

# OUR CONTRIBUTION

Northumbrian Water Group's  
Environment, Social and Economic Impact Report

**FOR THE YEAR ENDED 31 MARCH 2019**





# OUR CONTRIBUTION

## NORTHUMBRIAN WATER GROUP'S ENVIRONMENT, SOCIAL AND ECONOMIC IMPACT REPORT

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# NORTHUMBRIAN WATER GROUP'S ENVIRONMENT, SOCIAL AND ECONOMIC IMPACT REPORT

### ABOUT US:

Northumbrian Water and Essex & Suffolk Water are part of Northumbrian Water Limited, which is a member of Northumbrian Water Group Limited (NWG).

We provide water and sewerage services in the north east of England under the brand name Northumbrian Water (NW) and water services in the south east under the brand name Essex & Suffolk Water (ESW). We serve 2.7 million people in the north with water and sewerage services and 1.9 million people in the south with water services.



**CUSTOMERS SERVED**  
**2,700,000**  
**IN THE NORTH**



**CUSTOMERS SERVED**  
**1,900,000**  
**IN THE SOUTH**

### WE HAVE IDENTIFIED FIVE CAPITALS THAT WE RELY ON AS A BUSINESS:



Financial Capital



Manufactured Capital



Natural Capital



Human and Intellectual Capital



Social Capital



# WELCOME FROM HEIDI

**I PASSIONATELY BELIEVE THAT OUR PURPOSE IS NOT ONLY TO DELIVER THE ESSENTIAL SERVICES WE DO FOR CUSTOMERS, BUT ALSO CONTRIBUTE TO SOCIETY IN SUPPORTING THRIVING COMMUNITIES AND ENHANCING THE ENVIRONMENT ON WHICH WE ALL DEPEND. WITH THIS IN MIND, I'M PLEASED TO INTRODUCE OUR CONTRIBUTION REPORT FOR 2019, WHICH LOOKS AT OUR INFLUENCE AND IMPACT IN THE WIDER ECONOMY, THE ENVIRONMENT AND SOCIETY.**

Every day we provide the essential service of supplying drinking water and safely take away the wastewater from millions of people. Our ambition and the contribution we make goes far beyond this.

Our impact and influence for our customers, community and environment spans across a broad range of interests. To help us understand these dependences and interactions, we use the framework of the five capitals (see page 5). We first used the capitals as a basis to help us better understand and impact and influence in 2017 when we launched our first Our Contribution report. Since then we have been continuing our journey to better monitor, understand and deliver against the capitals.

As we continue our progress to understand our dependencies across all five capitals, we are working to use this information to make the best decisions - for nature, our customers, our communities and our business.

To fully understand our impact across the five capitals, is not a simple process. We have committed to doing this openly, honestly and in a robust way. While we report on a broad range of our performance for regulatory purposes, our material impacts across the five capitals goes further than this.

Our Contribution report is aimed at stakeholders with a particular interest in our economic, environmental and social impact. We share this information with our customers in a number of other ways; including [www.welivewater.co.uk](http://www.welivewater.co.uk). This reports sits alongside our [Annual Performance report](#) and [financial statements](#), which provide more information on our financial and manufactured capitals.

In this update to Our Contribution, we have particularly focused on understanding the social impact of some of our key partnerships that are

striving to make a difference for our communities and our customers. Measuring social value is complex and challenging to do in a robust way. I am proud that we have carried out some pioneering work with experts to understand this important area and of the fantastic results we are reporting.

In the last year we have made strides in better understanding our impact and influence on the natural environment; in moving towards incorporating an environmental net gain philosophy into our business.

This report is another step in our journey providing us with a greater understanding of the overall impact of our business on all our capitals. I hope you enjoy this report and seeing the progress we are continuing to make in this important area.

**Heidi Mottram CBE**  
Chief Executive Officer



## OUR CAPITAL ASSETS

**THERE ARE FIVE AREAS THAT WE RELY ON FOR OUR GOODS AND SERVICES, THESE ARE KNOWN AS THE FIVE CAPITALS.**



### 1. FINANCIAL CAPITAL

Financial capital is the funds available for business activities, whether generated by an organisation's own operations and investments or provided by financial institutions.



### 2. MANUFACTURED CAPITAL

Manufactured capital comprises material goods or fixed assets which contribute to the production process.



### 3. NATURAL CAPITAL

Natural capital represents the renewable and non-renewable environmental resources that all individuals and organisations are dependant on.



### 4. HUMAN AND INTELLECTUAL CAPITAL

Human and intellectual capital consists of people's health, knowledge, skills and innovation.



### 5. SOCIAL CAPITAL

Social capital is the networks, relationships and connections between people, communities and institutions.

In our previous Our Contribution reports we have explained what capitals we rely on as we go about our business as a water and wastewater company. We have been working this past year to truly embed our use of these capitals in some of the areas of our business; and indeed through our new Business Plan for 2020-2025.

The capitals are at the heart of our organisation. We rely on the natural world to provide the resources that we depend on to deliver our services; we strongly understand the importance of investing in our human and intellectual capital; without our manufactured capital we would not be able to carry out our undertakings and; society provides the many and varied customers who rely upon the services that we are able to provide.

Over the past year we have continued to work in-house and also with experts in the field. We are getting a better understanding of how we can use the data we have, and how we can turn it from raw data into an impact assessment. Hopefully this report will provide a good update and will take you along the next step of our journey.



# WATER FORUMS' FIVE CAPITALS REPORT

**WE WELCOME AND ENDORSE THE COMPANY'S APPROACH TO USING THE FIVE CAPITALS AS A MEANS OF VALUING THE WORK IT DOES AND THE CONTRIBUTION IT MAKES – NOTABLY TO SOCIETY AND THE ENVIRONMENT.**

In terms of social capital, there are some leading projects – StepChange and Powered By Water – described in this report, which offer valuable case studies to other organisations who may be considering a similar approach. In both cases, their success is down to a strong partnership approach to working – founded on the belief that bringing together the right blend of interested organisations will deliver results that are greater than any one of them could deliver alone.

From a natural capital perspective, we support NWL's adoption of an 'environmental net gain' philosophy. Having a baseline valuation of the biodiversity of its sites will enable NWL to

understand the environmental impact of decisions it makes. We believe that they could go even further still, by working with other utilities in their regions to take a joined-up, single approach to site ranking and net gain tools, which would aid Local Authorities, Non-Governmental Organisations, Local Enterprise Partnerships and the like. With its strong organisational culture of, and track record in, collaboration and partnership, NWL is well placed to lead the way and make a very positive difference in this regard.

There are two measures (shown in Key Data) where NWL has delivered 'unsatisfactory performance and more work is needed' in 2018/19: Repeat Sewer

Flooding in the past 10 years, and Lost Time Accidents. We will seek to understand and constructively challenge the company's plans to improve in both of these areas.

In conclusion, based on what we have seen and heard so far, we commend NWL's ambition for using the five capitals approach and look forward to seeing how it progresses over the next 12 months and beyond.

**Jim Dixon**

Water Forums Chair

On behalf of the Forums for Northumbrian Water and 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 they 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 Our Contribution report and in [Our Annual Performance report](#) for 2019.

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 8th time. We were again the only water company in the world to achieve this accolade.



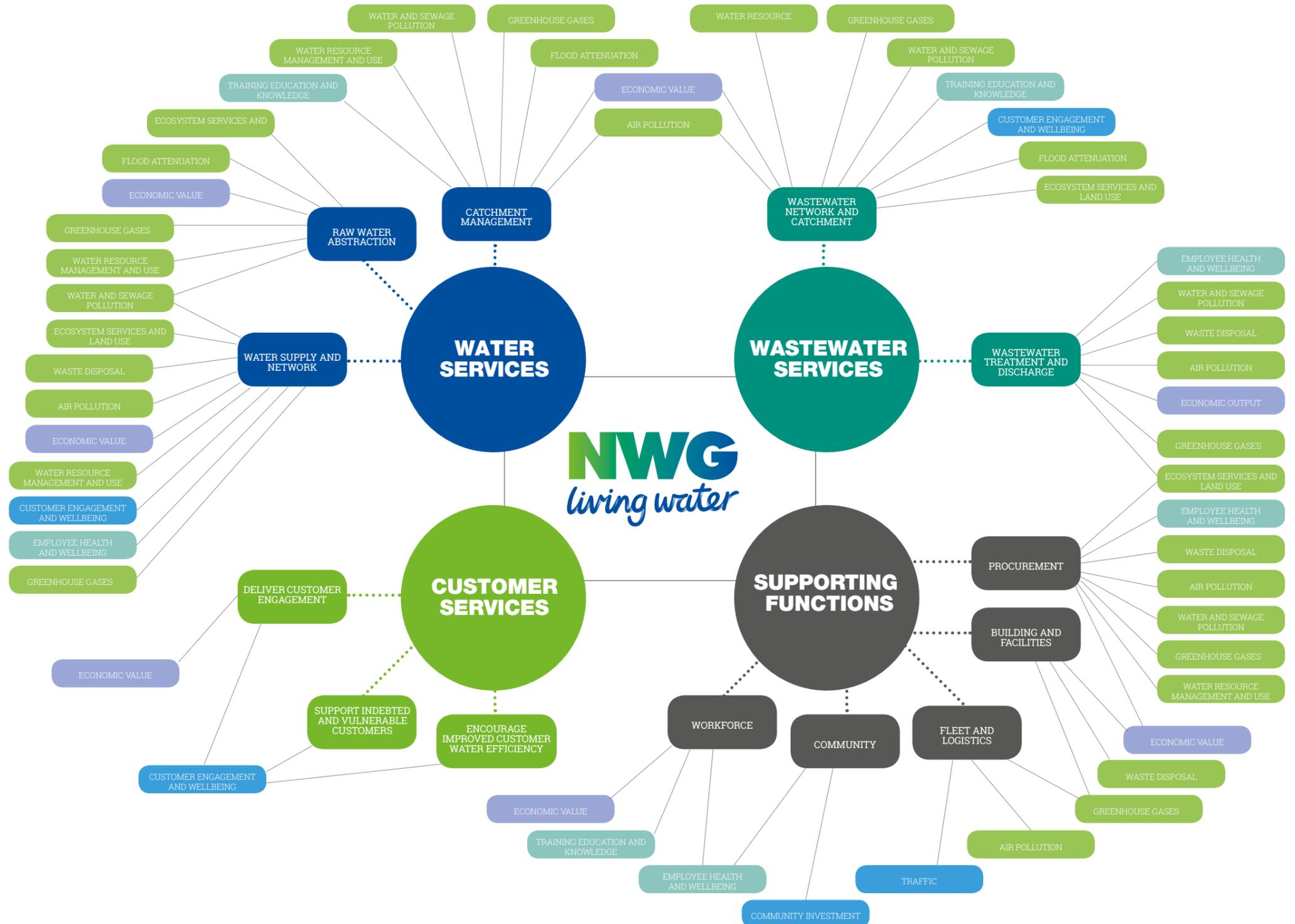
## 962 REFILL STATIONS

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.

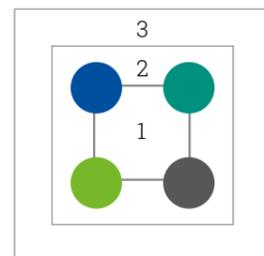


**FIGURE 1: LINKS BETWEEN OUR BUSINESS FUNCTIONS, KEY ACTIVITIES AND IMPACT AREAS**

The diagram below summarises the key links between our business activities and the impact areas identified. Examples of further detail on these links is provided with the case studies.



**KEY**



- 1. Business function
- 2. Key activities
- 3. Impact areas identified

- Financial and manufactured capital
- Social capital
- Human and intellectual capital
- Natural capital



# OUR CAPITALS JOURNEY

**THIS YEAR WE HAVE CONTINUED OUR JOURNEY AND MADE SIGNIFICANT PROGRESS IN UNDERSTANDING OUR INFLUENCE AND IMPACTS IN A NUMBER OF KEY AREAS FOR OUR BUSINESS.**

This year we have continued our journey and made significant progress in understanding our influence and impact in a number of key areas for our business.

We recognise that the work carried out through our investment programme is an area where we have a massive impact and dependency on all five of the capitals. In the last year we have been focussing on how we embrace the five capitals when designing, planning and carrying out work with the aim of leaving a positive legacy behind.



Due to our large customer base we provide with water and wastewater services, we know that we can have a massive impact on the social value that they derive from their interactions with us. This year we have worked with PwC to utilise their expertise in this area to help us measure and understand the broader social impact of two of our key partnerships; StepChange and Powered by Water.



The work we carried out in 2017 identifying our key impact and dependency areas, showed how interlinked our work is with the natural world. To enable us to start to collect more robust data on the impact of our operations on natural capital, we have made strides to better document the value of our landholding, what opportunities there are for enhancement, and how changes to land use impacts the value.



In the next section ([pages 13-26](#)), we describe the progress and what has been achieved in each of these areas.

## OUR LEGACY



The way in which we invest money in our assets has an impact on the value of all five of the capitals - how we chose to invest that money; the quality of the assets that we create; the impact the programme has on the natural world and the communities in which we are working and; the learning that our employees gain from the work and the innovative ideas they bring to it. We recognise we have both an opportunity and a responsibility to consider the legacy our investments leave behind and we have been looking at how this can change the way in which we make our investment decisions.

In the last year we have been focussing on how we can ensure we leave the most positive legacy when considering all of the five capitals. This approach was launched at a conference we held with our key supply chain partners in October 2018.

This event, held in Durham with over 100 attendees, was also used as a showcase for best practice and to inspire people to improve on the lasting legacy that we leave through our investment projects. By engaging with our supply chain partners this provided an opportunity to better explain our capitals approach to them and develop shared tools to monitor impact across our businesses.

With our partners, we have been working to ensure our capital projects leave a lasting positive legacy for our communities as measured by the five capitals. An executive leadership team project is in place with the objective of delivering clear, visible and effective processes to enable the implementation of delivery projects that leave a lasting positive legacy for our customers, based around the five capitals model.

Project teams are looking at this legacy in its broadest sense with a focus on projects designed and delivered with the community in mind and that enhance natural capital.

The lifecycle of our projects has been reviewed with respect to legacy and the five capitals. A framework for analysis against the five capitals is being developed and will be included in the front end assessment of projects by the end of 2019.

Some examples of how our projects are embracing the legacy approach are:

- Our Killingworth flood reduction scheme, where we are installing three floating 'eco systems' on Killingworth Lake, which will provide a home for wildlife and increase bio-diversity in the area. Children from a local primary school have helped to establish the eco systems with plants and shrubs, and learnt more about biodiversity through the project. To mark the project we have also worked with the Natural History Society of Northumbria to install new bat boxes at the reserve, which will help to encourage bats to the area.
- We recently completed work on a £1million project to replace almost a mile of sewage piping in the village of Escomb. As a 'thank you' to our community we painted fencing at nearby Bishop Auckland Railway Station and will be refurbishing old benches on local green space.
- As part of our investment in modernising Riding Mill pumping station we are working with the Environment Agency to install new screens at the river intake to protect fish and eel populations.





## SOCIAL IMPACT EVALUATION



We have been working with PwC to better understand, evaluate and quantify the social value of some of our work. We have set ourselves fourteen ambitious goals in our 2020-2025 Business Plan, which show how we plan to contribute to society over the next five years. To help us understand how to quantify and increase our positive impact, we worked with impact measurement experts from PwC's Sustainability & Climate Change team to assess the social impact of some of our current initiatives. The table below shows how these initiatives link through to our ambitious goals.

Ambitious Goals	Step Change	Powered by Water	Supply Chain
End water poverty in our operating areas by 2030	✓		
Promote confidence in our drinking water so that nine out of ten of our customers choose tap water over bottled water		✓	
Spend at least 60p in every £1 with suppliers in our regions			✓
Be the most socially responsible water company	✓	✓	

Where they were unable to truly quantify the impacts, PwC provided advice on how we could improve social impact measurement for these initiatives.

The outcome of this work is on the following pages.





**StepChange partnership**



We recognise that sometimes life’s ups and downs mean that some customers may find themselves in challenging financial situations. Whilst water bills are a comparatively small part of total household costs, we are determined to do everything it can to help our customers.

In 2014, we teamed up with StepChange Debt Charity, in a first for the water industry, to create a partnership to offer customers access to free, confidential debt advice and support. As the UK’s largest debt charity, StepChange is a natural partner to entrust with such important and often sensitive matters for our customers.

Last year the partnership saw more than 1,600 referrals to StepChange. These referrals allow us to understand better each customer’s financial situation and create an opportunity, and the time,

for them to work with the charity to put together an action plan. StepChange gives advice on a range of issues, from debt to bankruptcy, and even has an online benefits calendar on its website. The personal impact this partnership has on people lives is paramount.

Our partnership runs alongside a range of support available directly through our team and is part of our award winning Water without the Worry campaign. There is a case study giving greater details on this on [page 55](#).

We are committed to understanding and improving our impact on society, so we asked PwC to conduct a social impact assessment of the benefit this partnership has to society. We are delighted to publish their full report in parallel with this Our Contribution report.

The [PwC report](#) describes their assessment of the social impact we are having through this partnership. Amongst other things, the report estimates that our partnership with StepChange created £300,000 for society in 2018, through potential for improved physical and mental wellbeing, employment and productivity, repayments to creditors, and improved financial management.

We encourage all readers to review the full PwC report to understand their work and conclusions about the impact we are having through this important initiative.

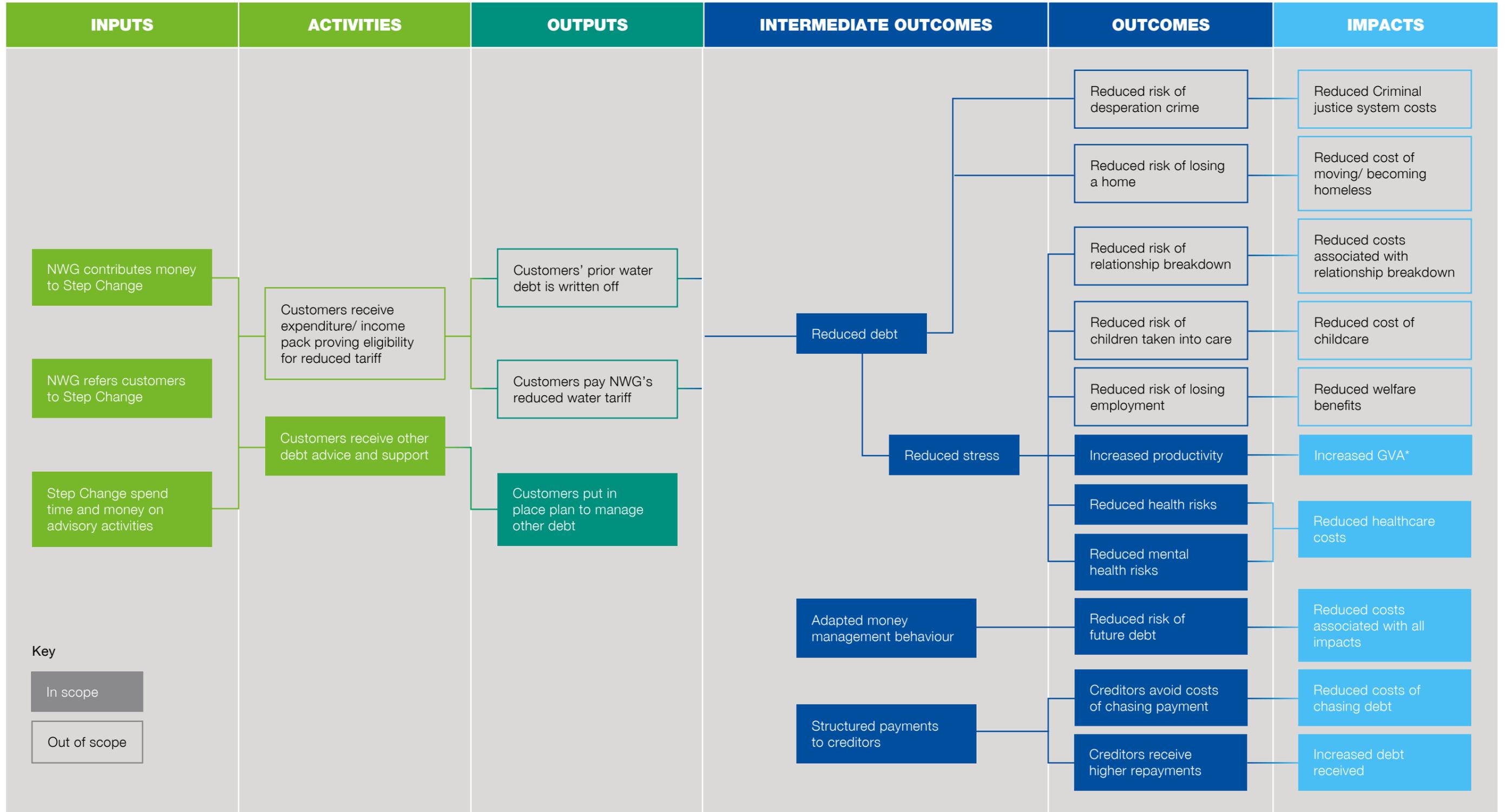
**OUR PARTNERSHIP WITH STEPCHANGE CREATED**

**£300,000**

**VALUE FOR SOCIETY IN 2018**



<p><b>1. IDENTIFY BENEFITS FROM DEBT ADVICE</b></p>	<p><b>2. IDENTIFY NUMBER OF BENEFICIARIES</b></p>	<p><b>3. ESTIMATE OUTCOMES ADJUSTMENT FACTOR</b></p>	<p><b>4. AGGREGATE IMPACTS</b></p>
<p>We identified the expected social impacts from the partnership’s debt advice based on the published literature.</p> <p>We identified two studies: Transforming Lives and The Economic Impact of Debt Advice of high relevance and took a conservative approach, only quantifying benefits where both studies agreed that they were well evidenced.</p> <p>We used values from Transforming Lives and conducted sensitivity analysis to test the impact of using values from The Economic Impact of Debt Advice on our results.</p>	<p>We identified the number of beneficiaries based on data provided by Step Change to NWG on the number of referrals, their demographic characteristics, and the types of debt advice received.</p> <p>Our estimate is likely to be conservative, because we do not include customers referred by NWG who use Step Change’s online debt tool due to data limitations, and we exclude customers who are not recommended a specific debt solution by Step Change. We also only focused on the demographic segments that have been identified by Transforming Lives as being of particular interest to Step Change.</p>	<p>We estimated an ‘outcomes adjustment factor’ for Step Change’s debt advice based on the findings of an outcomes study conducted by Step Change found that only certain groups change their debt situation for the better following initial advice sessions.</p> <p>The underlying social benefit values identified in step 1 should - in principle - account for the extent to which advice leads to outcomes. However this adjustment factor helps give confidence that only advice that leads to a positive outcome is included. This results in a conservative estimate being calculated.</p>	<p>To estimate the social value from the Step Change partnership, we multiplied the value of benefits per beneficiary by the number of beneficiaries and the outcomes adjustment factor to estimate.</p> <p>We conducted sensitivity analysis to test the impact of changing key assumptions on our results so that the reader can make their own informed decision about how to interpret the findings.</p>



\*GVA is the value a company adds during its production process. It comprises employee compensation plus EBITDA, or equivalently revenue minus spending on inputs. It show a company's contribution to national GDP.



We do also offer other help to customers on low incomes, and have an arrears write-off scheme, so it makes it even more impressive to see the additional value accrued from our partnership with StepChange – the ‘above and beyond’ aspect to our work.

The diagram below shows the central, upper- and lower-bound estimates of the social value created by our Step Change partnership.

	TOTAL POTENTIAL BENEFICIARIES		OUTCOMES ADJUSTMENT FACTOR		BENEFIT PER PERSON		TOTAL BENEFIT IN 2018
<b>CENTRAL ESTIMATE</b>	357	X	64%	X	£1,330	=	£300,000
<b>LOWER-BOUND ESTIMATE</b>	357	X	100%	X	£470	=	£170,000
<b>UPPER-BOUND ESTIMATE</b>	714	X	64%	X	£470	=	£330,000

Total benefit rounded to nearest £'000. Other figures rounded to nearest whole number.





**Powered by Water**



We have partnered with sports clubs to deliver the Powered by Water programme that educates 8-12 year old school children on the importance of drinking water.

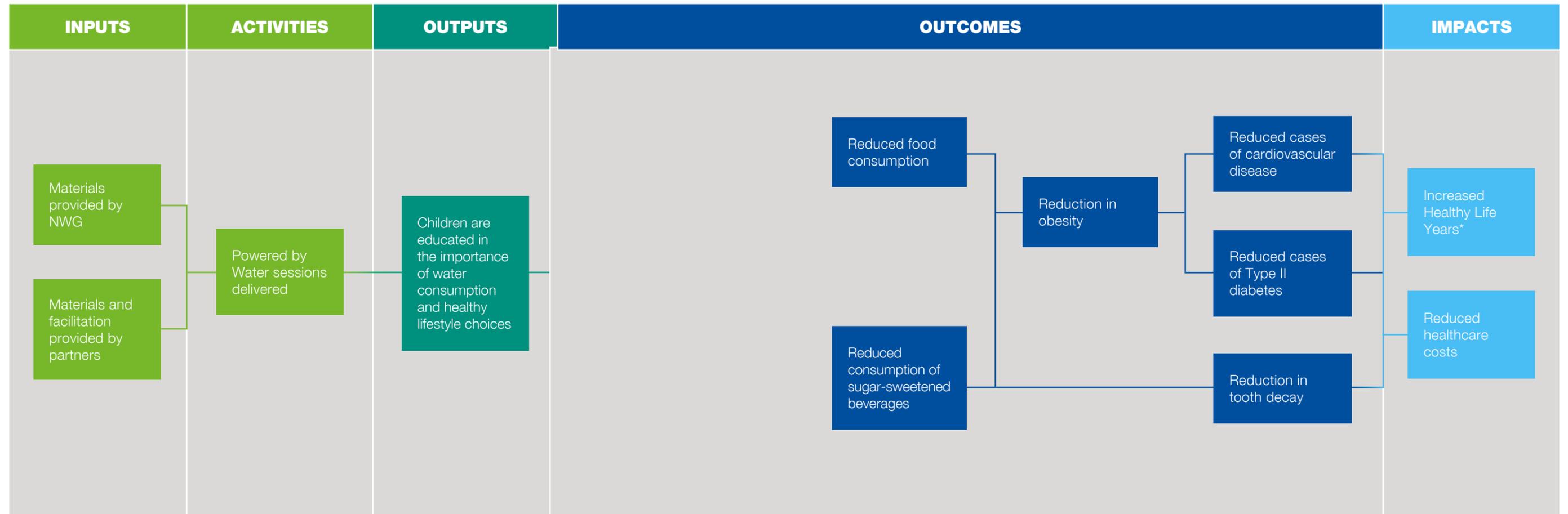
We asked PwC to conduct research on the potential long term impacts of this type of education and, based on this, to identify the potential benefits from the Powered by Water programme.

The [PwC report](#) describes their assessment of the potential benefits of Powered by Water and the level of evidence that is available to support these potential benefits.

While that report identifies some evidence to suggest benefits from the programme, including the avoided cost of type 2 diabetes at approximately £85,000 per case, it's also clear to us that there is some way to go to demonstrate the lasting changes in behaviour that drive impact. For example whilst evidence from the academic literature suggests that the programme may produce a positive impact on children's healthy drinking habits in the very short-term, it is unlikely to produce long-term effects when implemented in isolation, and the absence of data collection on outcomes means it is not possible to establish impact with certainty.

The diagram below shows two key potential outcomes from Powered by Water, both of which can be linked to health benefits.

PwC estimated that the value to society per avoided case of type 2 diabetes is approximately £85,000



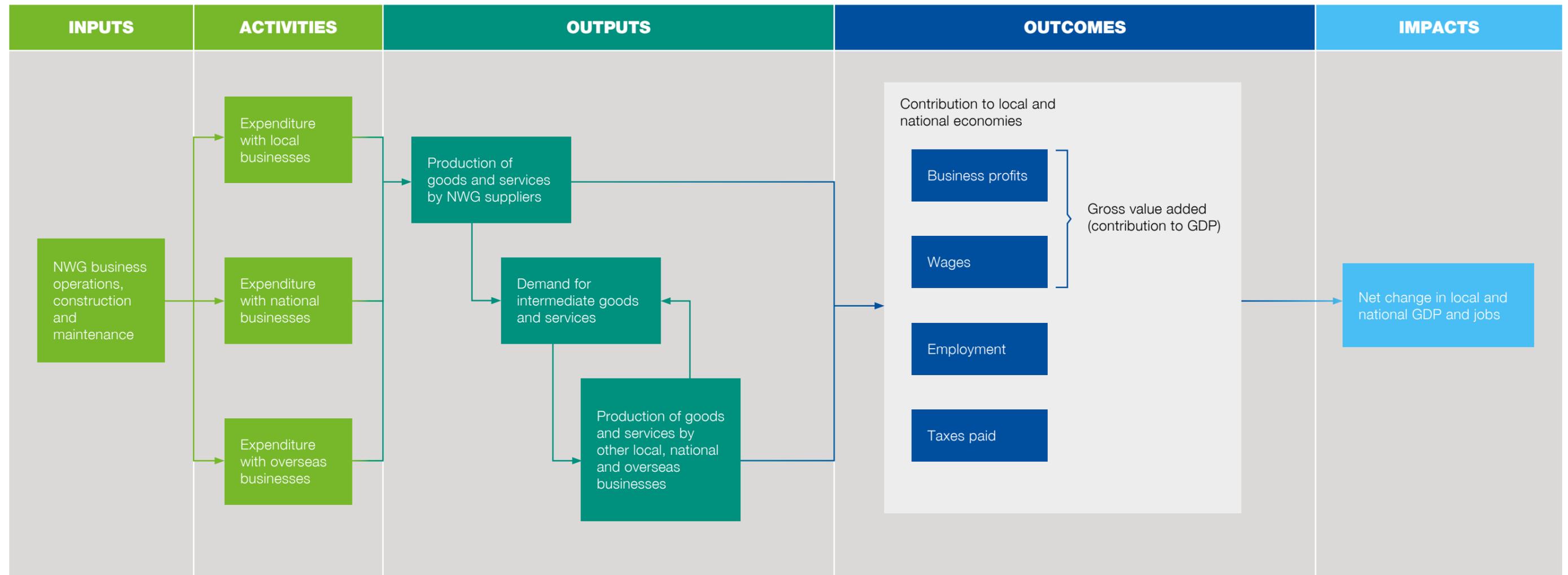
\*Healthy Life Years are a quantified measure of health impact. One Healthy Life Year is equivalent to one year lived in perfect health. Or, for example, two years lived with a severe illness that reduces overall quality of life by half (disability weight 0.5).



### Measuring the impact of our local expenditure

We have set ourselves an ambitious goal to spend “at least 60p in every £1 with suppliers in our regions”. Currently we spend approximately 50p in every £1 of our procurement budget with local suppliers.

The impact pathway below shows how our procurement expenditure is expected to contribute to the local economy in our regions as well as the UK overall.



The diagram above shows that it is not where a company is located that really matters, but how it contributes to the local economy. In particular:

- It is the effect of expenditure on indicators of local economic performance that matter, such as employment and income, rather than the amount of money spent in a particular location.
- The extent to which expenditure supports the local economy depends on not only the locality of expenditure but also the geography of the supply chain for goods and services we buy.

The impact pathway above shows how our procurement expenditure is expected to contribute to the local economy in our regions as well as the UK overall.

We have in the past used the LM3 tool to estimate our local economic contribution, and are now considering developing a transparent and replicable approach to economic impact assessment, focussing on economic value and production of clear metrics.



## SITE RANKING AND NET GAIN TOOLS



We are committed to introducing an environmental 'net gain' philosophy into our business. The first stage in doing this is understanding the biodiversity value of what we already have. In 2018 we started looking at what biodiversity valuation tools existed and what we would like to use. The obvious starting point was the Defra Biodiversity Metric that had been developed for the 2012 Biodiversity Offsetting Pilots. We chose to work with Ecosulis to develop some bespoke tools that are based on the Defra metric, but modified to enable us to consider some aspects that we believe are really important.

We worked to start valuing our landholding in terms of its biodiversity, carrying out habitat value assessments to establish a baseline that we can use to inform changes in management, and to identify where there are opportunities for improvement.

The Habitat Valuation Calculator that we developed with Ecosulis considers habitat distinctiveness and habitat condition as would be expected, and we then added in scores for the presence of priority habitats, priority species, how connected the site is to other areas of conservation value and the presence or absence of invasive non-native species. It is heartening to see that the revised Defra biodiversity metric is now considering connectivity which supports our inclusion of that. Whilst the Defra metric focuses solely on habitats, we decided it is important to us to include a measure for key species – both ones we would like to see on our sites, but also those we don't want there.

We have approximately 2,000 sites, so decided to set a size limit for initial assessment, and concentrate on the 550+ sites that are 0.2ha or larger in size. Once we have assessed these, we will work out a ranking scale based on biodiversity units, and rank the sites from say 1 to 5. This will enable us to focus on keeping our best sites in superb condition, and work on increasing the value of some of the lower ranked sites.

It is a significant step forward to have a way to create a baseline assessment of the biodiversity value of our sites. The 550+ sites were assessed by the end of March 2019

The next challenge was to find the right tool to enable us to better assess the impact of construction or development works on our sites. For this we decided to strip the tool back to being closer to the original Defra biodiversity metric. We can input the initial value of the land in question, then input any habitat to be lost, to be created or to be enhanced – looking both on-site and where that isn't possible off-site. The tool shows % changes in biodiversity value, and you can run different scenarios showing the impact of changes in scheme or mitigation design. Many of our projects are quite small so we have reduced the scale of the tool from ha to m<sup>2</sup> to ensure we can pick up the impacts at the right level.

We have started to put some projects through this tool, and are discussing the outputs with the project managers with the aim of embedding it into our normal working practices in AMP7.

Both tools represent a huge step forward for us to be able to genuinely understand the value of our landholding and the impact of our operations on the natural capital assets we are responsible for.



# KEY DATA

**BELOW WE PRESENT DATA AGAINST OUR KEY IMPACT AND DEPENDENCY AREAS LOOKING ACROSS THREE OF THE CAPITALS - NATURAL, HUMAN & INTELLECTUAL, AND SOCIAL. OUR DATA THAT RELATES TO OUR FINANCIAL AND MANUFACTURED CAPITALS ARE REPORTED THROUGH OUR ANNUAL PERFORMANCE REPORT WHICH IS AVAILABLE ON OUR WEBSITE ([www.nwg.co.uk](http://www.nwg.co.uk)).**

The data presented represents key impact areas and is all audited data. We took the conscious decision in 2018 to ensure that future data development is in line with our ambitious goals and outcomes that we have co-created with our customers and stakeholders for 2020-2025. For this report we are therefore providing an update of the data we set out last year's report; showing a three year trend in these key impact areas.

KEY	
Unsatisfactory performance on this measure and more work is needed in this area.	●
Satisfactory performance but below our ambition - an area we will be focusing on.	●
Good performance on this measure.	●

NWG KEY IMPACT & DEPENDENCY AREAS	AREAS FOR DATA DEVELOPMENT	OUTCOME			ANALYSIS
		16/17	17/18	18/19	
<b>NATURAL CAPITAL</b>					
GHG emissions	GHG emissions (kt CO <sub>2</sub> )	187.7	163.5	148	●
	% of sewage sludge to biogas and then into renewable energy	100	100	100	●
Ecosystem services & land use	No. patrols completed to help protect our rivers	1,137	2,074	1,836	●
	% bathing water quality compliance (sufficient or higher)	100	100	97.06	●
Water & sewage pollution	No. pollution incidents (category 3)	102	58	59	●
	Leakage MI/d (Northumbrian Water)	133.82	137.1	136.3	●
	Leakage MI/d (Essex & Suffolk Water)	68.08	66.2	64.5	●
Flood attenuation	No. properties flooded internally	119	96	124	●
	No. properties flooded externally	839	944	902	●
	No. repeat sewer floodings (in the last 10 years)	46	38	60	●

NWG KEY IMPACT & DEPENDENCY AREAS	AREAS FOR DATA DEVELOPMENT	OUTCOME			ANALYSIS
		16/17	17/18	18/19	
<b>NATURAL CAPITAL</b>					
Water resource management & use	households water saving MI/d	0.55	0.88	1.06	●
	£k invested in water efficiency programmes	1,607	1,424	1,618	●
	No. customers engaged about water efficiency	29,066	48,453	57,608	●
Waste disposal	% sewage sludge sent to landfill	0	0	0	●

NWG KEY IMPACT & DEPENDENCY AREAS	AREAS FOR DATA DEVELOPMENT	OUTCOME			ANALYSIS
		16/17	17/18	18/19	
<b>HUMAN &amp; INTELLECTUAL CAPITAL</b>					
Training, education & knowledge	No. people sponsored on internships & apprenticeships	N/A	42	36	●
	No. apprentices employed	N/A	41	31	●
	No. employees undertaking upskilling/development under apprenticeship standards	N/A	>200	161	●
Employee health & wellbeing	No. postgraduate research students sponsored	30	20	25	●
	% employees participating in Just an Hour	53.2	52.4	48	●
	No. lost time accidents	17	22	29	●
	% employee engagement survey participation	71	80	75	●
	% employee retention	89.78	91.48	95.27	●



NWG KEY IMPACT & DEPENDENCY AREAS	AREAS FOR DATA DEVELOPMENT	OUTCOME			ANALYSIS
		16/17	17/18	18/19	
<b>SOCIAL CAPITAL</b>					
Customer engagement & wellbeing	% compliance with drinking water quality standards	99.929	99.938	99.949	●
	No. referrals made for debt management support	3,918	2,939	1,638	●
	Position in CC Water Trust Ratings	1	1	1	●
	Net promoter score	46	44	43	●
Community investment	£m spent by group with local contractors	175	175	198	●
	£ contribution to environmental, community & charitable NGOs	613,566	623,897	£962,837	●
	No. visits to owned historical sites - Museum of Power, Tees Cottage & Ryhope Engines Museum	23,512	26,459	26,697	●
	No. visits to Kielder Leisure	408,000	426,000	422,000	●
	No. visits to Hanningfield & Abberton nature reserves.	97,100	107,800	120,500	●
	£ donated via Branch Out	56,679	60,037	60,271	●
	match funding levered by our Branch Out donations	x7.7	x5.9	x30	●
£ donated via the community foundation	23,576	25,153	25,750	●	



## PERFORMANCE EXCEPTIONS

We are pleased that in the majority of key data areas our performance is meeting our stretching goals and is therefore shown as green in the analysis above.

The following case studies give some examples of our highlights in these areas.

There are 6 areas where our performance has not met our expectations, shown as red or amber in the table above, and we will be focussing to improve next year. These are explained in more detail below.

### Bathing water compliance

Our bathing waters (sea water at the regions beaches) continue to be amongst 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. The rest of our bathing waters were all rated Good or Excellent and 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 North Tyneside Council 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.

### Flood attenuation

We have continued to meet our performance commitments for the number of properties flooded internally and for the number of properties experiencing repeat flooding. We have flagged this as amber in the data table above, as while we have met the stretching targets we set, our performance trend has shown an increase in both these areas this year. We are undertaking a full review of how we can dramatically improve our performance in this area.

### Apprentices employed

The number of apprentices employed fell from 41 to 31 in 2018 due to 10 apprentices moving in to full time roles. Due to the extensive transformation programmes and where the current apprentices are in their training cycle, no additional apprentices were recruited in 2018. A strategy is currently being

developed around future apprenticeship recruitment as part of our plans for our NWG Academy (see the case study on [page 57](#) for further details).

### Just an Hour

In 2018, we supported over 600 organisations and 1527 people got involved with our employee volunteering programme, Just an Hour. 48.4% of our people participated in Just an Hour, which was slightly below our target of 50%.

2018 was an exceptionally busy year for our people with the training and implementation of our new customer systems, a big drive to achieve our leakage targets and some challenging weather conditions for operational teams. These combined factors made it challenging for some teams of employees to take work time out to volunteer.

In 2019, we have a focused drive into encouraging our people to get involved and realise the benefits of taking time out from the business to build team spirit and community understanding via volunteering. This has included our entire leadership cohort leading by example and taking part in a volunteer beach clean.

### Lost time accidents

In 2018 we saw an increase in Lost time accidents. In response we continued to ramp up our Everyone Home Safe Every Day initiative. Further details of this programme are given in the case study on [page 45](#). This work culminated in over 1759 employees attending one of our safety workshops and 2454 employees attending a safety briefing focussing on 2017's performance and the use of our 60 Second Check tool.

When looking at Lost Time Accidents (LTA) as our main measure, the overall performance continued to be disappointing. However, viewing this in the context of a lagging indicator, it is also important to consider our leading indicators which may predict future performance. Our leading indicators that measure awareness and focus on safety within the business have improved significantly with 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.

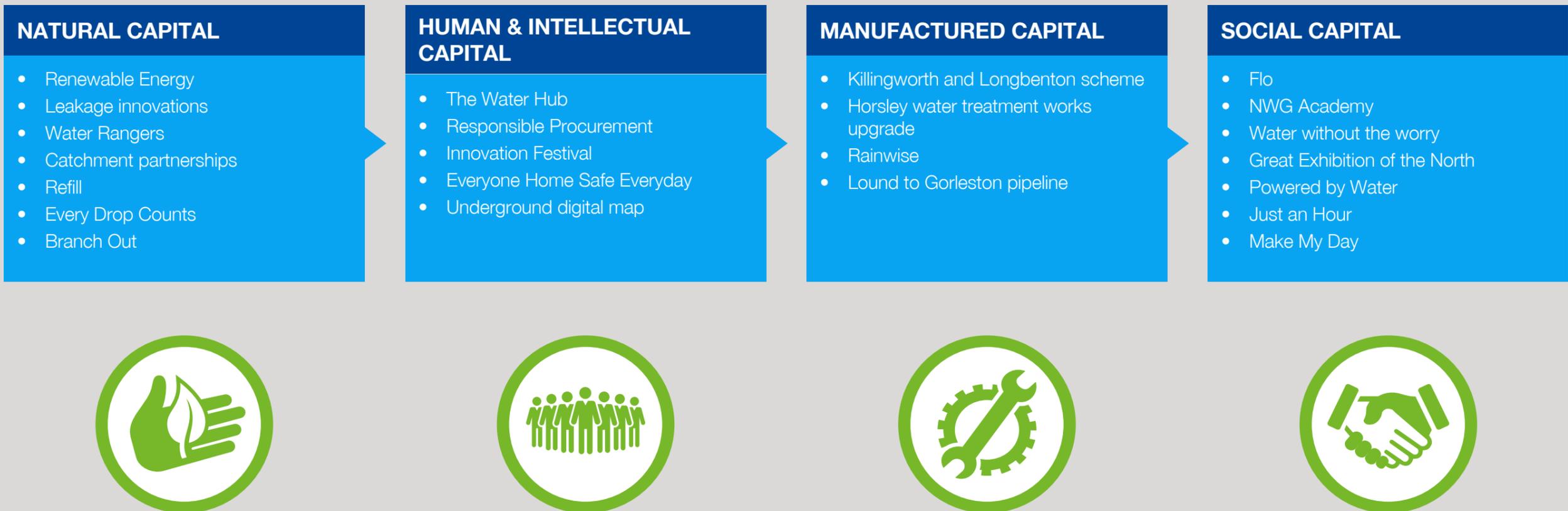
In Spring 2019 we also relaunched our safety systems and procedures with an emphasis on rationalising and simplification of processes. We remain optimistic that these activities are inducing a long term behavioural and culture change that will lead to a positive step change in our LTA performance.



# CASE STUDIES

**WE HAVE INCLUDED A SERIES OF NEW CASE STUDIES IN THIS YEAR'S REPORT. HERE'S AN OVERVIEW OF THEM, AND WHICH CAPITALS THEY HAVE AN IMPACT ON – DEMONSTRATING HOW ONE PROJECT CAN IMPACT ON MANY CAPITALS. WHILST WE HAVE NOT SPECIFIED THE ROLE OF FINANCIAL CAPITAL WITHIN THE CASE STUDIES, IT WRAPS ROUND ALL OF OUR PROJECTS - ENABLING AND ENHANCING OUR INVESTMENT IN THE OTHER CAPITALS.**

We have used the symbols shown on [page 5](#) to explain which of the capitals we feel are represented in each case study.





# OUR HIGHLIGHTS IN NUMBERS:



**74KM**  
**OF WATERWAYS**  
PATROLLED AT LEAST  
ONCE A FORTNIGHT BY  
OUR WATER RANGER  
VOLUNTEERS



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



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



**2,000**  
**PEOPLE**  
ATTENDED OUR 2018  
INNOVATION FESTIVAL



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



**4,000**  
**PROPERTIES**  
PROTECTED FROM FLOODING  
THROUGH OUR RAINWISE SCHEME



**962**  
**PREMISES**  
REGISTERED AS REFILL STATIONS  
ACROSS OUR SUPPLY AREAS



**27,500**  
**YOUNG PEOPLE**  
ENGAGED WITH THROUGH  
OUR POWERED BY WATER  
PROGRAMME



CUSTOMER HEROES ATTENDED  
**130**  
EVENTS



**6,000**  
60-SECOND  
SAFETY CHECKS  
COMPLETED BY OUR  
PEOPLE IN 2018



**£410,000**  
**IN GRANTS**  
AWARDED TO LOCAL  
ENVIRONMENTAL SCHEMES  
THROUGH OUR BRANCH OUT  
FUND SINCE 2013



**4,200**  
**PEOPLE SURPRISED**  
DURING OUR 2018  
MAKE MY DAY WEEK

# RENEWABLE ENERGY



**WE ARE LEADING THE WAY IN THE USE OF GREEN 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 BY 2027.**

We 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. Race Bank Offshore Wind farm is one of the newest operational wind farms in the UK with its 91 Siemens Gamesa 6MW wind turbines having been commissioned earlier this year.



# 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, as well as looking out for any water leaks on our distribution network and operational issues such as blocked outfalls, missing / 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 6473 patrols have been 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 help patrol the designated routes.

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



# CATCHMENT PARTNERSHIPS & EU PENINE PEATLIFE



**WORKING IN CATCHMENTS IS FUNDAMENTAL TO THE RESILIENCE OF OUR BUSINESS AND PLAYS A CRITICAL PART IN HOW WE THINK AND OPERATE. WE HAVE A LONG HISTORY OF WORKING IN PARTNERSHIPS AND ACTIVELY CONTRIBUTING TO PARTNERSHIPS IN CATCHMENTS ACROSS OUR ENTIRE SUPPLY AREA.**

We recognise that looking at the whole catchment area is key to making sure we supply clean, clear drinking water that tastes great to our customers now and in the future. In addition to improving water quality, taking a catchment based approach is helping us reduce the risk of flooding and improve biodiversity. To look after the entire catchment, we work in partnership with others.

By working in partnership, we are able to pool resources and knowledge to better understand our catchments and work more effectively to address any environmental issues.

We have been looking ahead to what we hope to achieve in 2020-25 and launched our new partnership scheme 'Improving the Water Environment' in July. We've also been engaging our partners in our proposals for holistic catchment projects in the South Tyne and in Essex; and in developing catchment approaches to balancing nutrients.

A key catchment partnership project that we continue to be involved in is the £6 million Pennine PeatLIFE project. This started in November 2017 and will focus on areas of the North Pennines, Yorkshire

Dales and Forest of Bowland, repairing 1,535ha of damaged areas of blanket bog or 'peat bog' over the next four years.

13% of the world's resource of 'peat bog' is found in the UK. Once restored, it provides homes for wildlife, stores carbon to help combat climate change and helps filter clean water. Water quality benefits will be delivered through the project, benefiting the uplands; delivering upstream solutions for the benefits of our downstream customers.

This project is led by the North Pennines Area of Outstanding Natural Beauty (AONB) Partnership in collaboration with Yorkshire Wildlife Trust and Forest of Bowland AONB Partnership. It is financed by the European Union's LIFE Programme, Environment Agency, Yorkshire Water and United Utilities. We also help finance the project and sit on the board of the partnership, advising on peat restoration, supporting with water quality sampling and monitoring in the uplands. The project will also test innovative ways of funding, identifying new approaches to paying for environmental improvements with multiple benefits for everyone.



# LEAKAGE INNOVATION



**WE ARE DETERMINED TO BRING DOWN LEAKAGE ACROSS OUR NETWORK, AND HAVE BEEN UTILISING 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.

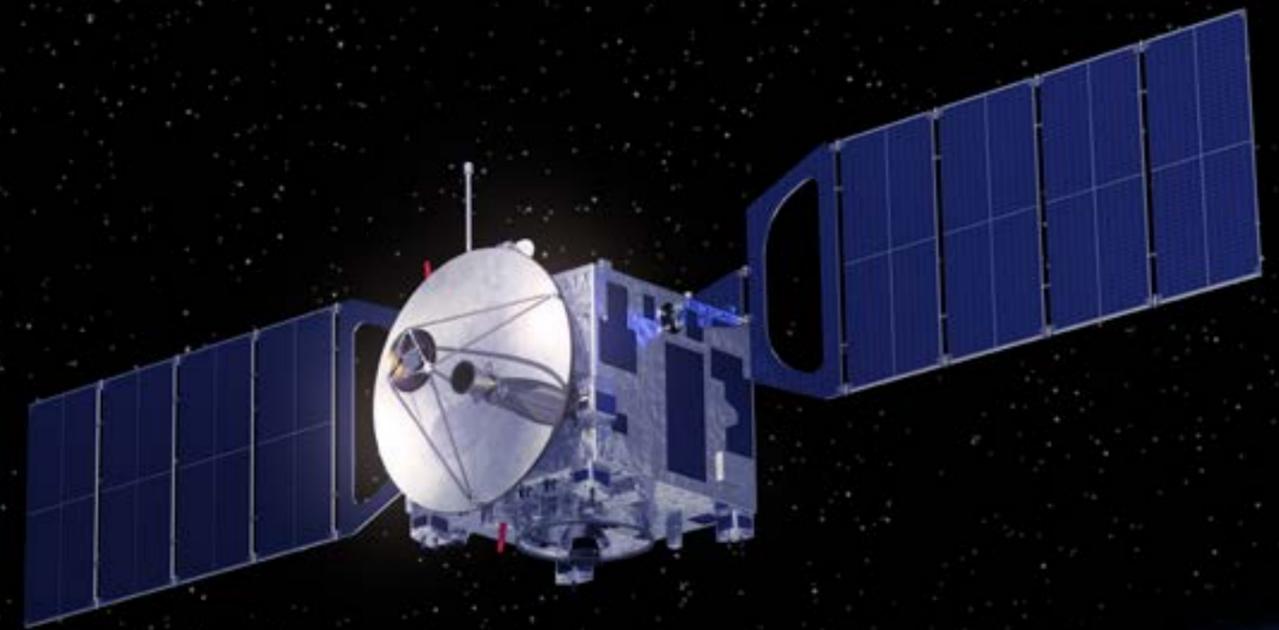
We have also brought a four-legged friend on board to help us battle leakage! – Denzel is a springer spaniel who has been trained to sniff out and locate leaks by recognising the tiniest traces of chlorine use to disinfect our water supplies.

Our customers can also be a great help to us 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, so 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.

Our 2018-19 leakage target was 203Ml/d and the reported figures were 200.43Ml/d. Compared with the 2017/18 reported figure of 203.22Ml/d, our leakage performance has shown reduction of 2.79Ml/d from year to year.



# EVERY DROP COUNTS



**OUR AWARD WINNING WHOLE-TOWN APPROACH TO DELIVERING WATER EFFICIENCY, EVERY DROP COUNTS, DEVELOPED FURTHER WITH A GREATER FOCUS ON CHANGING BEHAVIOUR.**

This year we completed 5,084 home visits through Every Drop Counts, split between Washington and Barking. We helped our customers achieve average measured savings of 22.2 litres/property/day in Washington, and in our southern area, in Barking, our customers achieved an average measured saving of 39.8 litres/property/day.

Our exciting new children's play, Super Splash Heroes, has built on our previous primary school work, engaging with over 31,400 pupils in 198 schools on water efficiency over this year. The premise behind Super Splash Heroes is that every single child has the potential to be a Super Splash Hero. The characters are children who transform into heroes by changing their attitudes to using and saving water. The play aims to demonstrate how people can make little changes that will have a big impact on the world around them and to inspire

children to make a positive difference through the way they use water.

This year we also offered a free water saving visit to customers who are on our reduced tariff or our arrears support scheme and were pleased to have nearly 500 customers taking up the offer.



# REFILL



**REFILL IS A NATIONAL TAP WATER DRINKING CAMPAIGN LED BY THE PLASTIC POLLUTION CAMPAIGN GROUP CITY TO SEA. IT AIMS TO PROVIDE A NETWORK OF CAFES, SHOPS, HOTELS AND OTHER BUSINESSES THAT WILL REFILL PEOPLE'S REUSABLE BOTTLES WITH TAP WATER FOR FREE, REDUCING RELIANCE ON SINGLE-USE PLASTICS.**

Our campaign started from a conversation with City to Sea at our 2017 Innovation Festival. We launched in Durham in November 2017 and have now rolled out the campaign across all of our operating areas with almost 1,000 local businesses across our supply areas registered as Refill stations by the start of 2019.

Other water companies followed our lead, joining forces in an industry-wide approach to the campaign. The goal for the network is to extend to every city and town in England by 2021. The Refill smartphone app can be used to register a business and find your nearest Refill station, and there are special blue stickers in shop windows. It is estimated that the scheme will cut plastic bottle use by tens of millions each year, as well as increasing the availability of high quality tap water.

We have worked with volunteer groups to launch their own local Refill schemes within our supply areas, and have been working with our partners, such as Essex Wildlife Trust, to encourage them to get involved and support the scheme.

In September 2018 we took part in the first ever 'National Refill Day', taking to the streets of Newcastle and Brentwood to spread the word about Refill and urge local businesses to sign up. A second National Refill Day is being planned for June 2019.





## BRANCH OUT



**WITH THE VISION OF “HELPING OUR REGIONS BUILD RESILIENCE AND ADAPT TO THE CHANGING CLIMATE WHILST BRINING BENEFITS TO PEOPLE AND WILDLIFE” AT ITS HEART, BRANCH OUT SUPPORTED A GREAT VARIETY OF PROJECTS IN 2018 AND HELPED SOME BRILLIANT PROJECTS BE DELIVERED OR GET UNDERWAY.**

It has helped involve local communities, schools, volunteers and universities in projects to control and remove invasive non-native species. New riverine habitats have been created; volunteers have improved community areas for wildlife and have inspired communities to monitor their local environment and improve the health of wetland areas. Upland meadows are being restored, with seed being collected, propagated and planted out, and new grazing introduced. Protected and threatened species such as the water vole and the black bee have been re-introduced. 2018 also saw the start of a project to create 1000 acres of wetland on the edge of Lowestoft which is being supported by Branch Out.

The concept of Branch Out was born in 2007 and the idea was developed and trialled over a period of years, resulting in the effective processes that we put in place in 2013. Since 2013 we have supported 105 projects and invested over £410,000 which has been used to lever in 12 times that amount of funding into our regions. This has resulted in Branch Out being part of, and helping to enable, an amazing £5.4m investment in wildlife and people across the regions in which we work.

## THE WATER HUB



**WITH THE LAUNCH OF THE COLLABORATIVE ‘THE WATER HUB’, WE’VE STRENGTHENED OUR PARTNERSHIP WITH DURHAM UNIVERSITY, DURHAM COUNTY COUNCIL AND THE ENVIRONMENT AGENCY.**

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.

The project, which is funded by the **European Regional Development Fund**, will help support SMEs through:

- Challenge events that will offer SMEs the chance to work on specific problems to try and find innovative solutions.
- Access to live testing facilities to test and further develop identified solutions. These facilities include residential homes, laboratories and supply chains.
- Innovations partnerships to facilitate the development of new networks of SMEs, partners and researchers with the aim of bringing people together to form new, exciting, collaborations.

- Small grants will be made available by the Water Hub to help support the development of novel ideas. Grants of £1000-£5000 can be made available at different stages in the innovation process and will be fully matched by the SME.

The Water Hub will also provide valuable mentoring and facilitation to SMEs to help develop ideas further, open up new supply chains and connect SMEs with research innovation services across the North East of England.



# 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 TO OUR ORGANISATION, TO SOCIETY AND TO THE ECONOMY, WHILE, WHERE POSSIBLE, 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 staff with purchasing authority understand key considerations when making procurement decisions. Our customer engagement vehicle 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.

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.



# 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 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 safely 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 and 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 2000 employees have attended an Everyone Home Safe Every Day half day workshop; over 6000 60 Second Checks were completed and over 650 Safety Conversations were held. By using innovation and technology such as VR and smartphone apps 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.





# UNDERGROUND DIGITAL MAPPING



**WORKING WITH OS, NORTHERN GAS NETWORKS, NORTHERN POWERGRID, OPENREACH, NEWCASTLE CITY COUNCIL, SUNDERLAND CITY COUNCIL AND DURHAM COUNTY COUNCIL, WE ARE PROGRESSING THIS EXCITING PROJECT THAT WILL BRING MAPS OF SERVICES TOGETHER FOR THE FIRST TIME.**

With our partners we have pooled data to create an underground map of part of the Sunderland area, which covers around 140,000 properties. A digital map is provided of 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.

Demonstrating the national significance of this innovation, in April 2019, Cabinet Office Minister, Oliver Dowden MP, visited Sunderland to see the work which is already underway to map the area's underground network. Following his visit, the Government's Geospatial Commission has backed the project and announced its ambition to bring together the existing data on underground pipes and cables to create an Underground Assets Register across the country. This work, started in the North East from an idea at the Innovation Festival, will now help to reduce the huge cost of accidental strikes on underground pipes and cables which is estimated as £1.2 billion a year hit to the UK's economy.

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. Water, gas, electricity and telecoms companies all have maps of their infrastructure underground, but we are bringing all of this 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. If the project works successfully in our operating region we are keen to develop this as a national platform."



# INNOVATION FESTIVAL



**OUR INNOVATION FESTIVALS ARE BIG, LOUD, EXCITING AND VERY UNIQUE EVENTS WHERE WE GATHER SOME OF THE GREATEST AND MOST INNOVATIVE MINDS FROM THE WORLDS OF BUSINESS, SCIENCE, TECH, ENGINEERING, UTILITIES AND CUSTOMER SERVICES AND GET THEM TO TACKLE REAL WORLD PROBLEMS TOGETHER IN A SERIES OF SPRINTS.**

We then throw in guest speakers, live music, comedy, tech demos, hackathons, face painting and much much more. It's gigabytes and glitter. Wellies and wastewater management. Like Glastonbury meets Bake off but without the rain and with more engineers!

We ran our first festival in 2017 and we saw 1,000 people from 140 organisations join us at the site village we built at Newcastle racecourse. More than 250 local school pupils came during the week and took part in STEM activities and workshops.

34 innovative ideas and solutions came from the festival and we've seen some of these grow into real life 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. 14 sprint tents and teams, 2 data hacks, 2,000 attendees from 510 businesses and 750 school pupils. We had celebrity speakers, lightning talks from innovators from across the world and demonstrations on cutting edge technology including augmented reality and hydrogen powered vehicles.

We had data hacks, poetry, poo shows, yoga sessions, mindfulness seminars and even our own onsite TV channel; that allowed millions of people from all across the globe to see what we were doing at the festival.

And again, the results speak for themselves.

We're progressing, at speed, a number of world leading innovative projects including Underground mapping, the barnacle and digital twins. All of which are being developed as this report is being produced.

In 2018 we also held our first 'day of innovation' event at our Sandon Valley House site in Chelmsford, Essex. This allowed our employees, partners and stakeholders the opportunity to be involved with progressing our innovation projects and adding to the ideas. Discussions are underway for a special event to be held in the south in 2019.





# 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 £6 million scheme, which is being carried out by our partners Esh-Stantec and 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 grass 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. Plants include plantain, starwort, reed sweet, yellow flag iris, water forget-me-not, purple loosestrife and meadowsweet.

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.

# HORSLEY WATER TREATMENT WORKS



**WORK IS CONTINUING ON OUR £46 MILLION PROJECT TO UPGRADE OUR HORSLEY WATER TREATMENT WORKS. THE PROJECT STARTED IN 2016 AND IS DUE TO BE COMPLETED IN 2020. IT WILL EXTEND THE LIFE OF THE 1970S WATER TREATMENT PLANT, WHICH SERVES AROUND 800,000 CUSTOMERS ON TYNESIDE.**

Up to 150 million litres of water a day are treated at this works and have been for around 40 years, drawing water from the River Tyne at Ovingham and Whittle Dene Reservoir.

We're building new treatment facilities alongside the existing Horsley works, which will remain in operation until the new works are complete.

The new works will include a new clarification process, six new rapid gravity filters, UV disinfection, improvements to the sludge treatment and handling process and new chemical dosing systems. We're also building a new pumping station at Birney Hill.

The project is being carried out by Doosan Interserve – a joint venture involving Interserve Construction Ltd and engineering company Doosan Enpure.

Once complete, the treatment works will continue to meet our ever increasing water quality standards and improve the site's resilience.



# RAINWISE



**OUR RAINWISE INITIATIVE REDUCES THE RISK OF CUSTOMERS' PROPERTIES BEING FLOODED, BY PREVENTING SURFACE WATER FROM ENTERING OUR SEWER NETWORK. IT USES SUSTAINABLE DRAINAGE SOLUTIONS (SUDS) TO MEET THE CHALLENGES OF HEAVIER RAINFALL AND A GROWING URBAN POPULATION.**

SuDS are an alternative to building more engineering infrastructure – they include ponds, rainwater gardens and grassed areas that store surface water temporarily.

Rainwise is about using data from planning authorities and the Environment Agency to spot areas that have flooded or may flood in future; then working with the communities to explore the best solutions for them. As well as our physical installation schemes, we raise awareness among parish councils, schools and residents about how they can get involved in creating their own small-scale ones, e.g. installing water butts.

Rainwise combines with 'SuDS for Schools' – our educational programme that teaches young people about flooding, climate change and biodiversity. The rain gardens and planters we install at the schools can also be used by teachers as part of the curriculum.

We try to get as many other benefits as possible from each Rainwise scheme, including reducing pollution risk, improving biodiversity and wildlife habitats, and green spaces for health and wellbeing.

Rainwise started in 2015 and we've made big strides towards our goal of reducing flood risk for 7,200 properties by 2020 – over 4,000 properties so far, through £40m investment in schemes large and small, across the North-East, which have had customer participation at their heart.



# LOUND TO GORLESTON PIPELINE



**AS PART OF OUR 2015 TO 2020 £1.1 BILLION INVESTMENT PLAN A NUMBER OF LARGE SCALE PROJECTS WERE PLANNED INCLUDING THE LOUND TO GORLESTON PIPELINE AND PUMPING STATION SCHEME WHICH WILL BE DESIGNED AND CONSTRUCTED WITHIN THIS PERIOD.**

The 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. Most of the pipework was installed within the existing carriageway of Beccles Road, Bradwell, Great Yarmouth, Norfolk. Work on the new water main started in September 2018 and was due to be completed in June 2019. However, the teams on site worked hard with the local council and Highways England, as a result 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. This will improve the water supply network and improve reliability, safeguarding supplies for many years to come.



# FLO



**OUR CUSTOMER ENGAGEMENT VEHICLE, FLO, HAS BEEN TRAVELLING OUR REGIONS, ATTENDING VARIOUS EVENTS AND POPPING UP AT KEY LOCATIONS ACROSS OUR OPERATING AREAS TO GAIN CUSTOMER INSIGHT AND RAISE AWARENESS OF IMPORTANT CAMPAIGN MESSAGES.**

Flo helps to deliver customer participation and engagement activity, involving our customers in what we do, providing the opportunity to help us improve what we do and find out what we are doing well.

We have a team of over 30 Customer Heroes to support Flo delivering activities with customers. Our Customer Heroes have meaningful one-on-one conversations with customers and in 2018, directly engaged with over 22,000 customers.

Some of the campaigns included are: 'Refill' to help reduce plastic waste and encourage customers to use our clear, great tasting tap water; 'Have Your Say' to support with research and Business Plan awareness; water efficiency messages including 'Every Drop Counts'; awareness of blockages; engagement around asset investment schemes; water quality information; 'Rainwise' and; Waterside Parks messaging.

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

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 2020-2025 Business Plan that it is our ambition to give every single customer the opportunity to have a strong voice and engage with us through our participation ladder, having 2 million customers involved by 2025.

# 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 a leading habitat for salmon.

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.

More than 4 million visitors were welcomed to NewcastleGateshead over the summer, with 32% citing the Great Exhibition of the North and 75% of those engaging with the event's content. Our own social media around the Exhibition reached more than 38,000 people, with more than 1,250 engagements.

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.



# MAKE MY DAY



**A YOUNGSTER WITH NEUROBLASTOMA, 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.**

'Make My Day' celebrates our customers and people, and 2018 saw employees delivering surprises and showing their love for the people they serve as the initiative marked its third year. 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
- 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 hearing how she continued to work tirelessly for those under her care, despite her own personal difficulties
- Called in to surprise staff 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 a 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

...plus more.

'Make My Day' is aimed at showing appreciation and love for people who contribute to making the communities we serve special.

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. Employees also voted to determine recipients of 'People's Choice' surprises.



# WATER WITHOUT THE WORRY – ERADICATING WATER POVERTY



**WE COMMITTED TO A BOLD NEW PROJECT, WORKING WITH NATIONAL ENERGY ACTION (NEA), THE CHARITY THAT LEADS IN TACKLING FUEL POVERTY.**

At the forefront of this is our unique commitment to eradicate Water Poverty across all the areas we serve by 2030 – an industry first in recognising it, challenging all of its causes and making the necessary investment to make a difference to the lives of our most vulnerable customers.

We define household paying more than 3% of their income on water, after housing costs, as being in Water Poverty. It is estimated around 400,000 customers are living in water poverty across our regions.

With NEA we established the national Zero Water Poverty Unit, with Jess Cook appointed as the new Project Development Manager to drive this work forward. Learning from work in the Energy Sector on Fuel Poverty, we are exploring and modeling different ways of eliminating water poverty with our customers. This is a multi-year commitment to continuously improve how we take on the challenge of Water Poverty that also offers opportunities for the wider water, and utilities sector, to take on the challenges set by Ofwat and Ofgem.

As part of delivering this commitment the 'Water without the Worry' initiative was launched – an umbrella campaign that brought together all of our inclusivity work under one banner. With a concept researched to target appropriate customers, provide clarity for our employees and link together all of our services – from social tariffs to worrying about a leak, the priority services register to metering – this campaign demonstrates the holistic, whole company response to tackling on Water Poverty.

Adam Scorer, Chief Executive, NEA, said:



'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.'

We were delighted that at the Water Industry Awards 2019 our Water Without the Worry scheme was named Customer Service Initiative of the Year and our Zero Water Poverty modelling was awarded Data Project of the Year - both cited as being innovative and leading in the field.

# POWERED BY WATER



**WE HELP YOUNG PEOPLE LEARN ABOUT THE IMPORTANCE OF STAYING HYDRATED AND CHOOSING WATER OVER SUGARY DRINKS, THANKS TO OUR SPORTING PARTNERSHIPS AND POWERED BY WATER PROGRAMME.**

Powered by Water is our interactive educational workshop that is delivered to thousands of students, as part of our partners' ongoing programme of activity with schools in their local areas.

Our partners include Newcastle Eagles Community Foundation, Foundation of Light Sunderland, Middlesbrough FC Foundation and Essex County Cricket Club. In 2017/8, our sporting partners delivered the Powered by Water Programme to more than 27,500 young people.

We aim to help children understand the importance of drinking water to keep them healthy and hydrated, through a series of fun games and activities. Staying topped up with water throughout the day keeps your brain healthy, helps you think clearly, improves your mood and stops you from getting tired.

Powered by Water also teaches children the importance of choosing water over fizzy drinks and fruit juices, which can contain high amounts of sugar.

The value to society per avoided case of type 2 diabetes is £85,000.



# NWG ACADEMY



**AS PART OF THE NWG ACADEMY, A GROUP OF 17 UNDERGRADUATES ARE SPENDING UP TO 12 MONTHS GAINING REAL-WORLD WORK EXPERIENCE WITH US.**

The students are spending time with various departments throughout the business, and with our supply chain partner companies, in areas including engineering, customer service, information services and economic regulation.

This continues our work to support undergraduates and it is the first time NWG has undertaken an undergraduate placement programme of this scale. In the past two summers, our Asset Investment team and supply partners have run successful summer programmes with groups of undergraduates spending 12 weeks working with them.

The programme is part of our NWG Academy activity to attract and develop talent and raise awareness of career opportunities within the company and the wider water industry.

We are a partner in the Energy & Utilities Skills Partnership, a nationwide initiative aimed at helping promote sector skills and fill an estimated 221,000 roles by 2027.

This initiative is a fantastic opportunity for the undergraduates to learn about the huge range of roles that make up the water industry and put a year of work on their CV.

Rebekah Hilton, who is one of those taking advantage of the opportunity, working with the Digital Experience and Customer Insights teams, said:

“It’s been really useful to get an idea of what kind of jobs I can do with my degree and how I can make it useful in a more corporate environment.”



# JUST AN HOUR



**WE ENCOURAGE OUR EMPLOYEES TO SUPPORT COMMUNITY AND CHARITABLE ORGANISATIONS THROUGH OUR EMPLOYEE VOLUNTEERING SCHEME, JUST AN HOUR. THIS SCHEME ALLOWS EMPLOYEES TO GIVE A MINIMUM OF 15 HOURS EVERY YEAR TO SUPPORT CAUSES CLOSE TO THEIR HEARTS.**

Since the launch of Just an Hour in 2002, our employees have given more than 100,000 hours in support of the communities we serve, something we are very proud of.

Last year 48.4% of employees – that's more than 1,500 people - participated in Just an Hour, putting their wealth of knowledge, skills and expertise into our community support. More than 600 organisations were supported and almost 14,000 hours of volunteering time given.

Our employees often find opportunities through Just an hour allow them to learn new skills and can increase their confidence so they also benefit. Some departments use Just an Hour for team building.

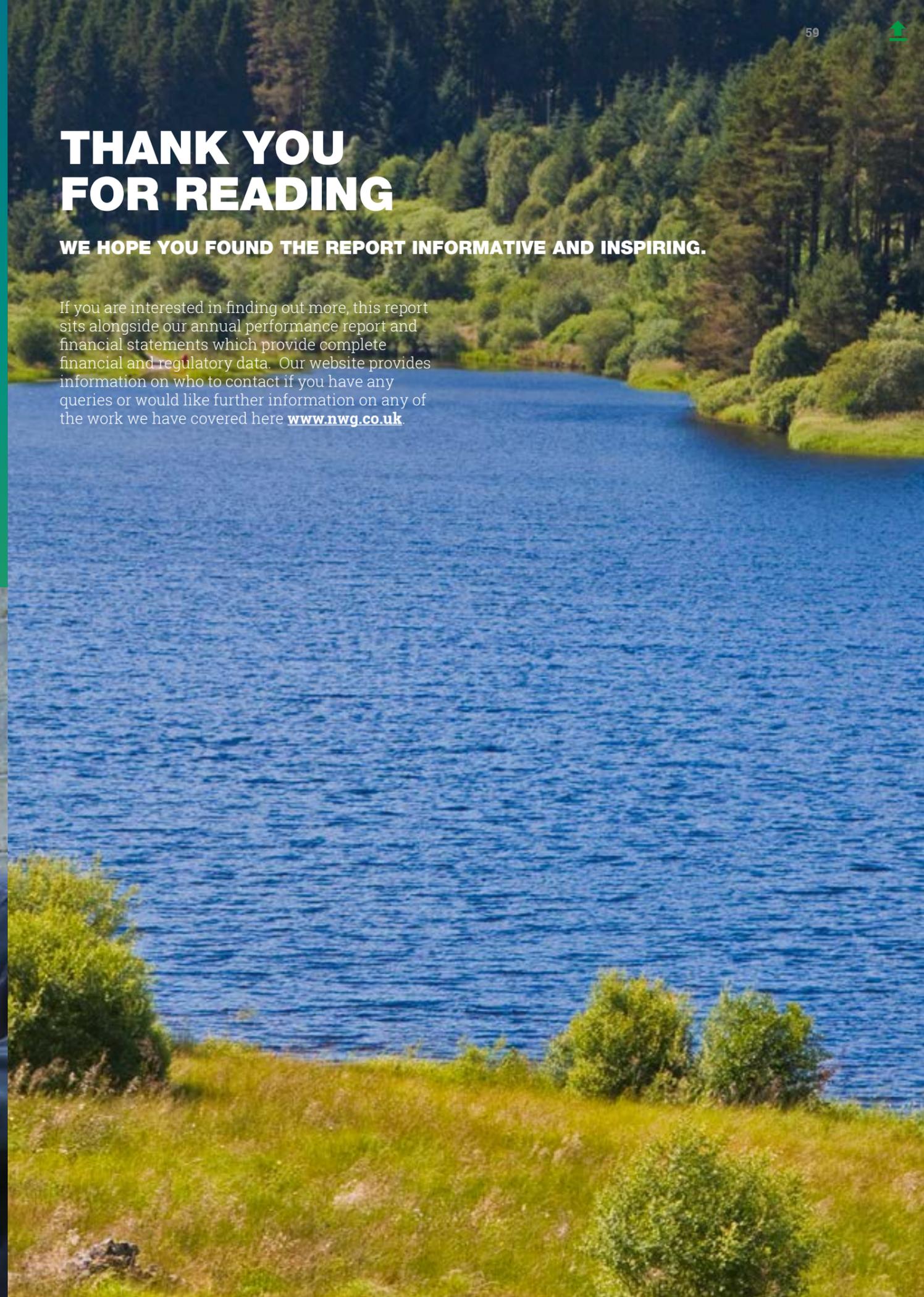
The work goes on throughout the year, with people doing painting and decorating, taking part in the 'Make My Day' initiative, providing social media advice, gardening and even riding for the NHS' Blood Banks Service.



# THANK YOU FOR READING

**WE HOPE YOU FOUND THE REPORT INFORMATIVE AND INSPIRING.**

If you are interested in finding out more, this report sits alongside our annual performance report and financial statements which provide complete financial and regulatory data. Our website provides information on who to contact if you have any queries or would like further information on any of the work we have covered here [www.nwg.co.uk](http://www.nwg.co.uk).



Northumbrian Water Limited  
Northumbria House  
Abbey Road  
Pity Me  
Durham  
DH1 5FJ

[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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