAND SALES: WHOLESALE

For the 12 months ended 31 March 2019

	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 (s45)	-	4.9	-	4.9
Infrastructure charge receipts (s146)	-	3.2	-	3.2
Requisitioned mains (s43, s55 & s56)	-	1.5	-	1.5
Other contributions (price control)	-	-	-	-
Diversions (s185)	3.0	-	-	3.0
Other contributions (non-price control)	0.2	-	-	0.2
Total	3.2	9.6	-	12.8
Value of adopted assets		-		-
Grants and contributions – wastewater				
Infrastructure charge receipts (s146)	-	1.8	-	1.8
Requisitioned sewers (s100)	-	0.5	-	0.5
Other contributions (price control)	-	0.9	-	0.9
Diversions (s185)	0.6	-	-	0.6
Other contributions (non-price control)	0.6	-	-	0.6
Total	1.2	3.2	-	4.4
Value of adopted assets		12.3		12.3

	WATER	WASTEWATER	TOTAL
	£'m	£'m	£'m
Movements in capitalised grants and contributions			
Brought forward	258.9	169.9	428.8
Received in year (above)	9.6	3.2	12.8
Adopted assets	-	12.3	12.3
Transferred to receipts in advance	(1.1)	-	(1.1)
Adjustment in respect of IFRS15 adoption	(29.9)	(34.5)	(64.4)
Amortisation (in income statement)	(3.5)	(1.8)	(5.3)
Carried forward	234.0	149.1	383.1
Land sales			
Proceeds from disposals of protected land	3,165.4	43.8	3,209.2

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 2019

	WHOLESALE CHARGES REVENUE	RETAIL REVENUE	TOTAL REVENUE	NUMBER OF CUSTOMERS	AVERAGE HOUSEHOLD RETAIL REVENUE PER CUSTOMER
	£'m	£'m	£'m	000s	£
Unmeasured water only customer	76.5	7.2	83.7	284.3	25.3
Unmeasured wastewater only customer	7.2	0.4	7.6	30.8	13.0
Unmeasured water and wastewater customer	270.1	21.9	292.0	667.4	32.8
Measured water only customer	90.9	12.9	103.8	462.3	27.9
Measured wastewater only customer	6.1	0.5	6.6	33.8	14.8
Measured water and wastewater customer	126.2	16.7	142.9	409.7	40.8
<b>Total</b>	<b>577.0</b>	<b>59.6</b>	<b>636.6</b>	<b>1,888.3</b>	<b>31.6</b>

## 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 2019 was £176.4m, as reported in table 2I.

## 2I REVENUE ANALYSIS

For the 12 months ended 31 March 2019

	HOUSEHOLD	NON- HOUSEHOLD	TOTAL
	£'m	£'m	£'m
<b>Wholesale charge – water</b>			
Unmeasured	194.8	1.4	196.2
Measured	144.6	88.5	233.1
Third party revenue	-	7.3	7.3
<b>Total</b>	<b>339.4</b>	<b>97.2</b>	<b>436.6</b>
<b>Wholesale charge – wastewater</b>			
Unmeasured	159.0	4.2	163.2
Measured	78.5	75.0	153.5
Third party revenue	-	-	-
<b>Total</b>	<b>237.5</b>	<b>79.2</b>	<b>316.7</b>
<b>Wholesale Total</b>	<b>576.9</b>	<b>176.4</b>	<b>753.3</b>
<b>Retail revenue</b>			
Unmeasured	29.5	-	29.5
Measured	30.1	-	30.1
Other third party revenue	-	-	-
<b>Retail total</b>	<b>59.6</b>	<b>-</b>	<b>59.6</b>
<b>Third party revenue – non-price control</b>			
Bulk Supplies – water			3.2
Bulk Supplies – wastewater			-
Other third party revenue			7.3
<b>Principal services – non-price control</b>			
Other appointed revenue			0.4
<b>Total appointed revenue</b>			<b>823.8</b>

2I REVENUE ANALYSIS (continued)

	WATER	WASTEWATER	TOTAL
	£'m	£'m	£'m
Wholesale revenue governed by price control	436.6	316.7	753.3
Grants & contributions	9.6	3.2	12.8
<b>Total revenue governed by wholesale price control</b>	<b>446.2</b>	<b>319.9</b>	<b>766.1</b>
Amount assumed in wholesale determination	449.1	320.6	769.7
Adjustment for in-period ODI revenue	-	-	-
Adjustment for WRFIM	(7.0)	1.3	(5.7)
<b>Total assumed revenue</b>	<b>442.1</b>	<b>321.9</b>	<b>764.0</b>
<b>Difference</b>	<b>4.1</b>	<b>(2.0)</b>	<b>2.1</b>

Wholesale revenue control reconciliation to FD

Charges for 2018/19 were set taking account of the wholesale revenue forecasting incentive mechanism (WRFIM), which reflected over-recovery of wholesale water revenue and under-recovery of wholesale wastewater revenue in 2016/17.

Wholesale water revenue was £4.1m (1%) higher than the assumed revenue allowance. This comprised £4.4m from standard published water charges and £0.3m from developer contributions which were lower than expected. The higher water revenue primarily relates to the NW area where volumes have been higher than expected for both our household customers and the non-household industrial water customers.

The numbers of reported properties were broadly in line with forecast and although the number of void properties has increased for non-household properties, the movements did not generate material differences from the allowed revenue.

Wholesale wastewater revenue was £2.0m (0.6%) lower than the assumed revenue. This is due to revenue from standard tariffs being £1.7m lower than expected which is primarily due to lower trade effluent and special agreement volumes from our non-household customers. Income from developer contributions was £0.3m lower than anticipated at the time of setting the tariffs.

2J INFRASTRUCTURE NETWORK REINFORCEMENT COSTS

For the 12 months ended 31 March 2019

	NETWORK REINFORCEMENT CAPEX	ON SITE / SITE SPECIFIC CAPEX (MEMO ONLY)
	£'m	£'m
<b>Wholesale water network+ (treated water distribution)</b>		
Distribution and trunk mains	0.7	-
Pumping and storage facilities	-	-
Other	-	-
<b>Total</b>	<b>0.7</b>	<b>-</b>
<b>Wholesale wastewater network+ (sewage collection)</b>		
Foul and combined systems	0.4	-
Surface water only systems	-	-
Pumping and storage facilities	-	-
Other	-	-
<b>Total</b>	<b>0.4</b>	<b>-</b>

2K INFRASTRUCTURE CHARGES RECONCILIATION

For the 12 months ended 31 March 2019

	WATER	WASTEWATER	TOTAL
	£'m	£'m	£'m
<b>Impact of infrastructure charge discounts</b>			
Infrastructure charges	3.2	1.8	5.0
Discounts applied to infrastructure charges	-	0.9	0.9
<b>Gross infrastructure charges</b>	<b>3.2</b>	<b>2.7</b>	<b>5.9</b>
<b>Comparison of revenue and costs</b>			
Variance brought forward			-
Revenue	3.2	2.7	5.9
Costs	(0.7)	(0.4)	(1.1)
<b>Variance carried forward</b>	<b>2.5</b>	<b>2.3</b>	<b>4.8</b>

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 first year of our rolling five year review and show a variance between infrastructure charges received and network reinforcement expenditure of £4.8m. This was in line with our expectations, as we anticipate a number of significant network reinforcement projects over the next four 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	14.5	Negotiated	0.154
Anglian Water Business (National) Limited (AWB)	Water and sewerage supplies	470.9	Competitive letting	90.404
NWG Bioenergy Limited	Pathogen and chemistry testing	3.3	No market	0.012
Northern Gas Networks Limited (NGN)	Mains repairs and trade effluent charges	410.0	No market	0.020
NWG Business Limited (NWGB)	Water and sewerage supplies	76.1	Competitive letting	67.367
Vehicle Lease and Service Limited (VLS)	Rental of garage and service charges	17.8	Negotiated	0.106
UK Power Networks	Rental income	1,668.9	No market	0.007



Services supplied to the appointee by associated companies:

ASSOCIATE	SERVICE	TURNOVER	TERMS OF SUPPLY	VALUE
		£'m		£'m
CKI	Software licensing agreements	3,627.8	Negotiated	2.741
NGN	Gas main diversions	410.0	No market	0.089
NWGL	Holding company charges	6.7	No market	1.537
Three Rivers Insurance Company Limited (TRICL)	Public liability insurance (deductible infill policy)	0.5	No market	0.492
VLS	Vehicle maintenance and capital finance charge	17.8	Competitive letting	8.346
UK Power Networks	Cost of damages	1,668.9	No market	0.043

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	3.3	No market	0.800
Ayr Environmental Services Operations Limited	Transfer of corporation tax group losses	6.2	No market	0.219
NWG Commercial Solutions Limited (NWGCSL)	Transfer of corporation tax group losses	1.1	No market	0.051
NWGL	Transfer of corporation tax group losses	6.7	No market	14.617

Turnover data for all companies relates to the year to 31 March 2019, with the exception of data for VLS and CKI which relates to the year to 31 December 2018.

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.	0.011
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.	0.939
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 £2,237.0m due to NWF, a subsidiary company. Details of these loans and the associated guarantees are provided in note 16 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 £4.8m were entered into and capital repayments of £3.4m were made. The year end finance lease creditor was £12.0m. All leases have an individual interest rate which is fixed for the term of the lease. In 2018/19 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:

Dividends paid:	£'m
Final dividend for the period ended 31 March 2018	65.0
Interim dividend for the period ended 31 March 2019	65.0
Total dividends paid in the period	130.0

In previous years the appointed business has typically paid two interim dividends in each financial year, in October and March. In 2018, the Directors decided that the second interim dividend payment will be replaced with a final dividend to be paid in April, after the Directors have reviewed the financial position of the appointed business at the balance sheet date.

A final dividend of £65m for the year ended 31 March 2019 was approved by the Board and paid after the balance sheet date.

Dividends proposed, not paid in year:	£'m
Final dividend for the period ended 31 March 2019	65.0

Dividend policy

The Board has a policy which takes into account the principle of incentive based price cap regulation, including operating, investment and financing 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 had 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.

An explanation of how the Board applies this dividend policy is provided on [page 131](#).

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.

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

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

### Opinion

We have audited Sections 1 and 2 of Northumbrian Water Limited's (the Company) Annual Performance Report for the year ended 31 March 2019 ('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) 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 capital 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 water revenues by customer type (table 2H), the revenue analysis and wholesale control reconciliation (table 2I), the infrastructure network reinforcements costs (table 2J), the infrastructure charges reconciliation (table 2K) and the related notes.

We have not audited the Outcome performance tables 3A to 3S or the additional regulatory information in tables 4A to 4W.

In our opinion, Northumbrian Water Limited's Regulatory Accounting Statements within the Annual Performance Report have been properly 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, set out on [pages 133 to 135](#).

### Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ('ISAs(UK)'), including ISA (UK) 800, and applicable law, except as stated in the section on Auditors' responsibilities for the audit of the Regulatory accounting statements within the Annual Performance Report below, 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 Accounts 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 Standards 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 – basis of preparation

We draw attention to the fact that the Regulatory Accounting Statements within the Annual Performance Report have been prepared in accordance with Condition F, the Regulatory Accounting Guidelines, the accounting policies (including the 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.

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 137 to 171](#) 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 Annual Performance Statement and the audit section below. As a result, the Regulatory Accounting Statements may not be suitable for another purpose.

Our opinion is not modified in this respect.

### 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 when:

- 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.

### Reporting on other information

The other information comprises all of the information in the Annual Performance Report other than the Regulatory Accounting Statements within the Annual Performance Report 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 within the Annual Performance Report or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement or inconsistency of this 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 130](#) 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.



### Auditors' responsibilities for the Audit of the Regulatory accounting statements within the Annual Performance Report

Our objectives are to obtain reasonable assurance about whether the Regulatory accounting statements within the Annual Performance Report are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this Annual Performance Report.

As part of an audit in accordance with ISAs (UK), we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the Company's Annual Performance Report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our report. However, future events or conditions may cause the Company to cease to continue as a going concern.

- 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 the audit.
- Assess the reasonableness of significant accounting estimates and related disclosures made by the directors.

The Company has presented the allocation of operating costs and assets in accordance with the accounting policy for price control segments set out in note [E] of the Regulatory Accounting Policies and its Accounting Methodology Statement published on the Company's website on 12 July 2019. We are not required to assess whether the methods of cost allocation set out in the Methodology Statement are appropriate to the circumstances of the Company or whether they meet the requirements of the WSRA, which would have been required if we were to express an audit opinion under International Standards on Auditing (UK).

### 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 paragraph 3 of 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 within the Annual Performance Report is separate from our opinion on the statutory Financial Statements of the Company for the year ended 31 March 2019 on which we reported on 12 July 2019, 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 FCA** (Senior statutory auditor)

for and on behalf of Deloitte LLP

Statutory Auditor

Newcastle Upon Tyne, United Kingdom

12 July 2019

## SECTION 3: PERFORMANCE SUMMARY

# 3



## 3A OUTCOME PERFORMANCE TABLE FOR THE YEAR ENDED 31 MARCH 2019

UNIQUE ID	PERFORMANCE COMMITMENT	UNIT	2017-18 PERFORMANCE LEVEL – ACTUAL (FOR INFORMATION)
W-A1	Asset health measures – water	n/a	n/a
W-B1	Satisfaction with taste and odour of tap water	nr	978
W-B2	Overall drinking water compliance (3-year average)	%	99.943
W-B3	Discoloured water complaints (3-year average)	nr	2,776
W-C1	Interruptions to water supply for more than 3 hours (average time per property per year)	time	05:23
W-C2	Properties experiencing poor water pressure (3-year average)	nr	202
W-C3	Water mains bursts (3-year average)	nr	4,102
W-C4	Leakage (MI/d) Northumbrian area	nr	137.1
W-C5	Leakage (MI/d) Essex & Suffolk area	nr	66.2
W-D1	NWL independent overall customer satisfaction score	score	8.7
W-D2	Service incentive mechanism (SIM)	score	86.4
W-D3	Domestic customer satisfaction, net promoter score	%	44
W-E1	NWL independent survey on keeping customers informed	%	94
W-F1	Greenhouse gas emissions	nr	164
W-F2	Annual environmental performance report	text	The Forums have prepared their statement and it will be published in the Our Contribution document
S-A1	Asset health measures – wastewater	n/a	n/a
S-B1	Properties flooded externally	nr	944
S-B2	Properties flooded internally	nr	96
S-B3	Repeat sewer flooding (3-year average)	nr	55
S-B4	Sewer collapses (3-year average)	nr	46
S-B5	Transferred drains and sewers – internal sewer flooding	nr	199
S-B6	Transferred drains and sewers – external sewer flooding	nr	2,726
S-B7	Transferred drains and sewers – sewer collapses	nr	51
S-C1	Sewage treatment works discharge compliance (3-year average)	nr	1.33
S-C2	Pollution incidents – category 3 (3-year average)	nr	105
S-C3	Bathing water compliance	nr	34
S-C4	Whitburn combined sewer overflow (CSO) scheme	text	Delivered

2018-19 PERFORMANCE LEVEL – ACTUAL	2018-19 COMMITTED PERFORMANCE LEVEL MET?	NOTIONAL REWARD OR PENALTY ACCRUED FOR 2018-19	NOTIONAL REWARD OR PENALTY ACCRUED FOR 2018-19	TOTAL AMP6 REWARD OR PENALTY 31 MARCH 2020 FORECAST	TOTAL AMP6 REWARD OR PENALTY 31 MARCH 2020 FORECAST
			£'m	£'m	
n/a	-				
1,060	No	Penalty	(1.6790)	Penalty	(1.5800)
99.941	No	Penalty	(3.9848)	Penalty	(7.9695)
2,667	Yes	Reward	-	Reward	0.2640
09:12	No	Penalty deadband	-	Reward	7.9380
195	Yes	Reward deadband	-	Reward deadband	-
4,113	Yes	-	-	-	-
136.3	Yes	Reward deadband	-	Reward deadband	-
64.2	Yes	Reward deadband	-	Penalty	(0.1265)
8.7	Yes	-	-	-	-
85.9	No	-	-	-	-
43	Yes	-	-	-	-
93	No	-	-	-	-
148	Yes	-	-	-	-
Our Contribution report published	Yes	-	-	-	-
n/a	-				
902	Yes	Reward	0.4740	Reward	2.0980
124	Yes	Reward	0.8060	Reward	4.2640
48	Yes	Reward	1.2610	Reward	3.7830
50	Yes	-	-	-	-
246	No	Penalty deadband	-	-	-
2,967	No	Penalty deadband	-	-	-
59	Yes	-	-	-	-
1	No	Penalty deadband	-	Penalty deadband	-
73	Yes	Reward	0.0640	Reward	0.3360
33	No	Penalty deadband	-	-	-
n/a	-	-	-	-	-

UNIQUE ID	PERFORMANCE COMMITMENT	UNIT	2017-18 PERFORMANCE LEVEL – ACTUAL (FOR INFORMATION)
S-D1	NWL independent overall customer satisfaction score	score	8.7
S-D2	Service incentive mechanism (SIM)	score	86.4
S-D3	Domestic customer satisfaction, net promoter score	%	44
S-E1	NWL independent survey on keeping customers informed	%	94
S-F1	Greenhouse gas emissions	nr	164
S-F2	Annual environmental performance report	text	The Forums have prepared their statement and it will be published in the Our Contribution document
R-B1	NWL independent overall customer satisfaction score	score	8.7
R-B2	Service incentive mechanism (SIM)	score	86.4
R-B3	Domestic customer satisfaction, net promoter score	%	44
R-C1	NWL independent value for money survey	score	8.2
R-C2	Satisfied with value for money of water services – Northumbrian region (CCWater research)	%	78
R-C3	Satisfied with value for money of sewerage services – Northumbrian region (CCWater research)	%	78
R-C4	Satisfied with value for money of water services – Essex & Suffolk region (CCWater research)	%	71
R-D1	NWL independent survey on keeping customers informed	%	94
R-E1	Greenhouse gas emissions	nr	164
R-E2	Annual environmental performance report	text	The Forums have prepared their statement and it will be published in the Our Contribution document
R-F1	Delivering a consolidated Customer Information and Billing (CIB) system	£m	Delivered late

2018-19 PERFORMANCE LEVEL – ACTUAL	2018-19 COMMITTED PERFORMANCE LEVEL MET?	NOTIONAL REWARD OR PENALTY ACCRUED FOR 2018-19	NOTIONAL REWARD OR PENALTY ACCRUED FOR 2018-19	TOTAL AMP6 REWARD OR PENALTY 31 MARCH 2020 FORECAST	TOTAL AMP6 REWARD OR PENALTY 31 MARCH 2020 FORECAST
		£'m		£'m	
8.7	Yes	-	-	-	-
85.9	No	-	-	-	-
43	Yes	-	-	-	-
93	No	-	-	-	-
148	Yes	-	-	-	-
Our Contribution report published	Yes	-	-	-	-
8.7	Yes	-	-	-	-
85.9	No	-	-	-	-
43	Yes	-	-	-	-
8.2	Yes	-	-	-	-
75	No	-	-	-	-
78	No	-	-	-	-
71	No	-	-	-	-
93	No	-	-	-	-
148	Yes	-	-	-	-
Our Contribution report published	Yes	-	-	-	-
n/a	-	Penalty	(0.1300)	Penalty	(0.1300)



Our performance against our Outcomes, Measures of Success and Performance Commitments is explained fully on [pages 28 and 29](#) of this report. Table 3A reports the full performance in the format required by Ofwat.

Measurement of performance and calculation of any penalties or rewards is calculated using the methodology stated in our PR14 Final Determination, and is subject to robust assurance. Some of the ODIs have earned a reward in the year to 31 March 2019, although this will not be reflected in the RCV until 1 April 2020 in the next price control period.

MoS within our Asset Health baskets are measured on a three year average.

The performance summary within this report describes both the three year average performance and actual annual performance.

We have engaged with our Water Forums to discuss our performance and further information about our performance is available in a more customer-friendly presentation on our websites at [www.nwl.co.uk](http://www.nwl.co.uk), [www.eswater.co.uk](http://www.eswater.co.uk) and [www.welivewater.co.uk](http://www.welivewater.co.uk).

3B SUB-MEASURE PERFORMANCE TABLE

For the year ended 31 March 2019

NWL does not have any sub-measures to report in table 3B. All performance measures are reported in table 3A.

3C AIM TABLE

For the year ended 31 March 2019

ABSTRACTION SITE	2018–19 AIM PERFORMANCE [MI]	2018–19 NORMALISED AIM PERFORMANCE	CUMULATIVE AIM PERFORMANCE 2016–17 [MI]	CUMULATIVE NORMALISED AIM PERFORMANCE 2016–17 ONWARDS [NR]	CONTEXTUAL INFORMATION RELATING TO AIM PERFORMANCE
Ormesby Broad	(942.6)	(0.8)	(942.6)	(0.8)	-

The baseline abstraction value used is 10.81Ml/d. The 2015-20 water level trigger threshold is -0.14mAOD. The water level in Ormesby Broad did not fall below the water level trigger threshold of -0.14mAOD during the 2016/17 or 2017/18 reporting years, and so AIM was not triggered. Water levels fell below the trigger during the summer and autumn of 2018, so data is reported for the 2018/19 year.

As AIM has only been triggered in one year; the cumulative figures are currently the same as the annual figures for 2018/19.

The 2015-20 baseline abstraction data and the abstraction data for 2018/19 is taken from company annual abstraction returns to the Environment Agency. The 2018/19 abstraction data entered into the PR19 data table (App3) was provisional data, obtained from Management Information Presentation System (MIPS), and calculations derived from it (AIM performance, normalised AIM performance, cumulative AIM performance and cumulative normalised AIM performance) will therefore be slightly different.

3D SIM TABLE

For the year ended 31 March 2019

	SCORE
Qualitative performance	nr
1st survey score	4.44
2nd survey score	4.50
3rd survey score	4.51
4th survey score	4.54
Qualitative SIM score (out of 75)	65.58
Quantitative performance	
Total contact score	94.19
Quantitative SIM score (out of 25)	20.29
SIM score	
Total annual SIM score (out of 100)	85.87

## **SECTION 4:**

# **ADDITIONAL REGULATORY INFORMATION**

# 4



4A NON-FINANCIAL INFORMATION

For the 12 months ended 31 March 2019

RETAIL - HOUSEHOLD	TOTAL COMPANY		NORTHUMBRIAN WATER		ESSEX AND SUFFOLK WATER	
	2018/19		2018/19		2018/19	
	UNMEASURED	MEASURED	UNMEASURED	MEASURED	UNMEASURED	MEASURED
Number of void households	53.4	40.2	42.7	20.8	10.7	19.4
Per capita consumption (excluding supply pipe leakage) l/h/d			148.6	142.5	161.5	156.9

WHOLESALE	2018/19		2018/19	
	WATER	WASTEWATER	WATER	WASTEWATER
Volume (Ml/d)				
Bulk supply export	0.8	-	4.1	-
Bulk supply import	-	-	74.3	-
Distribution input	680.4		458.0	

4B TOTEX ANALYSIS

For the 12 months ended 31 March 2019

	CURRENT YEAR		CUMULATIVE 2015–20	
	WATER	WASTEWATER	WATER	WASTEWATER
	£'m	£'m	£'m	£'m
Actual totex	378.3	182.4	1,282.4	700.4

Items excluded from the menu				
Third party costs	8.8	0.2	37.8	4.9
Pension deficit recovery payments	6.5	3.0	24.2	11.4
Other ‘Rule book’ adjustments	1.3	(0.3)	2.1	2.9
Total items excluded from the menu	16.6	2.9	64.1	19.2

Transition expenditure	-	-	-	4.0
Adjusted Actual totex	361.7	179.5	1,218.3	685.2

Adjusted Actual totex base year prices	312.5	155.1	1,097.5	619.7
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Allowed totex based on final menu choice – base year prices	252.7	200.9	1,063.9	824.1
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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. We are confident that we will outperform the wholesale totex allowed in our PR14 Final Determination over the five year price control period, based upon our implementation of a new operating model for efficient delivery of our capital investment programme, our ongoing focus on our opex efficiency programme and our innovation strategy.

However, it is important that one-off exceptional adjustments are taken into account to gain a more realistic view of the underlying efficiency position.

Atypical items

There were no atypical items in 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: £0.6m in 2018/19 and £1.6m cumulatively; and
- A fine and costs of £0.5m relating to a DWI prosecution.

Wastewater:

- provision for enforcement undertakings relating to historic pollution incidents: £0.3m reduction in provision in 2018/19 and £3.0m cumulatively; and
- reduction in a provision for a compensation event: -£0.1m cumulatively.

Water totex compared to FD

The performance reported in the table above shows cumulative actual costs for Water £33.6m (3.2%) lower than the totex allowed in the FD, in 2012/13 prices.

The operating model that we have implemented 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.

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 and an extended period of dry weather pushing water supply costs upwards.

The performance reported in [table 3A](#) and in Our Performance Summary on [pages 28 and 29](#) demonstrates that we have achieved efficiencies whilst continuing to deliver excellent customer service, meeting the majority of our PCs and maintaining asset health performance.

Wastewater totex compared to FD

Table 4B shows cumulative actual costs for Wastewater of £204.4m (24.8%) 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, maintaining excellent sewage treatment works compliance and maintaining asset health performance.

4C FORECAST IMPACT OF PERFORMANCE ON RCV

For the 12 months ended 31 March 2019

	2018/19	
	WATER	WASTEWATER
	£'m	£'m
Cumulative totex over / (underspend) so far in the price control period	52.8	(227.6)
Customer share of cumulative totex over / (underspend)	15.5	(110.1)
RCV element of customer share of cumulative totex over / (underspend)	11.4	(123.0)
Adjustment for ODI rewards or penalties	2.9	8.9
RCV determined at FD at 31 March	2,111.6	2,160.1
Projected 'shadow' RCV	2,125.9	2,046.0





## 4D TOTEX ANALYSIS: WHOLESALE WATER

For the 12 months ended 31 March 2019

	WATER RESOURCES	
	ABSTRACTION LICENCES	RAW WATER ABSTRACTION
	£'m	£'m
<b>Operating expenditure</b>		
Power	-	6.8
Income treated as negative expenditure	-	(0.2)
Abstraction charges / discharge consents	28.0	-
Bulk supply	-	1.0
Other operating expenditure – renewals expensed in year (Infrastructure)	-	1.2
Other operating expenditure – renewals expensed in year (Non-Infrastructure)	-	-
Other operating expenditure – excluding renewals	-	7.4
Local authority and Cumulo rates	-	5.2
<b>Total operating expenditure excluding third party services</b>	<b>28.0</b>	<b>21.4</b>
Third party services	4.9	-
<b>Total operating expenditure</b>	<b>32.9</b>	<b>21.4</b>
<b>Capital Expenditure</b>		
Maintaining the long term capability of the assets – infra	-	0.3
Maintaining the long term capability of the assets – non-infra	-	4.6
Other capital expenditure – infra	-	1.2
Other capital expenditure – non-infra	-	1.7
Infrastructure network reinforcement	-	-
<b>Total gross capital expenditure (excluding third party)</b>	<b>-</b>	<b>7.8</b>
Third party services	-	-
<b>Total gross capital expenditure</b>	<b>-</b>	<b>7.8</b>
Grants and contributions	-	-
<b>Totex</b>	<b>32.9</b>	<b>29.2</b>
<b>Cash Expenditure</b>		
Pension deficit recovery payments	-	0.4
Other cash items	-	-
<b>Totex including cash items</b>	<b>32.9</b>	<b>29.6</b>

<b>Unit cost information (operating expenditure)</b>		
Population ('000s)	4,534.7	4,534.7
Unit cost (£/pop)	7.3	4.7

	LICENCED VOLUME AVAILABLE	VOLUME ABSTRACTED
Volume (MI)	674,395	578,337
<b>Unit cost (£/MI)</b>	<b>48.8</b>	<b>37.0</b>

NETWORK+				
RAW WATER TRANSPORT	RAW WATER STORAGE	WATER TREATMENT	TREATED WATER DISTRIBUTION	TOTAL
£'m	£'m	£'m	£'m	£'m
2.6	-	2.5	16.0	27.9
-	-	(0.3)	-	(0.5)
-	-	0.3	-	28.3
-	-	-	-	1.0
0.1	-	-	2.5	3.8
-	-	0.5	0.2	0.7
0.6	1.6	36.8	65.7	112.1
3.6	-	4.9	24.3	38.0
<b>6.9</b>	<b>1.6</b>	<b>44.7</b>	<b>108.7</b>	<b>211.3</b>
1.0	-	0.6	2.3	8.8
<b>7.9</b>	<b>1.6</b>	<b>45.3</b>	<b>111.0</b>	<b>220.1</b>
1.0	-	0.3	36.7	38.3
0.3	-	43.5	39.3	87.7
-	-	-	21.0	22.2
-	-	10.4	3.5	15.6
-	-	-	0.7	0.7
<b>1.3</b>	<b>-</b>	<b>54.2</b>	<b>101.2</b>	<b>164.5</b>
-	-	-	-	-
<b>1.3</b>	<b>-</b>	<b>54.2</b>	<b>101.2</b>	<b>164.5</b>
-	-	(0.1)	(12.7)	(12.8)
<b>9.2</b>	<b>1.6</b>	<b>99.4</b>	<b>199.5</b>	<b>371.8</b>
-	0.1	1.8	4.2	6.5
-	-	-	-	-
<b>9.2</b>	<b>1.7</b>	<b>101.2</b>	<b>203.7</b>	<b>378.3</b>

4,534.7	4,534.7	4,534.7	4,534.7	
1.7	0.4	10.0	24.5	

VOLUME TRANSPORTED	AVERAGE VOLUME STORED	DISTRIBUTION INPUT FROM WATER TREATMENT	DISTRIBUTION INPUT FROM TREATED WATER
206,388	1,554	417,087	417,087
<b>38.3</b>	<b>1,029.6</b>	<b>108.6</b>	<b>266.1</b>

## 4E TOTEX ANALYSIS: WHOLESALE WASTEWATER

For the 12 months ended 31 March 2019

	NETWORK+ SEWAGE COLLECTION		
	FOUL	SURFACE WATER DRAINAGE	HIGHWAY DRAINAGE
	£'m	£'m	£'m
<b>Operating expenditure</b>			
Power	6.3	-	-
Income treated as negative expenditure	-	-	-
Discharge consents	1.8	-	-
Bulk discharge	-	-	-
Other operating expenditure – renewals expensed in year (Infrastructure)	1.7	2.9	1.6
Other operating expenditure – renewals expensed in year (Non-Infrastructure)	-	0.1	-
Other operating expenditure – excluding renewals	0.5	14.6	7.9
Local authority rates and Cumulo rates	0.3	-	-
<b>Total operating expenditure excluding third party services</b>	<b>10.6</b>	<b>17.6</b>	<b>9.5</b>
Third party services	-	0.1	-
<b>Total operating expenditure</b>	<b>10.6</b>	<b>17.7</b>	<b>9.5</b>
<b>Capital Expenditure</b>			
Maintaining the long term capability of the assets – infra	5.5	9.1	4.9
Maintaining the long term capability of the assets – non-infra	2.0	3.2	1.8
Other capital expenditure – infra	2.7	4.5	2.4
Other capital expenditure – non-infra	0.5	0.9	0.5
Infrastructure network reinforcement	0.1	0.2	0.1
<b>Total gross capital expenditure (excluding third party services)</b>	<b>10.8</b>	<b>17.9</b>	<b>9.7</b>
Third party services	-	-	-
<b>Total gross capital expenditure</b>	<b>10.8</b>	<b>17.9</b>	<b>9.7</b>
Grants and contributions	(1.2)	(1.9)	(1.0)
<b>Totex</b>	<b>20.2</b>	<b>33.7</b>	<b>18.2</b>
<b>Cash Expenditure</b>			
Pension deficit recovery payments	1.0	0.1	-
<b>Totex including cash items</b>	<b>21.2</b>	<b>33.8</b>	<b>18.2</b>

(TABLE CONTINUED)

NETWORK + SEWAGE TREATMENT		SLUDGE			TOTAL
SEWAGE TREATMENT AND DISPOSAL	SLUDGE LIQUOR TREATMENT	SLUDGE TRANSPORT	SLUDGE TREATMENT	SLUDGE DISPOSAL	
£'m	£'m	£'m	£'m	£'m	£'m
12.8	1.2	1.0	(0.8)	-	20.5
-	-	-	(9.8)	-	(9.8)
1.9	-	-	-	-	3.7
-	-	-	-	-	-
-	-	-	-	-	6.2
0.1	-	-	-	-	0.2
27.1	0.9	2.9	10.7	1.5	66.1
7.0	-	-	1.5	-	8.8
<b>48.9</b>	<b>2.1</b>	<b>3.9</b>	<b>1.6</b>	<b>1.5</b>	<b>95.7</b>
0.1	-	-	-	-	0.2
<b>49.0</b>	<b>2.1</b>	<b>3.9</b>	<b>1.6</b>	<b>1.5</b>	<b>95.9</b>
0.1	-	-	-	-	19.6
29.4	-	1.1	6.9	-	44.4
-	-	-	-	-	9.6
12.0	-	-	-	-	13.9
-	-	-	-	-	0.4
<b>41.5</b>	<b>-</b>	<b>1.1</b>	<b>6.9</b>	<b>-</b>	<b>87.9</b>
-	-	-	-	-	-
<b>41.5</b>	<b>-</b>	<b>1.1</b>	<b>6.9</b>	<b>-</b>	<b>87.9</b>
(0.3)	-	-	-	-	(4.4)
<b>90.2</b>	<b>2.1</b>	<b>5.0</b>	<b>8.5</b>	<b>1.5</b>	<b>179.4</b>
1.5	-	-	0.4	-	3.0
<b>91.7</b>	<b>2.1</b>	<b>5.0</b>	<b>8.9</b>	<b>1.5</b>	<b>182.4</b>



4E TOTEX ANALYSIS: WHOLESALE WASTEWATER (continued)

for the 12 months ended 31 March 2019

	NETWORK+ SEWAGE COLLECTION		
	FOUL	SURFACE WATER DRAINAGE	HIGHWAY DRAINAGE
	£'m	£'m	£'m
Population ('000s)	2,632.0	2,632.0	2,632.0
Unit cost (£/pop)	4.0	6.7	3.6

	VOLUME COLLECTED FOUL	VOLUME COLLECTED SURFACE WATER DRAINAGE	VOLUME COLLECTED HIGHWAY DRAINAGE
	MI	MI	MI
Volume	165,801	102,675	55,286
£/unit	63.9	172.4	171.8

NETWORK + SEWAGE TREATMENT		SLUDGE		
SEWAGE TREATMENT AND DISPOSAL	SLUDGE LIQUOR TREATMENT	SLUDGE TRANSPORT	SLUDGE TREATMENT	SLUDGE DISPOSAL
£'m	£'m	£'m	£'m	£'m
2,632.0	2,632.0	2,632.0	2,632.0	2,632.0
18.6	0.8	1.5	0.6	0.6

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
Tonnes	Tonnes	m3	ttds	ttds
66,237	5,837	795,310	71	28
739.8	359.8	4.9	22,539.2	53,571.4

## 4F OPERATING COST ANALYSIS: HOUSEHOLD RETAIL

For the year ended 31 March 2019

	HOUSEHOLD UNMEASURED			
	WATER ONLY	WASTEWATER ONLY	WATER AND WASTEWATER	TOTAL
	£'m	£'m	£'m	£'m
<b>Operating expenditure</b>				
Customer services	1.7	0.2	4.0	5.9
Debt management	0.3	-	0.8	1.1
Doubtful debts	3.8	0.3	13.0	17.1
Meter reading	-	-	-	-
Other operating expenditure	1.0	0.2	2.5	3.7
<b>Total operating expenditure excluding third party services</b>	<b>6.8</b>	<b>0.7</b>	<b>20.3</b>	<b>27.8</b>
Third party services operating expenditure	-	-	-	-
<b>Total operating expenditure</b>	<b>6.8</b>	<b>0.7</b>	<b>20.3</b>	<b>27.8</b>
Depreciation – tangible fixed assets (on assets existing at 31 March 2015)	0.1	-	0.1	0.2
Depreciation – tangible fixed assets (on assets acquired since 1 April 2015)	0.2	-	0.4	0.6
Amortisation – intangible fixed assets (on assets existing at 31 March 2015)	-	-	-	-
Amortisation – intangible fixed assets (on assets acquired since 1 April 2015)	0.1	-	0.3	0.4
<b>Total operating costs</b>	<b>7.2</b>	<b>0.7</b>	<b>21.1</b>	<b>29.0</b>
<b>Capital expenditure</b>	<b>0.3</b>	<b>-</b>	<b>0.6</b>	<b>0.9</b>
Demand-side efficiency and customer-side leaks analysis – Household				
Demand-side water efficiency – gross expenditure				
Demand-side water efficiency – expenditure funded by wholesale				
<b>Demand-side water efficiency – net retail expenditure</b>				
Customer-side leak repairs – gross expenditure				
Customer-side leak repairs – expenditure funded by wholesale				
<b>Customer-side leak repairs – net retail expenditure</b>				

HOUSEHOLD MEASURED				
WATER ONLY	WASTEWATER ONLY	WATER AND WASTEWATER	TOTAL	TOTAL
£'m	£'m	£'m	£'m	£'m
5.9	0.4	5.2	11.5	17.4
1.1	0.1	1.0	2.2	3.3
1.3	-	0.7	2.0	19.1
0.8	0.1	1.4	2.3	2.3
3.7	0.3	3.2	7.2	10.9
<b>12.8</b>	<b>0.9</b>	<b>11.5</b>	<b>25.2</b>	<b>53.0</b>
-	-	-	-	-
<b>12.8</b>	<b>0.9</b>	<b>11.5</b>	<b>25.2</b>	<b>53.0</b>
0.2	-	0.2	0.4	0.6
0.6	0.1	0.6	1.3	1.9
-	-	-	-	-
0.4	-	0.3	0.7	1.1
<b>14.0</b>	<b>1.0</b>	<b>12.6</b>	<b>27.6</b>	<b>56.6</b>
<b>0.8</b>	<b>0.1</b>	<b>0.8</b>	<b>1.7</b>	<b>2.6</b>
				£'m
				1.6
				(1.6)
				-
				2.0
				(2.0)
				-



## 4G WHOLESALE CURRENT COST FINANCIAL PERFORMANCE

For the 12 months ended 31 March 2019

	WATER	WASTEWATER	TOTAL
	£'m	£'m	£'m
Revenue	446.6	317.0	763.6
Operating expenditure	(220.1)	(95.9)	(316.0)
Capital maintenance charges	(139.1)	(106.7)	(245.8)
Other operating income	2.6	0.2	2.8
<b>Current cost operating profit</b>	<b>90.0</b>	<b>114.6</b>	<b>204.6</b>
Other income	6.8	2.4	9.2
Interest income	0.3	0.3	0.6
Interest expense	(63.7)	(65.2)	(128.9)
Other interest expense	(1.5)	(0.7)	(2.2)
<b>Current cost profit before tax and fair value movements</b>	<b>31.9</b>	<b>51.4</b>	<b>83.3</b>
Fair value gains/(losses) on financial instruments	(5.7)	(5.8)	(11.5)
<b>Current cost profit before tax</b>	<b>26.2</b>	<b>45.6</b>	<b>71.8</b>

## 4H FINANCIAL METRICS

For the 12 months ended 31 March 2019

	UNITS	CURRENT YEAR	AMP TO DATE
<b>Financial indicators</b>			
Net debt	£m	2,853.3	
Regulated equity	£m	1,418.4	
Regulated gearing	%	66.8%	
Post tax return on regulated equity	%	12.0%	
RORE (return on regulated equity)	%	6.9%	8.4%
Dividend yield	%	9.2%	
Retail profit margin – Household	%	0.5%	
Retail profit margin – Non household	%	n/a	
Credit rating	n/a	BBB+/Baa1 (negative outlook)	
Return on RCV	%	7.1%	
Dividend cover	dec	1.2	
Funds from operations (FFO)	£m	342.2	
Interest cover (cash)	dec	4.5	
Adjusted interest cover (cash)	dec	2.4	
FFO/Debt	dec	0.1	
Effective tax rate	%	16.7%	
RCF	£m	212.2	
RCF/capex	dec	0.8	

	UNITS	CURRENT YEAR	AMP TO DATE
<b>Revenue and earnings</b>			
Revenue (actual)	£m	812.9	
EBITDA (actual)	£m	443.8	
<b>Movement in RORE</b>			
Base return	%	5.6%	5.7%
Totex out / (under) performance	%	(0.4)%	1.5%
Retail cost out / (under) performance	%	(0.2)%	0.1%
ODI out / (under) performance	%	(0.2)%	0.2%
Financing out / (under) performance	%	2.0%	0.9%
Other factors	%	0.0%	0.0%
<b>Regulatory return for the year</b>	<b>%</b>	<b>6.9%</b>	<b>8.4%</b>
<b>Borrowings</b>			
Proportion of borrowings which are fixed rate	%	63.1%	
Proportion of borrowings which are floating rate	%	1.5%	
Proportion of borrowings which are index linked	%	35.4%	
Proportion of borrowings due within 1 year or less	%	1.7%	
Proportion of borrowings due in more than 1 year but no more than 2 years	%	1.4%	
Proportion of borrowings due in more than 2 years but no more than 5 years	%	15.5%	
Proportion of borrowings due in more than 5 years but no more than 20 years	%	55.7%	

### Movements in RORE

This commentary explains the differences between the base return at PR14 and the cumulative RORE performance in AMP6 to date, which have contributed to an overall outperformance of 2.73%.

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 1.5% to RORE. This is explained in the Wholesale totex reconciliation to FD narrative under table 4B.

Retail outperformance against FD has added 0.14% to RORE. 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. The outperformance primarily relates to reductions in the doubtful debt charge in 2016/17 and 2017/18, following a comparison of the doubtful debt provision against historical collection rates. The underlying bad debt policy has remained unchanged over AMP6.

ODI rewards earned in AMP6 to date have added 0.15% to RORE. These have been reported each year in table 3A and comprise £7.6m net reward on wastewater services, mostly due to significant improvements in sewer flooding performance, and £2.5m net reward on water services, reflecting rewards for interruptions to supply less penalties for overall drinking water compliance and satisfaction with taste and odour.

Financing outperformance of 0.94% over base RORE reflects 1.33% from outperformance of the PR14 cost of debt, in real terms, due to new debt being raised in AMP6 at favourable market rates, less -0.39% due to actual average RPI being lower than anticipated in the PR14 FD.

4I FINANCIAL DERIVATIVES

For the 12 months ended 31 March 2019

	NOMINAL VALUE BY MATURITY (NET)		
	1 TO 2 YEARS	2 TO 5 YEARS	OVER 5 YEARS
	£'m	£'m	£'m
Derivative type			
Interest rate swap (sterling)			
Floating to fixed rate	20.0	10.0	150.0
Fixed to index-linked	-	-	250.0
Total	20.0	10.0	400.0
Forward currency contracts			
Forward currency contracts USD			
	4.3	-	-
Total	4.3	-	-
Other financial derivatives			
Other financial derivatives			
	13.8	-	-
Total			
Total financial derivatives	38.1	10.0	400.0

For the floating to fixed rate swaps, the interest rate receivable has been calculated using a 3 month sterling LIBOR of 0.85%, being the market rate for the last day of 2018/19.

For the fixed to index-linked swaps, the interest rate payable has been calculated using a reference RPI of 2.4%, being the published RPI for March 2019. Both swaps reported in this line are set at RPI minus a fixed percentage.

TOTAL VALUE AT 31 MARCH 2019		INTEREST RATE (WEIGHTED AVERAGE FOR 12 MONTHS TO 31 MARCH 2019)		
NOMINAL VALUE (NET)	MARK TO MARKET	TOTAL ACCRETION	PAYABLE	RECEIVABLE
£'m	£'m	£'m	%	%
180.0	(10.9)	-	2.77%	1.25%
250.0	(30.4)	17.6	1.71%	2.17%
430.0	(41.3)	17.6		
4.3	0.3	-	0.00%	0.00%
4.3	0.3	-	0.00%	0.00%
13.8	(1.2)	-	0.00%	0.00%
448.1	(42.2)	17.6	0.00%	0.00%



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[www.nwl.co.uk](http://www.nwl.co.uk) | [www.eswater.co.uk](http://www.eswater.co.uk) | [www.welivewater.co.uk](http://www.welivewater.co.uk)

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**WATER** *living water*

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**WATER** *living water*