

# Bristol Water..

# Clearly

Our long-term ambition for excellent  
community water experiences

BRISTOL  
WATER

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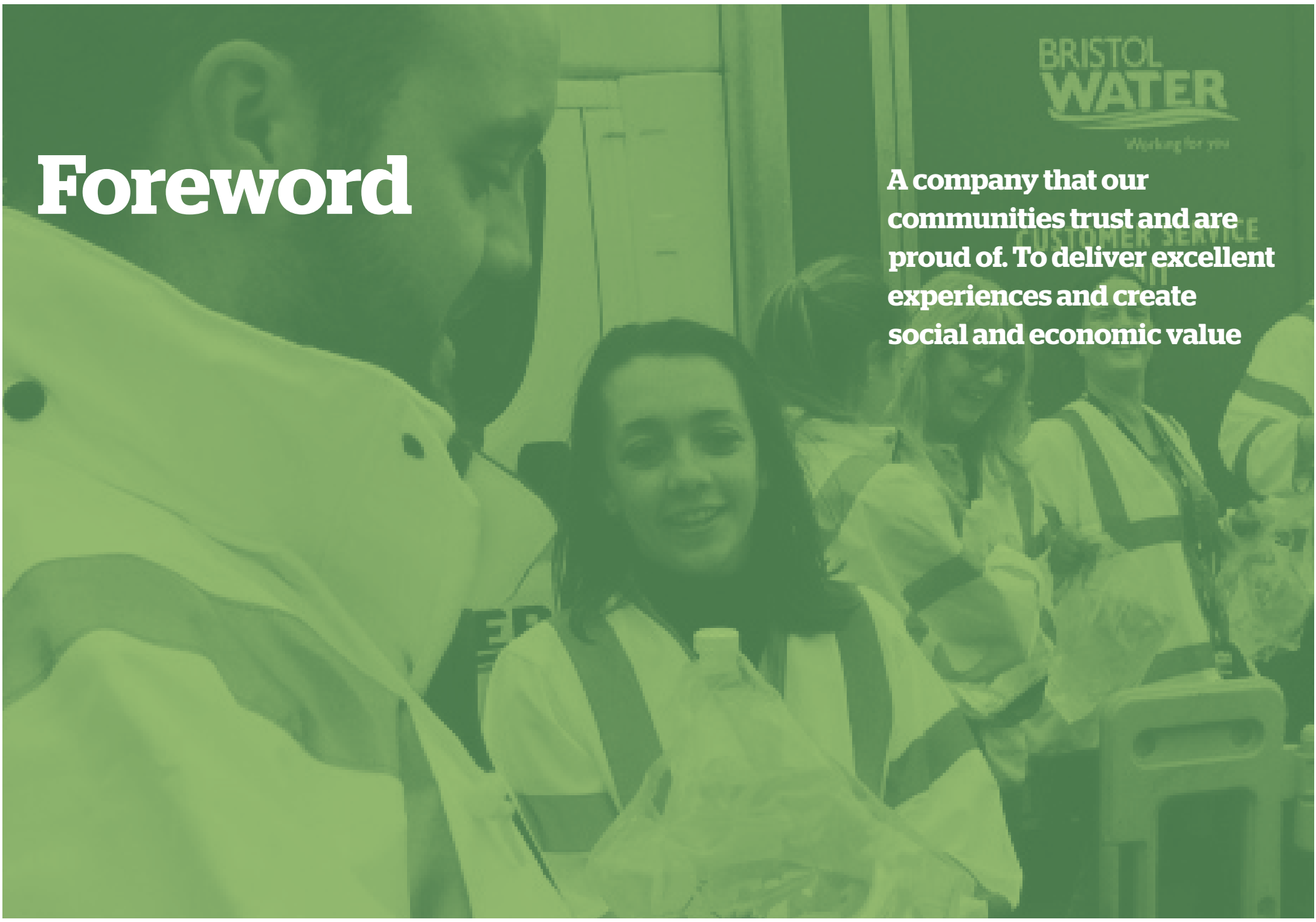
# Bristol Water... Clearly

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# Foreword

**BRISTOL  
WATER**  
Working for you

**A company that our communities trust and are proud of. To deliver excellent experiences and create social and economic value**



# Bristol Water.. Clearly Mel Karam, CEO, Bristol Water

When Bristol Water was formed in 1846 under an Act of Parliament, its founders had a ground-breaking and ambitious aim. It was, as it is now, to bring fresh, clean drinking water to the city, essential to the health and wellbeing of all communities and not just for the wealthy few.<sup>1</sup> We carry forward into the next millennium their vision that beyond providing water supplies, there remains a social enterprise doing what it can for all the communities it serves.

Today, clean and reliable water has become a cornerstone to modern society and we proudly continue to supply water to the 1.2 million people and 34,000 businesses who rely on us to provide an essential service every day.

Companies that want to be around for the decades to come must ensure that society and the environment are at the heart of everything they do. Over our long history, we have gained the trust of our customers as we have remained true to our original roots; to break new ground, and to be ambitious, in finding better ways to plan for the future and to respond to our customers' expectations, changing societal and environmental needs, and the needs of future generations.

Our vision is:

**"Trust beyond water - providing excellent customer experiences."**

**Trust beyond water** reflects that the expectations of our customers and stakeholders goes beyond the product we supply. It reflects our mission to be:

**"A company that our communities trust and are proud of. To deliver excellent experiences and create social and economic value".**

We already work closely in collaboration with local communities, local businesses and stakeholders. We are well placed to continue to build on these relationships to meet the current and future needs of our customers, stakeholders and the environment, fulfilling a role well beyond the basic provision of water.

This document sets out our long terms ambitions to 2050.

Mel Karam  
CEO of Bristol Water

<sup>1</sup>See "A potted history" at <https://www.bristolwater.co.uk/about-us/history/a-potted-history>





# Introduction

A photograph of a woman smiling while holding a baby and a young girl. They are in a garden with a wooden fence and a large evergreen tree in the background. The image is overlaid with a semi-transparent purple filter.

**We are consulting on the future of water services in our supply area – looking ahead to 2050.**

# About this document

Through this document, we are consulting on the future of water services in our supply area - looking ahead to 2050.

This document sets out what we have been doing, who we have been listening to and working with, and what we could do in the future. It sets out some of the options we face for the long term, and how we plan to work with others to address shared challenges.

We have used the views of our customers, stakeholders and employees to develop this future ambition. Here we play back what we have heard, and present how we have translated these views into our plans for the future.

**We now seek further engagement and views, which we will use to shape our future plans:**

- We are interested to hear any comments you have about the options and priorities we are considering
- We are carrying out events as part of our consultation
- We will be talking about our future ambition on social media
- We have an [online interactive game](#), and you can sign up to be part of our [regular engagement survey](#)
- We will also be undertaking further research, together with focus groups covering some 'harder to reach' customer groups to help us to hear a wide range of views on our future ambition.

Based on what we hear, we will be publishing a draft of our business plan for 2020-25 in April 2018.





# Summary



**Our future ambition has been shaped by the views of our customers and stakeholders. It responds to the key drivers influencing our long-term ambition and builds on our enduring role in the communities we serve.**



# We are changing

## Background

Bristol Water will be 200 years old in 2046. Much has changed since we last published our vision “Water in the future” in December 2012:

- Through innovation and continuous improvement, we have taken major steps to cut our costs and become more efficient.
- By 2020 we will have cut leakage by 12% over five years. We plan to continue to focus on reducing leakage and promoting water efficiency to balance water supply and demand - we no longer believe we will need to develop major new water resource schemes for the foreseeable future.
- We have ensured that the largest communities we serve can now be supplied from more than one source, through the completion of our major supply resilience scheme.

## Some things haven't changed:

- We still have excellent water quality and customer services.
- Through our partnership work in the catchments and reservoirs where our water comes from, we help to improve the natural environment for water supply and for our communities to enjoy. As a result, our water quality remains top quality.
- We are still based in Bristol and play an active role in society and the local business community of the area which we serve.

Over the past 170 years, the needs and expectations of the communities which we serve have changed enormously.

We face a number of new challenges in the future, and we must continue to plan for the long-term, understanding and balancing the needs of those we serve, while remaining responsive to our communities and maintaining reliable supplies

Through this document, Bristol Water...Clearly, we are consulting on the future of water services in and around Bristol - looking ahead to 2050.

We have set out our long term ambition in this document.



# What we've heard – our role, your Bristol Water

Our customers and stakeholders expect us to fulfil a number of different roles

To help us develop our long-term ambition, we ran a series of consultation workshops to explore what customers and other stakeholders wanted from their local water company. Each group had a different perspective on our role, and our future plans must balance these views. Overall, based on what we have heard, we think that our role should be:

Bristol Water will be a leader in providing reliable, high quality water services. A trusted leader in the local business communities, that others are proud of, that cares about society and the environment.



A water company that provides a reliable high quality product and service while keeping an eye on the big picture and the long term for the Bristol area. My Bristol Water leads in helping with water efficiency and protecting the environment. I see them in the community and I am proud of my local water company.

**DOMESTIC CUSTOMERS**



A water company that provides a reliable high quality product and service while keeping an eye on the big picture and the long term for the Bristol area. My Bristol Water has a leading role in the business community and is a great employer.

**DEVELOPERS**



A water company that takes the lead in delivering social and environmental wellbeing in the Bristol area, in its own actions and through its collaborations.

**ENVIRONMENTAL GROUPS**



A local water company that is responsive, collaborative and innovative, part of a community of organisations in the Bristol area that work together. A water company whose plans help to address the big challenges in society-growing inequality, environmental pressures and a lack of trust between individuals and organisations.

**OTHER STAKEHOLDERS**

**The way we work will deliver excellent experiences.**

## What we've heard – what we should focus on?

We also asked our customers and stakeholders what they thought we should focus on. Our customers' main focus was on affordability, and providing a safe, reliable supply of water. Price was important to developers, but not at the expense of choice of service. Environmental stakeholders were keen to see Bristol Water leading in terms of environmental sustainability, which linked to the community benefits that other stakeholders saw could help wellbeing of communities. Water efficiency was an example of a shared priority across different stakeholders which aligned with customer choice as well as environmental and affordability concerns. Stakeholders understood other groups' priorities and saw a leading role for Bristol Water in balancing these.

Shading indicates particular priority areas for each group	Customer participation – customer water forum	Developers	Environmental stakeholders	Other Stakeholders
Environmental sustainability				
Affordability				
Reliability and Resilience				
Quality				
Local Community Leadership				
Water efficiency				
Customer focus and choice				

**We have used these views to shape our long term ambition**

# What we've heard – our contribution to the things which people value in our area

We contribute to the things that people living and working in our area are proud of

Our reservoirs, and the recreation opportunities they provide, were a key theme when we asked our customers and stakeholders what they are proud of in our supply area. Being a local water company with a rich heritage, we contribute to the society and the culture of our supply area, which also featured strongly in the things people value.

	Natural environment	Society and culture	Amenities
Environmental groups	Lakes, beautiful area, landscapes, green spaces	Best city to live, reputation, community spirit, diverse and multicultural, strong sense of history	Festivals
Domestic customers	Green spaces, countryside, green capital	Personality - open, inclusive, innovative, diverse, dynamic, cultural heritage, strong and diverse economy	Music scene, good food, carnival, education
Developers	Access to the water, landscape and hills	Great place to live, heritage sites, the West Country accent, multicultural	City, airport, access to country, music

These factors strongly influenced the view on our role as society changes in the future

# How we have responded to these views - our long-term ambition

Customer and stakeholder input has shaped our long-term ambition

## KEY DRIVERS





1. Customer expectations
2. Affordability
3. Vulnerability
4. Resilience
5. Role in our communities and the environment



## OUR VISION

Trust beyond water - we provide excellent experiences

## OBJECTIVES

-  Excel at customer experience
-  Develop our people and the business
-  Being trusted
-  Leading efficiency

## KEY OPPORTUNITIES

1. Collaboration
2. Innovation
3. Emerging markets



## OUR MISSION

A company that our communities trust and are proud of. To deliver excellent experiences and create social and economic value

## OUTCOMES

-  Excellent customer experiences
-  Local community resilience
-  Safe and reliable supply of water
-  Corporate and financial leadership

Societal changes are the key drivers influencing our long-term ambition.



# Our Strategic Objectives

We have set ourselves four strategic objectives which reflect our corporate priorities, the expectations of our customers and stakeholders and we will play our part in meeting the future challenges which society and the environment faces.

## Excel at Customer Experience

Building trust and achieving customer excellence needs to continue. This is our top priority.

## Leading Efficiency

We are committed to transforming our cost base.





## Developing our people and our business

Our employees and delivery partners are key to our strategy - they are the source of our customer excellence and innovation. Customer excellence means we need to be ready for the future shape of utilities that provide services that customers want (potentially not just water), rather than just a product.

## Being trusted

The subject of our reputation runs through the entirety of our strategy and supports all the other strategic objectives. It is not only about maintaining legitimacy with customers, consumers, communities and other stakeholders, but also about them having trust in our stewardship of the long-term sustainability and resilience of Bristol Water and our local environment.

## OBJECTIVES

-  Excel at customer experience
-  Develop our people and the business
-  Being trusted
-  Leading efficiency








In the long-term, our business objectives and the outcomes have to align, and our strategy sets out how we plan to achieve this.

## OUTCOMES

-  Excellent customer experiences
-  Local community resilience
-  Safe and reliable supply of water
-  Corporate and financial leadership

We have also set ourselves four outcomes, through which we will measure our success at delivering for customers and stakeholders.

# A summary of our plans

Objectives	Principles	Our plans	Outcomes
 <p><b>Excel at customer experience</b></p>	<p>Excellent services Providing choice Affordable bills for all Inclusive services</p>	<ul style="list-style-type: none"> <li>• Improve our communication channels</li> <li>• Improving the use of data, e.g. linking asset information to customer data</li> <li>• Transform the way that we deliver so that every interaction with us is positive e.g. reduced traffic disruption from our works</li> <li>• Faster response to our customers</li> <li>• Customer centric asset decisions e.g. network geographic location link to customers</li> <li>• Give customers choice of bundled services - e.g. provide water efficiency choice</li> <li>• Customer self service - e.g. Direct Debit payment choices used to help trigger vulnerable service promotion</li> <li>• All customers with good water pressure (including end consumers on shared connections)</li> </ul>	 <p><b>Excellent customer experiences</b></p>
 <p><b>Develop our people and our business</b></p>	<p>Collaborative working Market engagement Strong relationships with our local communities</p>	<ul style="list-style-type: none"> <li>• Develop cross-utility service offerings that connect with customers and communities</li> <li>• Support local academic and entrepreneurial partnerships</li> <li>• Invest in and develop our people and organisation</li> <li>• Build joint ventures and partnership working to get wider benefits to our business and local community resilience</li> <li>• Participate in and encourage further use of competitive markets, such as for water resources and demand management</li> <li>• Reduce leakage and consumption</li> <li>• Collaborate to deliver resource efficient communities</li> <li>• Actively promote metering</li> </ul>	 <p><b>Local community resilience</b></p>
 <p><b>Being trusted</b></p>	<p>Positive impact on health and the environment Investing for the future Being transparent</p>	<ul style="list-style-type: none"> <li>• Deliver resilient and high quality water</li> <li>• All major population centres can be served by more than one source.</li> <li>• We will build trust through communicating our longer term plans.</li> <li>• We will continually improve the resilience of water supplies - this requires us to deliver across a wide range of areas, including leakage and water efficiency</li> <li>• Community engagement and leadership in promoting the value of water</li> <li>• Share our success and partnership working e.g. where customers help to support innovation that ultimately has wider benefits</li> <li>• Maintain the long-term health of our assets as a minimum; improving long-term health as we deliver the service improvements that customers value</li> <li>• Deliver fair returns for our shareholders.</li> </ul>	 <p><b>Safe and reliable supply of water</b></p>
 <p><b>Leading efficiency</b></p>	<p>Innovation Digital technology Supply chain innovation Resilient workforce</p>	<ul style="list-style-type: none"> <li>• Optimising our use of water resources and water treatment, in line with our Drinking Water Safety Plans</li> <li>• Ambitious targets to reduce costs further</li> <li>• Implement smart technologies in energy cost reduction and increase renewable energy generation</li> <li>• Apply world class asset management processes</li> <li>• Apply continuous improvement and lean cost reduction to everything we do</li> <li>• Continue to build long-term financial resilience</li> <li>• Achieve a low and efficient cost of financing</li> <li>• Zero tolerance for health and safety failures for our workforce, our supply chain and our communities.</li> </ul>	 <p><b>Corporate and financial leadership</b></p>

# A summary of our aims

- **Fulfilling a role well beyond the basic provision of water** - We will deliver services for customers, not just a high quality product. We will work in collaboration with our communities to have a positive impact on the environment that they live in and their wellbeing.
- **Keeping bills affordable** - We will innovate to cut costs and provide better services. We want bills to increase by less than inflation over 2020-25, but not if this would mean significant risk to excellent services, protecting resilience and vulnerable customers, or mean higher bills for future customers.
- **Improved resource efficiency** - we will ensure there are sufficient water resources by cutting leakage and encouraging water efficiency.
- **Resilient supplies** - we plan to ensure that all population centres with over 10,000 people are served by more than one source of supply (we have already achieved this for most population centres with over 25,000 people).



We are on a journey, we have a proud history of serving the communities around Bristol - which we are an enduring part of

## A summary of our future ambition

1 Our water comes from catchments; we have to look after them for top quality water and environment in the future

2 Reservoirs and rivers are part of the local environment where people live, meet and enjoy

3 We excel at the community experience. We care about wellbeing and society

4 We are part of the communities we serve, with initiatives such as the Bristol Water Bar and Refill Bristol

5 Because we are part of the communities we serve, our customers trust us to deliver excellent experiences as well as top quality water

6 Our ambition is to address the challenges society faces. This delivers local community resilience.

8 We want to help customers to help their environment and save money through more choice on water efficiency

7 Technology and data, with our customer excellence, will allow us to meet your specific needs

9 Cutting leakage to keep supplies reliable and boost resilience

10 We innovate by activating ideas and learning from communities in the areas we serve

12 Affordable for all, for the wellbeing of society.

11 Working in partnerships with our stakeholders helps to get the best outcome at the lowest cost

**Mission statement**  
To be a company that our communities trust and are proud of. To deliver excellent experiences and create social and economic value.



# We will use your views to shape our future plans

We hope you've enjoyed reading about our future ambition - this is a consultation and your views will shape our future plans.

We are running further engagement events on our plans. As part of our consultation we plan to work with partners such as the University of the West of England to test our ideas and align our plans to regional innovation and delivery opportunities.

We will use your views to shape our future plans- you can email your contributions to [strategyandregulation@bristolwater.co.uk](mailto:strategyandregulation@bristolwater.co.uk)

**Our suggested questions that we would particularly welcome responses on are:**

- To help us think about the future we asked you what our role should be in the Bristol area. Your answers informed our own statement of our future role. Do you have any comments on our role and how it reflects your own view of us?
- Our long term ambitions respond to our understanding of the world around us. Do you have any comments on the future factors we've identified, or any that we might have missed?
- We've also developed four scenarios that describe different ways the future for water services may evolve in the long term. Do you have any comments on the future scenarios we've identified?
- We have set out how we think we can fulfil our role in the future, responding to the factors and scenarios described above. What do you think?
- Our long-term ambition focuses strongly on customer excellence and local community resilience. Do you agree with this focus and our aims?
- We can't deliver our ambition alone and our plans focus on building on ways in which we already collaborate with others. Do you have any ideas about how we can work together with other organisations to deliver our vision?

**Join in the conversation on:**

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[in LinkedIn](#) [Twitter](#) @BristolWater  
using #bristolwaterclearly

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[▶](#) Also see the videos on our YouTube channel

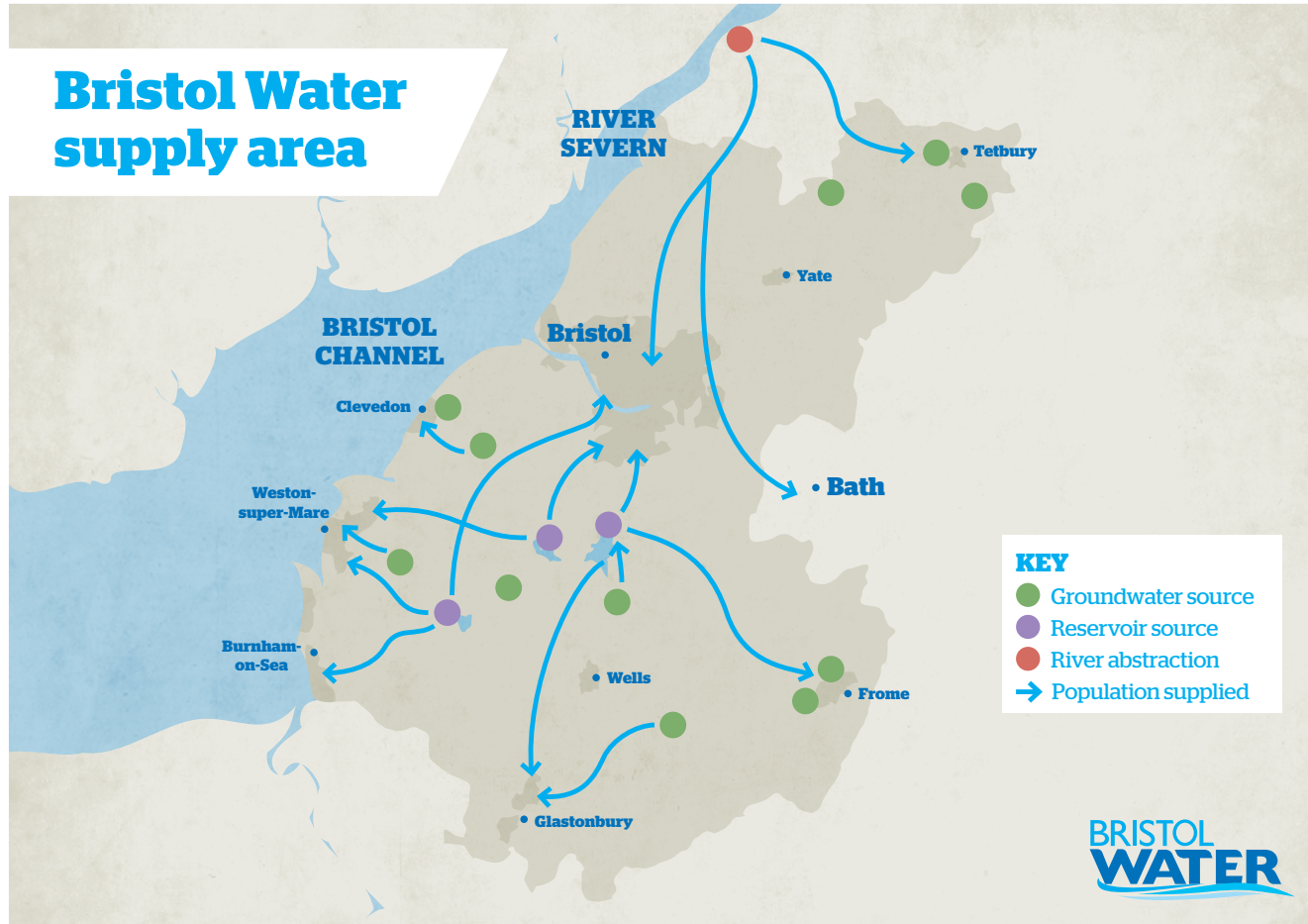


# About us

**We have a long history of supplying water to our local communities. We are a social enterprise that is part of these communities. Throughout our history we have been privately financed and our role continues to be enhanced by our investors.**

# Key facts about Bristol Water

SUPPLIES AN AREA OF 2,400 KM<sup>2</sup>



## KEY DUTIES

Regulated water only supply company ("WoC")

Licensed monopoly water services provider

Abstract, treat and distribute water

535k properties  
1.2m inhabitants

Retail services provided by Pelican for Bristol Water & Wessex Water

Water2Business provide retail business services, competing with other retailers



# About us

**Bristol Water has supplied drinking water since 1846.  
We have always been privately owned.**

We serve a population of 1.2 million people and 34,000 businesses in an area of 2,400 square kilometres (1,000 square miles). Our area of supply covers the area from Thornbury and Tetbury in the north to Street and Glastonbury in the south, from Weston-super-Mare in the west to Frome in the east. We also provide a bulk supply of water to Bath. Wessex Water provide sewerage services in much of our area.

We own three major reservoirs (Chew, Blagdon and Cheddar) and a number of boreholes to provide water from our catchments. But nearly half the water that we supply to our customers, comes from outside our area of supply, including from the River Severn.

We have a range of treatment works from the simple to the highly complex. These feed water into a network of pumping stations, storage reservoirs and mains so that we can deliver high quality water to customers' properties when they need it.

We have a long history of supplying water to our communities. In 1840, a government commission recorded: "There are few large towns in England in which the supply of water is as inadequate as at Bristol." The following year, the Society of Merchant Venturers, a collection of prominent Bristol businessmen, established the Merchant Venturers Water Works. With Isambard Kingdom Brunel as a backer, the group sought to supply water to Clifton and the wealthier parts of Bristol.

In 1845 a rival group formed. They were concerned that these plans were too restrictive and would not provide for the poorer, more densely-populated areas of Bristol. The government weighed up the plans of the two groups, and narrowly came down on the side of the new group. On the 16th of July 1846 the Bristol Waterworks Company was formally established by an Act of Parliament.

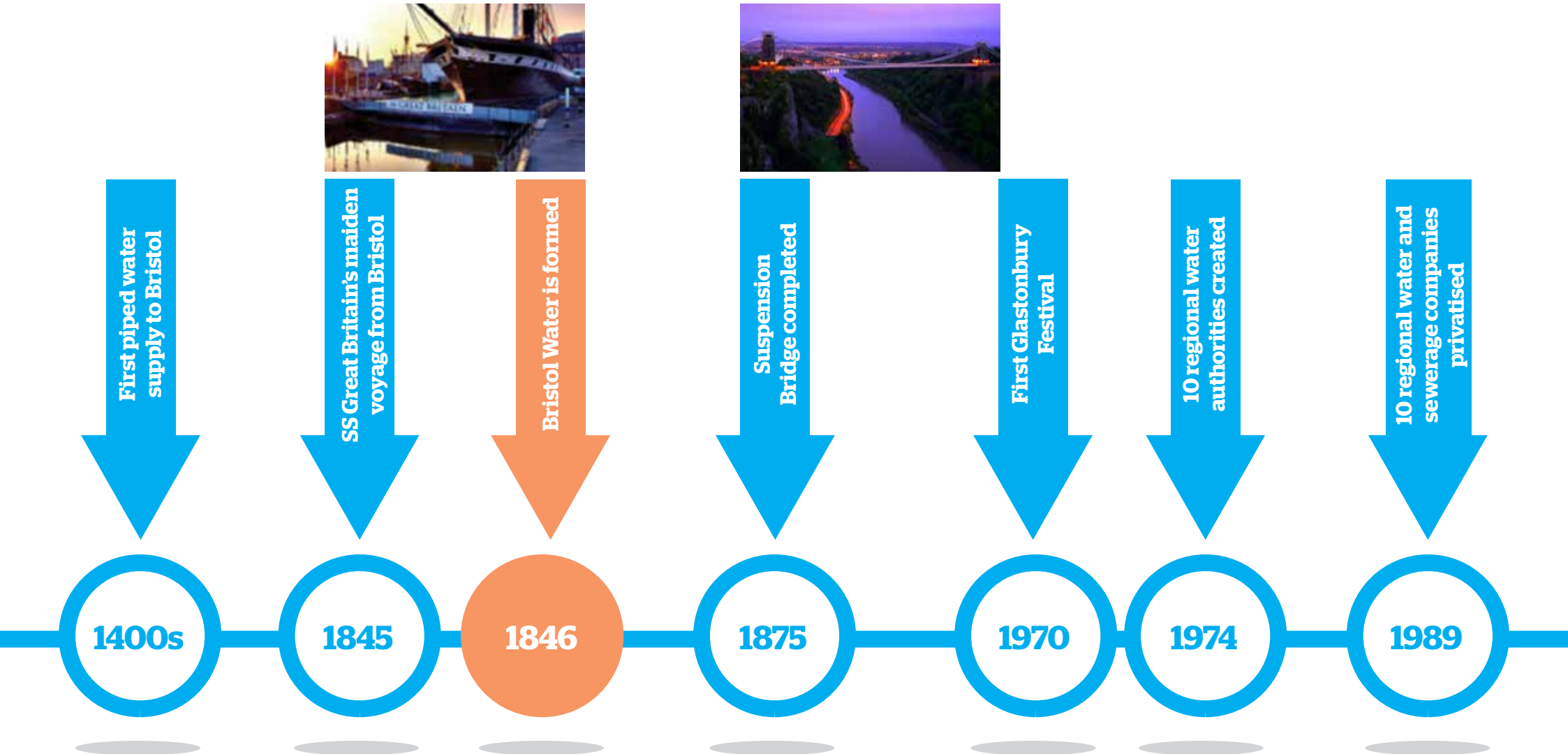
Much has changed since 1846, but Bristol Water has been an enduring feature of the water supply for Bristol and has grown to provide excellent quality water to the city and the surrounding area, with some of the lowest levels of leakage in the country.





# A 171 year heritage: water supply as social enterprise

Privately owned, socially responsible



# Our investors

We are financed by a combination of equity (35%) and debt (65%).

This balance seeks to ensure that we have both the funds available to finance our business efficiently and that the business is financially resilient to developments in our market place.

Our debt is provided by a combination of major local banks, including HSBC and RBS, as well as major institutional investors in the UK, such as Aberdeen Standard Investments, Legal & General and Prudential, via long term bonds.

We employ a prudent mixture of debt, with a majority being long term to achieve a good match with the nature of our assets, and to ensure that we are able to manage refinancing risks, which is particularly important for a local water company of our size.

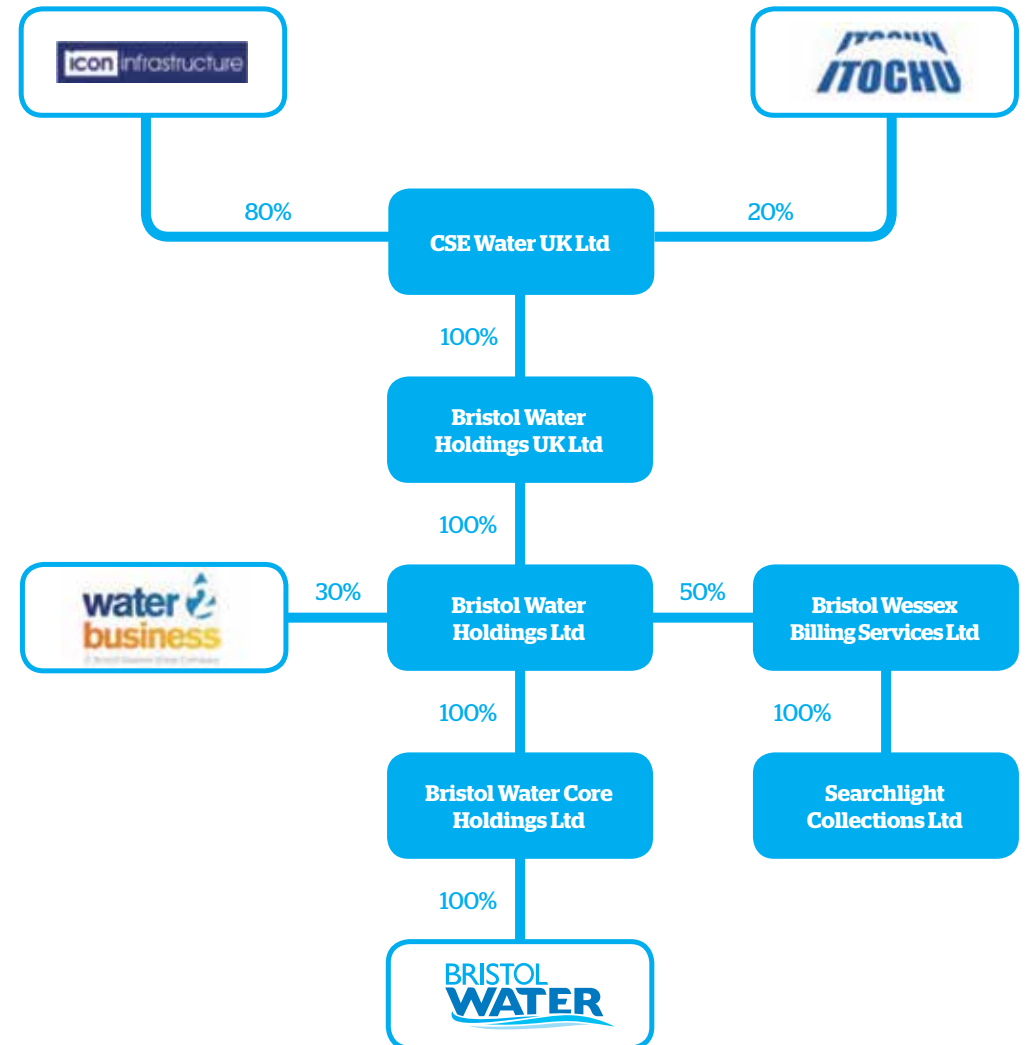
Equity is provided by a combination of preferred equity, which is listed on the London Stock Exchange, and ordinary equity.

Our ordinary equity is 80% owned by infrastructure funds advised by iCON Infrastructure and 20% owned by ITOCHU Corporation.

iCON Infrastructure's investment is on behalf of approximately three dozen long-term investors from the UK and overseas, of which the overwhelming majority are private and public pension funds. The ultimate investors include institutions such as East Riding Pension Fund, Canada Post Pension Plan and MP Investment Management A/S.

iCON Infrastructure is a responsible owner of local infrastructure businesses such as Bristol Water, with a long history of involvement in the UK water sector as well as an excellent track record of investing in businesses providing key social services. Other relevant examples include Firmus Energy, Mountaineer Gas, Stockholm Gas and Oslofjord Varne.

ITOCHU Corporation is a global, diversified trading company founded in 1858 and based in Japan, where it is listed on the Tokyo stock exchange. It is involved in trading of various products such as textile, machinery, metals, minerals, energy, chemicals, food, general products, real estate, information and communications technology, and finance, as well as business investment in Japan and overseas. It is active in the water and environment business where it has numerous investments internationally.



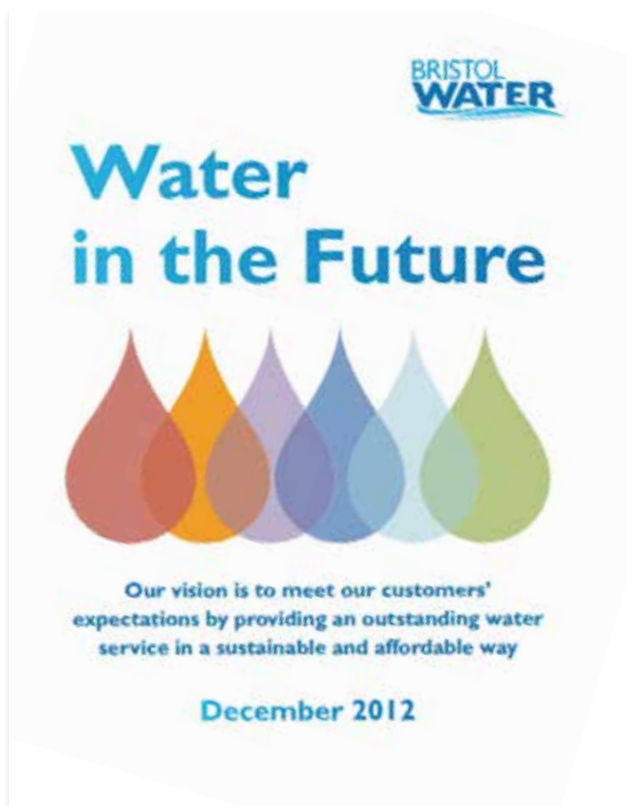
# How we are changing



**We must continually evolve to be responsive to the needs of our communities. We have undergone significant change in recent years - cutting costs and improving our services, as well improving the way we work and our impact on the environment through innovation. Together these changes have resulted in significant progress on our journey towards customer excellence and local community resilience.**



# How we are changing – a very different Bristol Water



Much has changed since our last strategy document “Water in the Future” was published in 2012

- We have cut our costs and become far more efficient - we’ve done this through being innovative in how we work.
- We have used various methods to understand our customers’ views and we have listened. For example, we now plan to balance future supply and demand by innovating to reduce leakage and support customers with water efficiency. We no longer expect to create a new reservoir for the foreseeable future.
- Our investors have changed and this has renewed our focus on what matters most.
- There has been significant changes to our Board, and most of the leadership of the company have changed too.
- We have built on the lessons we learnt from our 2014 business plan submission, which we referred to the Competition and Markets Authority after it was heavily challenged by Ofwat.
- We still have much to do, and we will need to continue to grow and change - and we can only do this in partnership with our customers and stakeholders, building their trust in the way that we work and deliver our strategy. This lies at the heart of our approach.

## OBJECTIVES



Excel at customer experience



Leading efficiency



Develop our people and the business



Being trusted

# How we are changing

## Excelling at customer experience

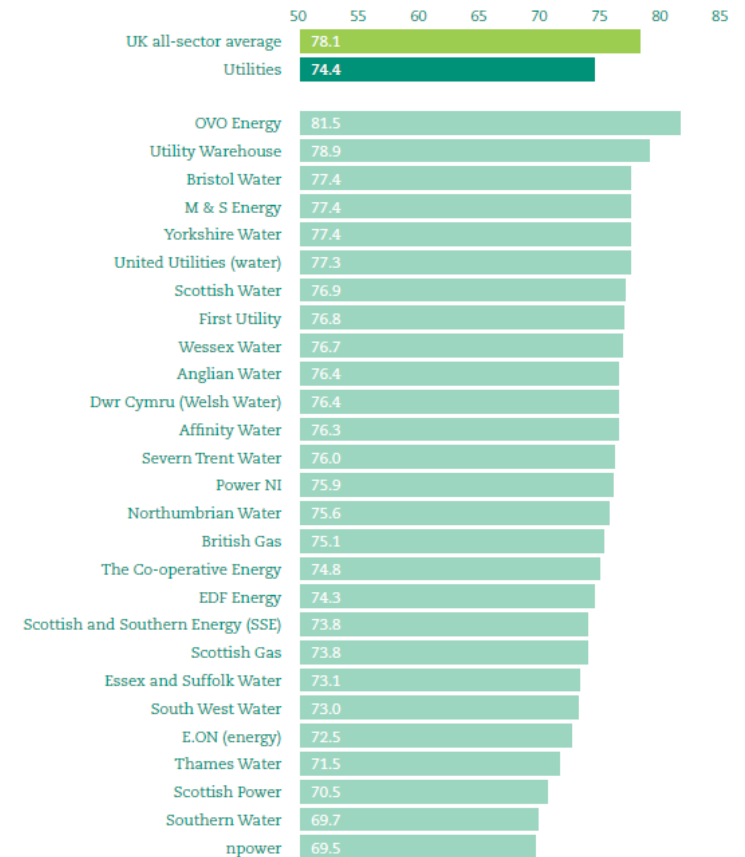


- We are a local water company. Our agility to innovate and change in response to our communities' needs is one of our key strengths. We focus this strength on providing the right experience for our customers.
- The respected UK Customer Service Index compiled by the Institute of Customer Service (ICS) compares customer services from retailers across many sectors. In the most recent survey results, published in January 2018, we were the top ranking water company by overall UK Customer Service Index(UKCSI) score (sharing this top spot with Yorkshire Water).
- The overall UKCSI score for utility companies is below the combined average for all sectors (including for example, the retail sector). Ofwat have challenged the water sector to match the performance of retailers in other sectors - we agree. Our current customer experience performance gives us a great platform to go even further.
- We recognise that this one measure doesn't mean our operational performance is the best in the industry

- but when things do go wrong our customers trust that it's the exception and we will do our best to put things right quickly. An example recently was the major burst at Willsbridge.

- Like all of our activities, we deliver customer excellence by working in partnership. Our household customers have a single billing and contact point for water and wastewater services in Pelican, a joint venture between Bristol Water and Wessex Water. Our operational staff and our contractors work with together to deliver great customer experiences.

### Organisation ranking by UKCSI score



UKCSI Utilities Sector Report, January 2018

# Willsbridge burst: 18 - 20 July 2017

## Case study

### CASE STUDY

#### The Incident

- Bristol Water identified increased flows through a flow meter at 11.30pm on 18 July and started receiving customer calls about loss of water at 1.16am on 19 July.
- Bristol Water arrived in Willsbridge, on the outskirts of Bristol, to discover large amounts of surface water with complicating site factors.
- The South Bristol Ring Main, which transports water between North and South Bristol, had to be isolated to allow the cause to be safely investigated.
- The cause of the incident - a burst main in Willsbridge - was confirmed within an hour of the initial reports. It was unique to the site and appears to have been the result of ground movement and the complex pipework at the pumping station.
- The Willsbridge site was made safe by 2.30pm on 19 July, which allowed re-routing of supplies for other customers to start. Supplies were restored to customers without the burst being fixed.
- 35,000 properties lost supplies because of the burst, but the Ring Main and the re-routing of water meant only 14,000 were without water by 7am on 19 July.
- 8,000 further properties had supplies restored around 10pm on 19 July with the remainder by 5.30am on 20 July.



#### Operational Response

- By 2am on 19 July, a major incident response launched.
- Key agencies and stakeholders were notified overnight as the situation and response were assessed.
- Proximity of gas mains, power cables, hazardous weather conditions (lightning strikes) and surface water added complexity to the incident, requiring close collaboration with BT and Western Power Distribution.
- By the morning of 19 July, Bristol Water had fully engaged all remaining stakeholders, which included a status call by early evening.
- Final update on the incident was cascaded to agency partners and stakeholders shortly after 9am on 20 July.
- The incident was formally closed at about 2.30pm that afternoon.

#### Customer Support

- Customer contacts peaked between 7am - 8am at 968 calls.
- A second call centre to manage the volume of calls was opened at 6am on 19 July.
- Bottled water was delivered to customers requiring additional support from 7am.
- At just after 7.30am, all other affected customers with registered mobile numbers received details of the incident.
- Five temporary water supply locations, each with a number of water bowers, were set up from 11.30am to mid-afternoon on 19 July. The bowers were frequently replenished to allow customers to take as much water as they needed.
- These were staffed by Bristol Water employees, who gave customer updates.



# Willsbridge burst: 18 - 20 July 2017

CASE STUDY

## Case study

35

Proactive Facebook and Twitter updates

750k  
views



150k  
reached

more than  
600

customer response

### Customer Communications

- The Communications Team was quick to respond.
- Updates to the Bristol Water corporate site, social media channels and the employee intranet were made by 3am on 19 July.
- Three members of the Comms team on 'incident alert' for 24 hours to allow social media channels to be effectively monitored and customer interactions proactively managed.

### Customer Satisfaction

- A recent customer survey included some who were affected by the burst.
- Of those affected surveyed, 62% were very or fairly satisfied, with how the burst was handled.
- Together with social and other media views, generally customers were satisfied with our response and most accepted that such events may occasionally happen. But, we recognise there is always room to improve communication and response.



### Summary and learnings

- The Willsbridge burst was a complex repair, hampered by challenging weather conditions and complicating site factors.
- Around 70 people were involved in response to the incident.
- Water was restored to 35,000 properties within 29 hours of the initial reports.
- More than 6,995 customers received support from contact centre staff or through social media.
- Despite the overall operational success and customer satisfaction, Bristol Water was able to draw four learnings from the experience.

- 1 More focus could be given to the impact of operational decisions on customers when restoring supplies and cascaded more effectively to further increase satisfaction.
- 2 Stakeholders were informed of the incident, but the process for doing this could be improved further.
- 3 Review processes to improve timing and accuracy of all customer communication channels, so that accurate information can be kept flowing, even when there is no significant update. In this type of scenario, customers are keen to know about how we mobilise in response and who is involved, not just information about their water supplies.
- 4 The incident will inform our review of how alternative water supplies are provided.

# We are changing – excellence to retailers and property developers

## CUSTOMER EXPERIENCE

We provide excellent services to retailers who serve business customers, for instance when their customers want to switch suppliers, or keeping them informed about services impacting their customers



Bristol Water aims to provide excellent wholesale services that support you and your customers. We understand that to excel in the competitive market, you will need first class service from your water wholesaler to support you in providing excellent service to you customers.

We also make those developing new properties get the services they need from us. For those competing in this market, we make sure they have the information and service from us they need to provide choice to developers.



### Our promise to you - the Developer

Our Developer promise sets out the levels of service you, as a developer or builder, can expect from Bristol Water

We understand that to encourage growth and investment in our area of supply we need to work in partnership with you to ensure your new development is connected to our supply infrastructure in a timely and efficient manner. We recognise that you have strict deadlines to meet for your clients therefore our promise is based on national standards and the target set by Water UK.



### Our promise to you - Self Lay providers

Our promise sets out the levels of service you can expect from Bristol Water as we work together to ensure your project is delivered on time. We recognise that you have strict deadlines to meet for your customers therefore our promise is based on national standards and the targets set by Water UK. In addition to this we have the aspiration that you as a customer of Bristol Water will receive industry leading service.



# Innovation at the heart of our journey

INNOVATION

We have a strong history of innovation that has had a wider impact on the rest of the industry. Historic examples include introducing “ice pigging” – a process in which an ice slurry is pumped into a pipe and forced along inside in order to remove sediment and other unwanted deposits to leave the pipe clean. It was developed in partnership with Bristol University and today has many applications in the water sector and is expanding into many other industries such as oil and food manufacturing. This partnering approach to innovation continues today.

The Water Bar and Refill campaigns are recent examples. The Water Bar was developed because it reflects the diverse and festival culture within our supply area - which provides an opportunity to link the health benefits of water and the high quality of water we supply to the local community. The Water Bar won multiple awards and has been copied by other companies. This partnership and engagement with the local community is also highlighted in innovation in communication channels, such as through the **Bristol Water “You Tube” channel**.

A recent example of the partnership working approach to innovation is the Refill campaign. Working with City to Sea, an app was developed which engages businesses and the local community in highlighting the social and community benefits in free public access to drinking water. The app includes ‘gamification points’ and provides local retailers with the opportunity to engage with the community, encourage custom, whilst also providing an essential public service. This innovation was driven by the wider environmental benefits of reducing single use plastic bottles as well as our aspiration to encourage greater recognition of the value of our drinking water, in terms of both availability and quality. The metal and wooden “Bristol Water Refill” bottles have become a local status symbol when out and about in Bristol and surrounding areas.



 YouTube



# We are changing

## Innovation at the heart of our journey

INNOVATION

For us, innovation in how customers and society experiences the value of drinking water forms a fundamental part of our role in supplying the city and contributed to Bristol being named European Green Capital in 2015.

These innovations mean Bristol Water is an integral part of the experience of living in and visiting our supply area, for instance the recent water efficiency campaign that was based on “selfies” with our massive toothbrush.



**Massive Toothbrush**




In 2015 Bristol Water and @Bristol, with the help of Bristol 2015's Green Capital Partnership's Water Group, were successful in delivering a landmark feature to the city centre - a new water fountain. Tap into Bristol in Millennium Square offers the public a plentiful and free supply of water in one of the city's most popular open spaces.

# We are changing

## Innovation at the heart of our journey

We follow a structured approach to identify innovations to support the business transformation that we need to deliver a change in how we work. We also seek to deliver continuous improvement through a daily focus on using innovation to improve our work. We use a “Brainwaves” approach to enable innovation from within the business, driven by our people, who have the best understanding of our business. Ideas are rewarded and a team from across the organisation assesses the potential using our innovation framework.

	Innovation	Transformation	Continuous Improvement
Current	<ul style="list-style-type: none"> <li>We pursue innovation to drive business improvements throughout the business.</li> <li>We place great value on partnering with other industry bodies and suppliers.</li> </ul> 	<p>Transformation enables Bristol Water to meet its cost and efficiency targets, through:</p> <ul style="list-style-type: none"> <li><b>Energy optimisation:</b> buy less, use less, pay less</li> <li><b>Organisation Design:</b> reduce cost to serve customers through better ways of working</li> <li><b>Commercial Management:</b> enhance strategic sourcing and commercial management</li> <li><b>Workforce Management:</b> increase time spent on productive activities and seek productivity improvements</li> <li><b>Continuous Improvement:</b> drive 'bottom-up' business improvements and challenge old ways of working</li> <li><b>Asset Management:</b> implement risk based investment decisions and better long term “total expenditure” decisions</li> <li><b>Information Management:</b> refresh measures and accountabilities, reduce reporting effort and reliability of data</li> </ul>	<p><b>Process improvement initiatives</b></p> <ul style="list-style-type: none"> <li>To support our initiatives we trained and accredited key staff in “Lean Competency System” fundamentals .</li> <li>The initiatives target a range of benefits for our customers, stakeholders and investors.</li> </ul> <p><b>Examples of benefits targeted:</b></p> <ul style="list-style-type: none"> <li>Improve our first time resolution for customer enquiries</li> <li>Improve the usability of our website</li> <li>Reduce the manual effort associated with some of our processes</li> <li>Increase the skill set of our staff</li> <li>Simplify how we pay our suppliers</li> </ul> <p>*A process optimisation approach originally developed at the Lean Enterprise Research Centre at Cardiff University</p>
Future	<p>Increase our central co-ordination of innovation in order to increase the benefits e.g.:</p> <ul style="list-style-type: none"> <li>Co-ordinate our technology scouting around priority areas</li> <li>Ensure alignment across related innovative initiatives such as smart network components</li> </ul>	<ul style="list-style-type: none"> <li>Identify the next efficiency steps as part of our strategy</li> <li>Developing the next change plan to deliver what's required</li> </ul>	<ul style="list-style-type: none"> <li>Continue to build maturity into business' Continuous Improvement capabilities in order to drive ongoing change</li> <li>Aim for all staff to recognise a culture of continuous improvement</li> <li>Ambition is to deliver the majority of business improvements through this 'bottom up' mechanism - using our expertise and knowledge of what works.</li> </ul>



# Recent innovations

## Operations and assets

INNOVATION

Innovation is a better way of working, sometimes this means using the latest technology to deliver a fundamental change in the way that we work. Often it means tackling an existing problem through taking a different approach. Here we list a number of the recent innovations in both our operations and assets and relating to our customer service and communities.

Innovation	Benefit	Description
Always in supply	Reduced Supply interruptions	A flexible, modular system of temporary tanks and digital pumps, which can be delivered in a van and installed on streets where maintenance work is taking place.
Pontoon works	Cost saving	Floating Working Platforms on Water that are faster and cheaper than scaffold when working over or in water. Idea generated through a British Water innovation exchange and being used at Purton water treatment works.
Southern resilience scheme	Improved supply resilience and cost saving	The Southern Resilience project team are using a range of technologies and processes to implement this scheme including drones for topographical surveys, new pipeline specifications, and smart Pressure Reducing Valves.
Pipe Minding technology	Cost saving, reducing leakage	Offers high-resolution data for long periods, it can be used for pressure or flow monitoring, and is controlled remotely. Highlights stresses and strains in the network and preventing leakage before it happens; for example, flow and pressure data can show where the operation of pumps and valves are putting undue pressure on pipes. The system also provides automated alerts for bursts and potentially damaging pressure transients.
Dynamically adaptive water distribution networks	Reduced supply interruptions, improved water quality, reduced bursts, reduced leakage	<p>This project has been a long-term collaboration Bristol Water, a technology company with extensive experience in pressure control (Cla-Val) and a world leading research-led university (Imperial College London).</p> <p>The project developed and implemented both analytical methods and control technologies to enable the concurrent design, operation and control of dynamically adaptive water distribution networks that automatically configure their connectivity and hydraulic conditions.</p> <p>For example, under the “control to optimise” application state, specific hydraulic conditions within adaptively configured areas are generated to minimise average zone pressure (AZP), variations in zonal pressure (VZPTM) and the cumulative pressure induced stress (CPISTM), while maximising the resilience of the water distribution network.</p>
Pump scheduling	Cost saving	Significant changes in the power generation mix are posing new challenges for the balancing systems of the grid. Many of these challenges are in the secondary electricity grid regulation services and can be met through demand response (DR) services – we are balancing our services with energy demand response through pump scheduling. Benefits are assessed in terms of reduced green-house gas (GHG) emissions from the grid due to the displacement of more polluting power sources and lower pumping cost for us.




# Recent innovations

## Customer and community

INNOVATION

Innovation	Benefit	Description
Live chat	Customer engagement	One of our “Brainwaves” staff generated ideas- on-line chat for customers who find FAQs on our website don’t answer their question - connects with a real person with a social media style interface. Includes post chat survey feedback. Launching in January 2018.
Customer research	Customer engagement	A large volume of innovations, including research being done jointly into customer valuations with Wessex Water, development of an on-line game, revealed preference research based on customer experience and response to supply interruptions, and a Youth Board.
Water engagement and water efficiency	Customer engagement	A range of innovations including the Water Bar, Refill campaign, Spawn to be Wild, public water fountains, and Sugar Smart Bristol - a structured partnership programme with a much wider impact, but is also a fundamental part of current and future customer experiences - both for the acceptability of service and value of water and the environment. <a href="http://www.bristolwater.co.uk/about-us/our-campaigns/">http://www.bristolwater.co.uk/about-us/our-campaigns/</a> .
Spawn to be Wild	Biodiversity	Initiatives such as Spawn to be Wild and engaging with Bristol City Councils One Tree Per Child project provide a platform for direct engagement with schools within the catchment to deliver lessons and messages around the natural environment, conservation of endangered species, restocking waterbodies with fish and eels, local heritage, water efficiency and access to the environment such as Bristol Water reservoir assets. These initiatives work in collaboration and partnership with local wildlife and rivers trusts and receive highly positive acclaim every season and have won environmental awards.
Biodiversity index	Biodiversity	<p>We have a significant number of biodiversity projects including work to benefit bats, ospreys, white clawed crayfish, eels and honeybees. Our Biodiversity Index approach creates a numeric score for a natural asset by combining ecological walkover results with habitat value assessments. A baseline assessment is identified before any operational or infrastructure work to which would be lost or impacted. This provides a quantifiable amount of environmental enhancement required at a site to offset an impact. It has elements of both ecosystem services and natural capital approaches that we will develop further. The innovation of this approach is shown within its use during site maintenance and planning, when the company sets out its environmental expectations which are used to brief those responsible for undertaking the work.</p> <p><a href="http://www.bristolwater.co.uk/article/bristol-water-improving-the-biodiversity-across-the-region/">http://www.bristolwater.co.uk/article/bristol-water-improving-the-biodiversity-across-the-region/</a></p> <p>Building partnerships with Natural England and stakeholders who have an active interest in the natural environment is a key feature of the Biodiversity Index approach.</p>

# Innovation in water efficiency

## Case study

CASE STUDY

### Benefits: Reduced consumption

We collaborated with the University of the West of England (UWE) in a student village project collaboration on water consumption evidence base. Follow up projects use the site as a water efficiency active testbed site which (for free to Bristol Water) allows research students to learn and UWE reduce water consumption and we test water efficiency approaches. Learning points include understanding the water efficiency use trends for a future generation water use trends who increasingly tend to shower twice a day.



**What we've learnt**

- Largest study of its kind in Europe
- Infrastructure management as important as behaviour
- 'Hard' interventions cancelled out by behaviour
- Pressure matters
- Demographics are important

Funded by



Led by



# Innovation in delivering water supply resilience



The Southern Resilience Scheme is a new £27 million water infrastructure project that will provide improved security of supply to over 280,000 customers across our supply area, including Weston-super-Mare, Cheddar, Burnham and Glastonbury and the southern part of Bristol.

This new network will give us increased flexibility and will allow us to move water from our northern sources into our southern region in the event of a loss of supply, or water back up to Bristol if we lose our northern supply. Put simply, it means if there is an emergency on one of our pipes we can get you back in water much, much quicker.

As well as this it will help us meet the increase in demand for water over the coming years. Weston-Super-Mare is one of Europe's fastest growing towns, and so we need to supply all of the new residents and businesses coming to the area.

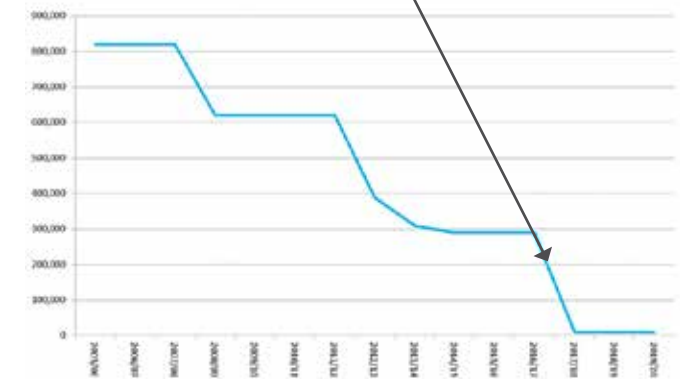
We used our bespoke Biodiversity Index approach to ensure that the work left a positive impact on the natural environment, with no net loss in biodiversity construction ends. We worked in partnership with Natural England to plan and deliver wildlife mitigation and compensation.



Archaeological dig before the ring main is laid



Population at risk from asset failure

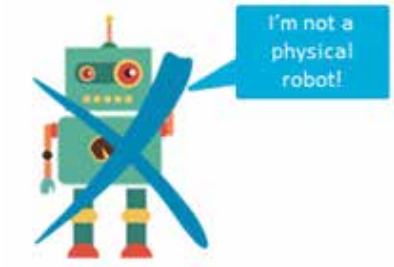




# Innovation in Robotic Process Automation (RPA)



As well as innovating to improve operations and customer experience, we also identify disruptive technologies - macro-trends that identify a wider transformational impact. A recent example of this is robotics. We identified that robotics and artificial intelligence would be a key disruptive and transformational activity, but that artificial intelligence may be at too early a stage to meet our practical challenges today. Instead, a step to pilot Robotic Process Automation (RPA) - the application of non-invasive software that mimics human activity to perform repeatable processes is at an early stage of trials. This provides an example of how our Business Improvement & Innovation approach engages the organisation, runs testable pilots, and then applies back to other business processes as part of transformation and continuous improvement.



**What is RPA?**  
 The application of non-invasive software that mimics human activity to perform repeatable processes.

- IPA software interacts with systems from the front-end like a human would do, without interfering with system integration.
- Technology has matured significantly in recent years and it is the fastest growing part of the automation sector.

**Why RPA?**  
 RPA has a broad range of benefits, beyond cost reduction. This includes, quick deployment, improved efficiency, increased control, and reduction in errors.

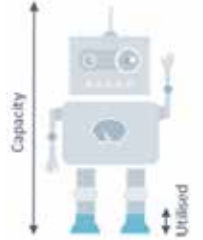
- Benefits**
- Consistent—reduction in output variation.
  - Repeatable
  - Non-invasive software
  - Improves productivity – freeing up time for more value-added tasks
  - Provides a full audit trail
  - Flexible – can ramp up or down to deal with demand
  - Manages exceptions, with use of message prompts and exception reporting



The initial pilot project ran over just 6 weeks from start to full business use.

The pilot robot was used to process the settlement reports received as part of the business retail market.

It demonstrated a 75% time saving, as well as removing any risk of manual error, and freeing up people's capacity for more value-added work.



- Next Steps**
- Develop pilot process to production
  - Ongoing internal capability development
  - Work towards utilisation of full robot capacity
  - Gather candidate processes from around the business for our RPA Hopper



# Taking innovation further



As you can see from our case studies we have recently taken a wide range of steps to increase our use of innovation. But as we look out to the future, we have identified a number of areas we can build on this further through our future innovation, to the benefit of water bills and services in the future. We explore these further in the trends that are affecting our strategy and the options we face.



Innovation area	Potential Benefits
Renewable energy generation at our works, reservoirs and pipes	Reduced carbon, reduced bills, resilience of power supplies to our works
Customer in-house leak and usage monitoring. Use of a water efficiency trading platform	Choice of water efficiency, excellent customer service, use of connected homes technology
Better use of consumer technology, apps, intelligent systems. New consumer channels (Alexa skills for water?) Data sharing - contributing to the Bristol Smart City operations centre	Customer choice of how information (and services) are delivered, better targeting of customer support (e.g. managing payments). Use of connected homes technology. Lower traffic disruption
Technology to monitor and predict failures	Improving service such as low pressure and leakage, less road works
Catchment management - working together to improve the long-term quality of water in the environment	Lower costs, better water quality, better environment, future challenges identified sooner by working together
Pipes that monitor themselves and can be fixed automatically. Use of robotics and intelligent systems. New ways of communicating information (e.g. meter readings that flow through the water?)	Better data. Better knowledge of emerging problems and how to fix them quickly. Better quality

# Enhancing our environment and protecting water quality

## Catchment planning and biodiversity

**Our water treatment works remove chemicals and harmful organisms from raw water to make it safe to drink.**

**Our catchment planning approach includes the use of satellite mapping to identify key areas to target for the reduction of nitrate and phosphorus at source.**

**The catchment planning and biodiversity index tools converts land use and farming practices into nitrate, phosphorus and load information, to help us to target our schemes.**

Our Biodiversity Index approach was established in 2015. Since this time, we have expanded the number of our operational sites and projects adopting the approach, with the aim to leave a positive impact on the natural environment following operational activity and construction works.

Our way of working has been commended by Natural England and our Local Engagement Forum.

It has enabled the company to improve its environmental performance, as measured by our Biodiversity Index score.

Activities undertaken include woodland management, tree planting and sensitive ditch and bank reinstatement, to enhance the biodiversity value of our sites.

We are now continuing to develop our approach, to incorporate ecosystem services and social services assessment. This will enable us to assess the benefits that our assets bring to local ecosystems and society. This will support the long-term maintenance of our environmental assets in the same way as we maintain our other assets to ensure that they remain fit for purpose in the long-term.

We intend to continue to increase biodiversity at our sites, actively supporting a resilient natural environment across the region.



ENVIRONMENT

# Enhancing our environment and protecting water quality

## Mendip Lakes Partnership

The Mendip Lakes are key sources of water. The quality of drinking water relies on the quality of the water environment. This is how we have enhanced and protected both and how we plan to continue this work in the future.

### 2010-2015

Increasing frequencies of algal blooms in Mendip reservoirs cause problems at our treatment works

### 2015-2020

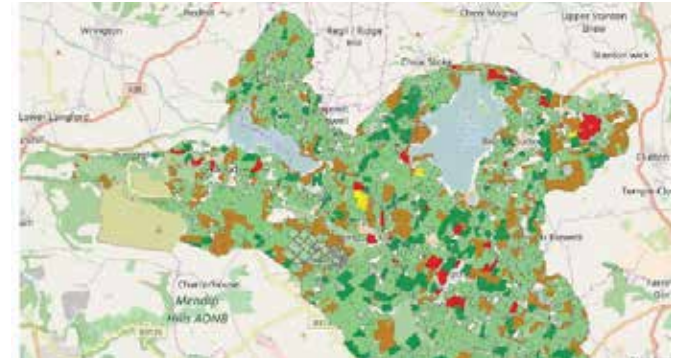
We started the Mendip Lakes Partnership project - bringing together the Environment Agency, Catchment Sensitive Farming and Natural England to coordinate advice and stewardship across the catchments. As part of this project we:

- Used satellite imagery to understand land use and nutrient loss from the catchment
- Formed a Farmer Focus Group to inform the project direction
- Provide advice and support to farmers on nutrient and soil management and analysis, farm yard infrastructure audits, water management advice and Countryside Stewardship application advice
- Provide farmers in the Mendip Lakes catchments with the Bristol Water Catchment Grant Scheme, this has helped farms reduce their pollution risk, for example by fencing off watercourses and sowing cover crops over winter to reduce nutrient leaching
- Run regular farm workshops with specialist speakers

### 2020-2025

We will continue to lead the Mendip Lakes Partnership, farmer engagement and provision of the grant scheme. The programme will be extended to include the River Axe and Cheddar Springs catchments as these are the catchments which supply Cheddar reservoir.

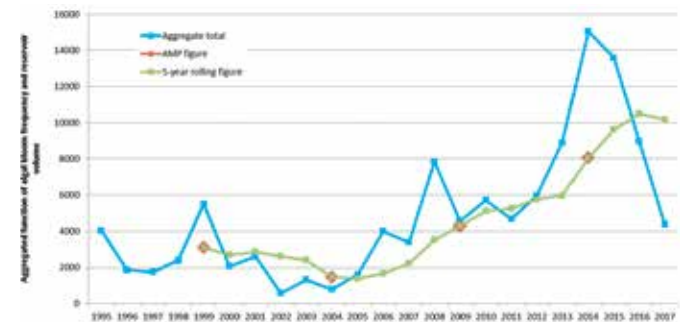
- We will build partnerships with Bristol University and Wessex Water to improve our scientific understanding of the reservoirs and the catchments and to validate our catchment management approach
- We will try different catchment interventions to deliver wider benefits and ecosystem services, for example such as promoting restoration of farm ponds and reedbed wetlands
- We will develop a way to measure our improvement across the catchment in terms of what we are trying to achieve, i.e. reductions in nutrients lost from farms to the environment



Land use mapping based on satellite imagery



Farm workshop with machinery demonstration



Algal blooms have reduced in the last 2 years - likely due to the weather. The catchment approach will take several years to show the full benefit

# Enhancing the environment and protecting water quality

## Metaldehyde Action Project

ENVIRONMENT

Metaldehyde is a pesticide used by farmers and gardeners to control slugs. It is washed off land during rainfall events and finds its way into raw water sources such as the Gloucester & Sharpness Canal. It cannot easily be removed by current water treatment work processes and so Bristol Water is working with farmers to reduce the amount used and risk that it will be washed off the land. Here is how we have dealt with this challenge to date and what we plan to do in the future:

### 2005 to 2010

We were the first company to detect metaldehyde in concentrations exceeding the drinking water standard  $0.1\mu\text{g/l}$

### 2010 to 2015

We started the Metaldehyde Action Project catchment management programme in the Canal catchments:

- We undertook river and stream sampling and fed back results to farmers
- We provided advice to individual farmers with high risk operations and fields next to watercourses
- We calibrated slug pellet spreaders to ensure accurate applications
- We provided training for farmers and agronomists in pesticide use
- We put leaflets in garden centres, agricultural suppliers and articles in the local press
- We engaged with domestic slug pellet users
- We trialled non-metaldehyde alternative (ferric phosphate)

### 2015-2020

Continued above programme of monitoring, training and engagement:

- We have further strengthened good relationships with the farming community
- We have compensated farmers for the higher cost of using ferric phosphate instead of metaldehyde

### 2020-2025

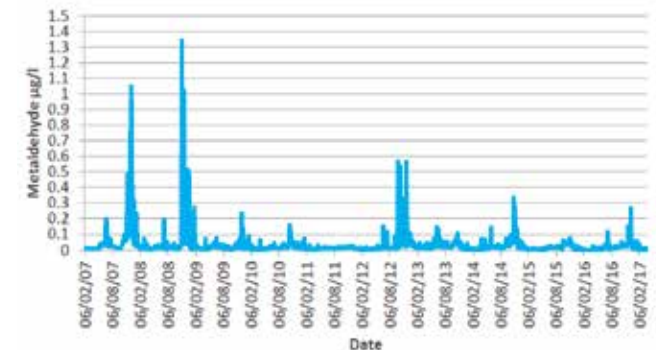
We will continue the programme of monitoring, training and engagement

- We will continue to build strong relationships
- We are developing partnerships with organisations such as WWT Slimbridge and Gloucestershire Wildlife Trust, who have an interest in water quality in the catchments
- We will continue to focus on reducing metaldehyde use from domestic and allotment sources where investigations have shown this to be a problem



Pellet spreader calibration

### Purton Intake



Raw water quality monitoring indicates reduced frequency of high concentration events



# Future Water resources

## Case study

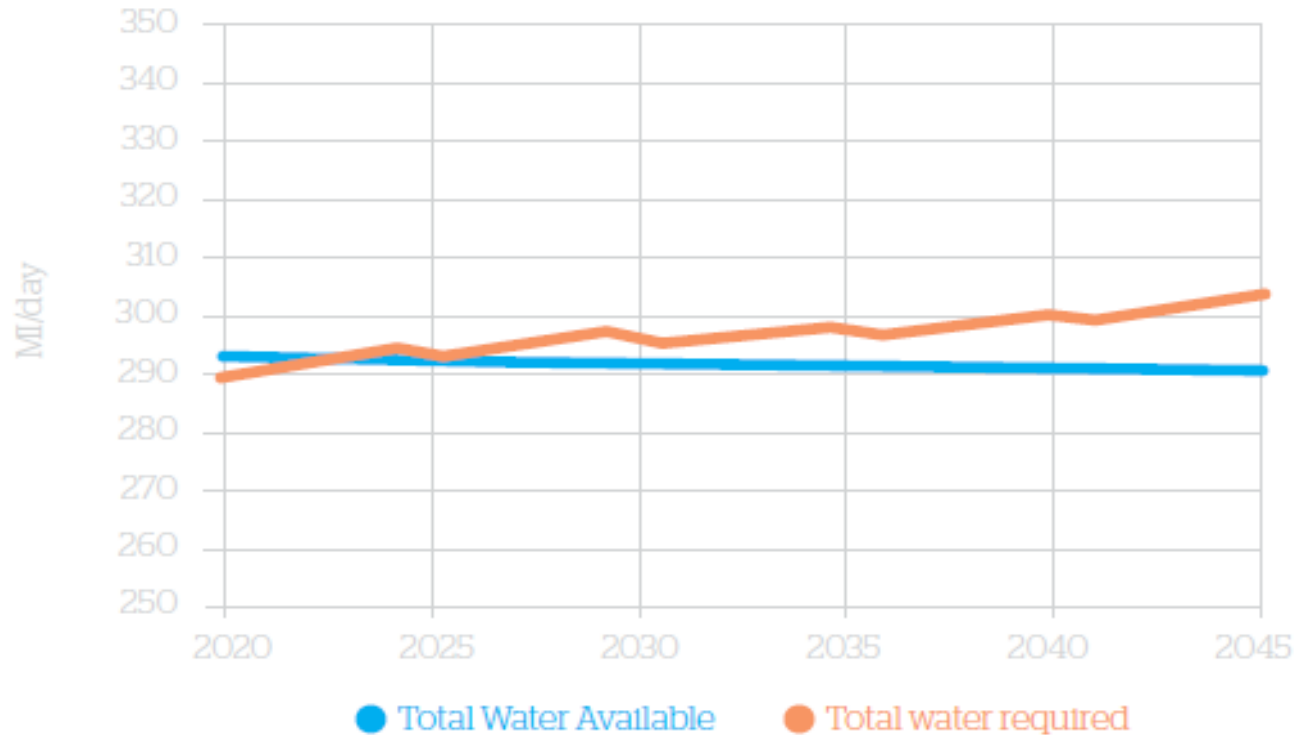
Stakeholder views, supported by customer research and engagement informed our future strategy for water resources, set out in our draft Water Resources Management Plan. Our plan takes account of all statutory drinking water quality obligations and plans to meet all drinking water quality legislation.

The plan sets out that we no longer need to build a new reservoir at Cheddar. The small gap that we have projected between supply demand deficit, which is based on planning for the worst expected drought which is only expected to occur more than once every 500 years, can be addressed before 2034 by measures to reduce leakage and water demand. We are therefore planning to reduce leakage (by up to 15% by 2025) and promote water efficiency to help support customers as metering increases and consumption reduces.

In the long-term, we would work with Wessex Water to optimise the way we share our water resources, potentially reducing our bulk water supply transfer to Wessex Water at Newton Meadows. We are working closely with Wessex to boost resilience through flexible use of water resources.



Baseline supply demand balance position



# Becoming more resilient

## Our resilience framework

RESILIENCE

Resilience is the ability to cope with, and recover from, disruptive events in order to maintain services for people and protect the natural environment, now and in the future. Resilience is important to all organisations, but is particularly important to the water industry due to the importance of our services to customers, to public health, to the economy and growth and to the wider environment.

### To deliver resilience we need:

- The trust of our customers and stakeholders (as was shown in the Willsbridge burst);
- To understand how our assets work and how we react in events. We are leaders on this for drinking water as shown by our position on the Drinking Water Inspectorate's Compliance Risk Index;
- Excellent customer services when we respond to events;
- A thorough understanding of customer and stakeholder needs;
- Financial resources available to cope with unexpected costs and to maintain a focus on long-term plans as we deal with short term events; and
- Corporate agility; as well as focusing on day to day performance for customers, we also focus on corporate responsibilities such as health and safety. We plan to avoid incidents, but we practice our response to crisis situations so we are ready.



# Future challenges to resilience

RESILIENCE

The World Economic Forum publishes an annual [Global Risk report that looks at trends in risks](#). We summarise below some of these risks and highlight the local factors in our strategy that form part of our long-term approach to resilience.

Global risk to resilience	Our strategic response
Climate change	We are resilient to climate change - our draft Water Resource Management Plan demonstrates how we plan to the worst historic events by reducing leakage and customer consumption through water efficiency. We don't currently have any environmentally damaging abstractions that require action, but we will investigate a few sites for further action by 2023. We will also reduce our environmental impact through energy efficiency, contributing to the Bristol City carbon strategy.
Degrading environment	Catchment management, and our biodiversity toolkit, helps us to understand and take action to protect natural capital. Traffic disruption and congestion in Bristol and surrounding areas is a key environmental impact which we will help to reduce through innovation.
Rising cyber-dependency	We have a strong IT platform to keep data secure. We are exploring wider sharing of data, including innovations that link connected homes to our connected networks, and smart city networks for Bristol.
Polarisation of society - income and wealth disparity	We already monitor the percentage of customers in water poverty, targeting our vulnerable customer support and social tariffs as incomes change. Efficiency and financial resilience ultimately means we reduce costs to all customers in the long run. Our objective of "being trusted" focuses on our role in society.
Ageing population and workforce	Our objective of 'Developing our people and our business' forms part of our corporate resilience. We are planning for the future skills we need, and our partnership approaches with regional bodies help us to deliver this. Our innovation approach also helps develop the skills of our current workforce. Our strategy for society could see us playing a role in future in helping monitor elderly friends and relations who may live on their own - technology that monitors everyday water use could help to indicate when help is needed.
Stressed economics and social protection	We take a long-term and cautious approach to financing, reflecting the vital nature of the services we provide. We also have a strong focus on our efficiency. Customer excellence means that customers also believe there to be value for money in the services we provide. We also see a role for us to play in social protection - using technology so we can promote our service choices to time-scarce consumers at the point they need us most but don't realise we can help.

# Examples of how we deliver resilience through our outcomes and objectives

Like innovation, resilience plays a key role throughout our plans. Each of our outcomes and objectives helps to deliver different elements of resilience: operational, service, financial and corporate.

## OBJECTIVES

-  Excel at customer experience
-  Develop our people and the business
-  Being trusted
-  Leading efficiency

- Drinking water safety plans
- Working closely with our neighbours
- Network monitoring and control
- Back up power supplies
- Long-term planning for a resilient network
- Cyber security
- Compliance and Event Risk Index
- Catchment management and environmental partnerships

**Operational**

- Partnership working - scaling of response for exceptional events
- Customer excellence during normal operation
- Use of technology to communicate
- Learning from incidents and events
- View asset information from customer perspective, not as properties supplied

**Service**

## OUTCOMES

-  Excellent customer experiences
-  Local community resilience
-  Safe and reliable supply of water
-  Corporate and financial leadership

- Strong stakeholder partnerships
- Transparency
- Emergency planning and response procedures
- Workforce planning
- Strong staff engagement
- Recognised ISO quality mitigation
- Risks understood, monitored and managed
- Use of external expert advice

**Corporate**

- Long-term investors - transparent arrangements
- Leading efficiency
- Maintaining efficient balance of equity and debt
- Maintaining investment grade credit rating

**Financial**



# Caring for our customers

## Affordability and vulnerability

**AFFORDABILITY  
& VULNERABILITY**

**We aim to make our bills affordable to all and our services accessible to all, including for those customers who are in circumstances which make them vulnerable.**

To effectively reach out to customers in need of financial assistance we work jointly with Wessex to partner with a number of charities. Our support is offered as a wide range of options when the charities help customers with their finances.

**We currently already offer a range of social tariffs and support options:**

- Flexible Payment plans - allow customers to have a short payment break, this may be needed when circumstances unexpectedly change, possibly due to a bereavement or health.
- Metering - having a meter is one of our first options for lowering bills; it is offered in combination with water saving advice.
- We offer payment directly from benefits.
  - WaterSure Plus - this caps the bill for customers who are low income and high usage; the cap is higher than the national minimum.
  - Assist - a range of low rate tariffs which vary with the customers' ability to pay
  - Pension credit tariff - a bill discount of around 20% where the customer is in receipt of pension credit
- For customers in debt and ready to start making ongoing future payments, we run a restart scheme - a two year payment plan designed to cover current usage, with old debts written off as contributions are made towards them. We target support through [www.moneyadvicewest.org.uk](http://www.moneyadvicewest.org.uk) with a range of face to face, online and telephone independent advice available.

- In the future, on-line adjustments by customers to their direct debit levels, to identify those who may need our help.

This year we are expanding access to social tariffs, to those who receive a bill via a third party rather than directly from us - such as those in supported accommodation.

We use a Priority Services Register to capture the additional needs of customers in circumstances which make them vulnerable. We offer additional support to customers when they are affected by an operational issue, as well as providing tailored methods of communication, such as bills in brail or minicom services for those customers with impaired hearing or speech difficulties.

We have been part of an initiative to sign-post our vulnerable customer services with the energy sector - through Western Power Distribution. We plan to expand our partnership working using technology to improve our vulnerable customer services.

Metering can help many customers with the affordability of their bill. Our recent 'Beat the Bill' campaign is a way for households to see if they could save money on their water bill if a meter was fitted. As part of this campaign we are putting a water meter in place so we can tell customers exactly what the difference between their current bill and a metered bill would be. Customers can then have the choice to switch to a meter, or if they want to carry on with their existing billing, they don't need to do anything.



Excellent customer experiences



Being trusted



**“Debt was something that happened to other people, not me. I'd never thought about it before... speaking to the companies you owe money to makes you realise they only want to help”**

**Jan from Bristol**

**After we helped her repay her debt**

# How we are changing: Improving our efficiency



The innovations we have set out in this document have allowed us to make big strides forward in our cost efficiency.

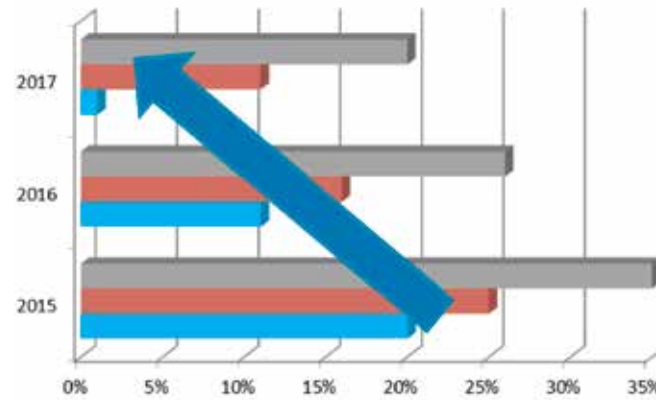
We have been rapidly closing the gap on wholesale costs between Bristol Water and the leading companies on efficiency, whilst at the same time delivering excellent customer services that other utilities appear unable to match. There is always uncertainty on an efficiency position (particularly shown by the range of model results) and future innovation trends mean we expect (and are planning for) the frontier of efficiency and service levels to become increasingly dynamic. But the trend in our performance is clear and progress to date means that we are confident that our future plans are based on sound, efficient costs.

We benchmark extensively to other water companies and utilities, as well as looking outside the sector.

We also compare our costs to utilities in Europe to see what lessons we can learn. This shows that our unit costs are low compared to similar sized utilities around Europe.

Expert research we commissioned has estimated that our costs can be expected to increase by c1.4% above CPI(H) inflation over 2020-25. Inflation already includes the average efficiencies made by companies in the whole economy. So if nothing else changed, we might need to make efficiencies of an additional 1.4% each year in order to avoid these cost increases affecting bills.

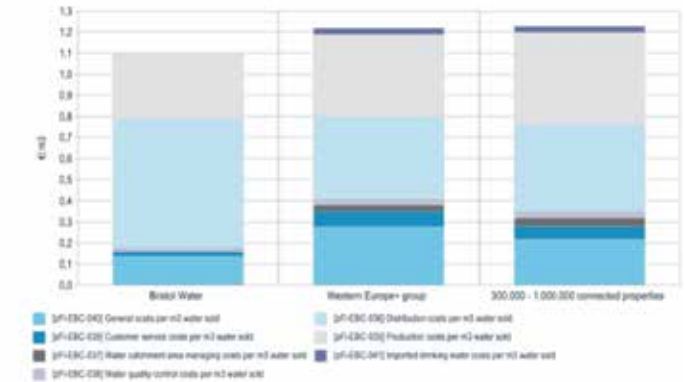
**Bristol Water estimated wholesale efficiency gap to top companies**



Efficiency range derived from a series of modeling approaches, including those used at the 2014 Price review. The blue “low” efficiency estimate derived from an innovative efficiency model selection work undertaken for Bristol Water by third party experts that identifies Water Treatment Works complexity as a significant industry factor which produces the most robust and appropriate model from an econometric and engineering perspective.

**The unit total costs per process for Bristol Water are low compared to Western Europe+ group**

Total costs per process



Leading efficiency

# Benchmarking and comparisons



We take part in the EBC European Benchmarking project - this allows us to compare our cost and service levels to other water companies in Europe.

This shows we compare well on many metrics, although energy use is higher, which reflects the complexity of many of our treatment processes, something we are seeking to address through energy efficiency investment.

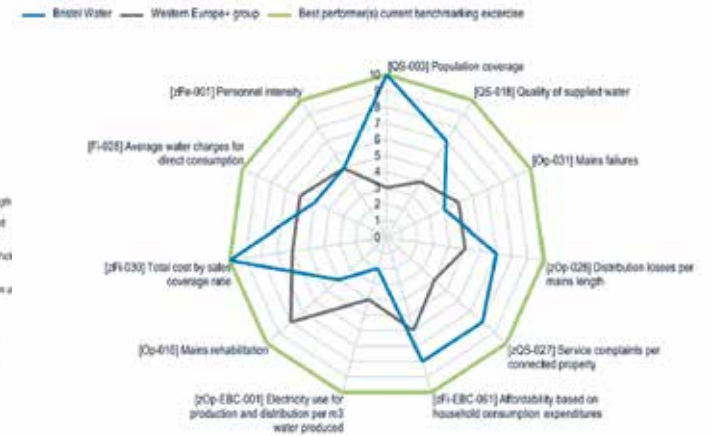
The sustainability indicators also suggest that, at 76 years on average our mains are the oldest in Europe, reflecting our enduring history of serving Bristol. But they are maintained well, as mains bursts are well below average. The volume of mains replacement is below many companies in Europe, but innovation in monitoring means that services to customers are protected as the investment is well targeted.

In addition, even though our leakage performance is amongst the leaders in England, we plan to cut leakage, and help customers cut their consumption by much more.

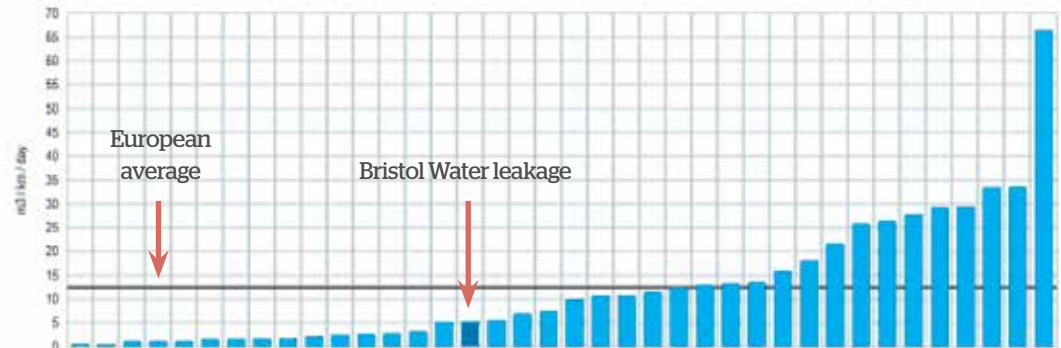
## Performance overview per area



- 1st quartile
- 2nd quartile
- 3rd quartile
- 4th quartile
- DNA
- A: (23-03) Population coverage
- B: (23-04) Quality of supplied water
- C: (0a-01) Mains failures
- D: (0a-02) Distribution losses per mains length
- E: (025-07) Service complaints per connected property
- F: (01-03C-00) Affordability based on household consumption expenditures
- G: (01-03C-00) Electricity use for production & distribution per m3 water produced
- H: (0p-01) Mains rehabilitation
- I: (01-03) Total cost by sales coverage ratio
- J: (01-02) Average water charges for direct consumption
- K: (01-00) Personnel intensity



The grey line shows the (unweighted) average value of the Western Europe+ group including Bristol Water.



# Wholesale cost pressures



We have reviewed the cost pressures that could affect us in the future. In the past there have been significant inflationary and unavoidable cost pressures that have affected water companies, but looking forward it is not clear that costs will necessarily increase by more than RPI inflation. We bought energy in advance for the next few years at a rate cheaper than it is today, so we are likely to see some increase in energy costs in 2020, but we plan to increase our energy generation to help offset this. The main cost challenges we face are summarised below:

Cost and efficiency risk	What we are doing about it
46% of our water comes from the Gloucester to Sharpness canal - which we have to pay to pump and abstract and is relatively expensive to treat.	We will challenge any cost increase for using the canal and target reductions.
We have more expensive and complex water treatment works than other companies.	This delivers high quality water to customers. We are looking to use renewable energy to reduce the overall cost.
Traffic congestion in Bristol and the surrounding area is the worst outside of London.	We will work with local authorities and contribute to their long-term strategy to tackle traffic congestion.
Operating in a city with a historic water network can result in increased maintenance costs as assets age.	We use innovative technology to target our work at the best locations.
Higher wages than the rest of the South West, especially because of major construction and infrastructure projects in the region.	We manage our skill development and workforce planning carefully to ensure we have the skills we need. We invest in new technology to overcome cost pressures wherever possible.

## Retail Efficiencies

Our research suggests that household retail costs are linked to scale (the size of population served) and whether bills for water and wastewater services are sent together. We have historically had efficient retail costs, in part because the joint venture with Wessex Water (Pelican) allows us to avoid duplicating customer contact and billing between the two services.

Customer bad debt and debt management costs are approximately 40% of our retail cost. Our research suggests that efficient bad debt costs are linked to deprivation, wholesale bill size and level of transience (which makes it harder for companies to keep track of people when they move in and out of properties). Our wholesale policy of selectively metering properties on change of occupancy helps us to be efficient, as well as reducing water consumption.

Our retail costs are low in comparison to other companies and we also provide high levels of customer service and social tariffs. Our view, supported by expert research, is that our retail costs remain among the most efficient in the industry.

We expect we will have to make cost reductions to maintain this position over in the future, although this depends on how much we can absorb inflation and pressures in society that could increase bad debt. Bristol and the neighbouring areas we serve are seeing an increase in household indebtedness, in part reflecting the high housing costs in this growing area.

### Estimated percentage of residents who are 'over-indebted'





# Charging less

## Reducing our bills

YOUR BILL

**Our bills decreased by £28 (14%) in 2015, and have increased by less than RPI inflation since then.**

After 2020, Ofwat have decided bills each year will no longer be linked to RPI inflation, which is an out of date index. Instead - CPIH - the Consumer Price Index including housing costs, will be used. This is approximately 1% per annum lower bill changes than might be expected than with the RPI index.

Many benefits and pensions are now linked to CPI, and in recent years average wage increases have been closer to the CPI rather than RPI index.

Where we have costs that change closer to RPI rather than CPI, we will have to work harder on efficiency to make sure that bill changes are below the new assumed rate of inflation, or less.

Bills are likely to decrease as Ofwat expect to set a cost of capital for the industry at c.2.4%, compared to the 3.7% assumed for 2015-20 (in real terms before RPI inflation).

All other things being equal, this would reduce Bristol Water bills by c.£7 (c.4%). The shift of inflation to CPIH could see an initial change to bills that broadly offsets this.

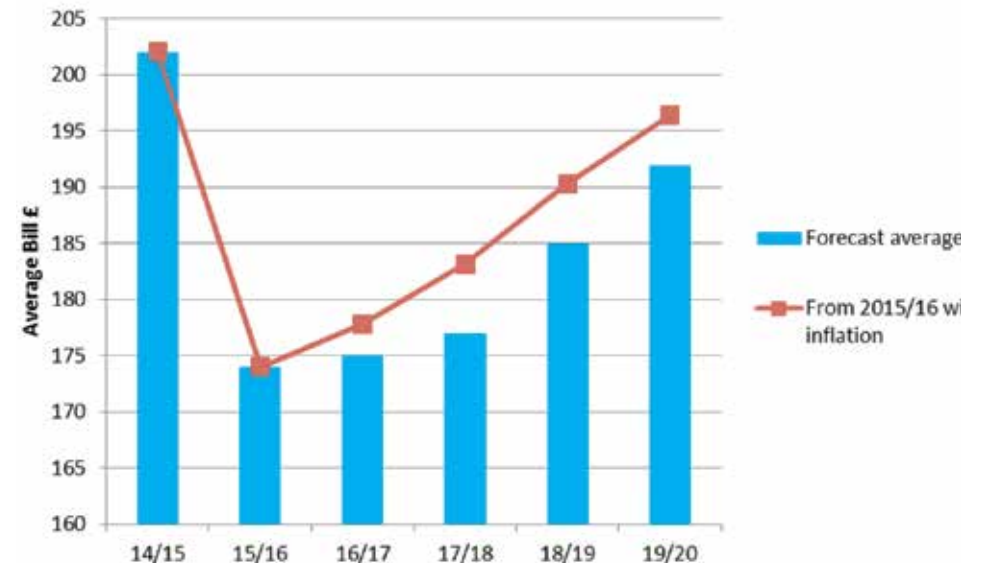
Before we consider options for investment in services, there are changes in costs and the timing of investment that can also affect bills. There are choices on how quickly services improve and customer views on what is affordable may change. Our plans and timing of delivery must adapt to this, as well as considering how we can deliver more by innovating at a lower cost.

At this stage we would like bills to change at a rate at or below CPIH inflation, although this depends on taking a long-term view on financing costs to sustain all of the large drop in bills seen in 2015.

This consultation on our long-term ambition considers how we can meet this aim, both in the next few years and in the longer run.

Tariffs can go up for individual customers by more than average bills, particularly where customers on a meter cut their consumption, or by lower amounts as costs are shared with new customers. We always aim to keep tariff increases for any customer below 5% each year unless it is not in customers' long-term interests to avoid this. We have managed to achieve this up to 2019, despite inflation this year being at 3.9%.

**Bristol Water average bill**



Between 2015 and 2019 Bristol Water bills have decreased by 9%.

Over the same period electricity prices have increased by 17% and rail fares by 9%. In the last two years house prices in Bristol have increased by c.17%

# Charging less

## Where your money is spent



The average household bill in 2017/18 was £175, equivalent to 48 pence per day.

A total of 70% of this is spent on day to day expenditure to maintain wholesale supplies, with around 10% being spent on customer service.

Borrowing and shareholder investment in assets that was not reflected in customer bills in March 2017 had a total value of £471m, equivalent to around £900 per customer. The cost of financing this investment is reflected in profit and interest.

Ofwat incentives are set at price reviews - companies will earn more profit (and returns to shareholders) if they are more efficient or deliver better services than assumed.

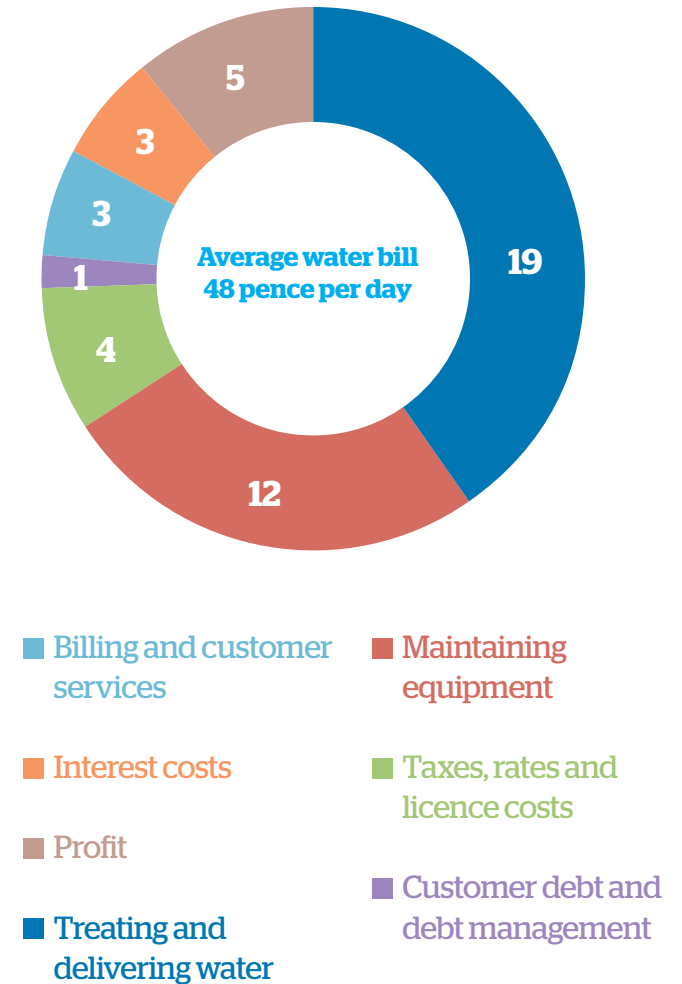
One of the ways this is measured is through the "Return on Regulated Equity" - RORE. Ofwat assumed that we would be able to earn a return of 5.8% over 2015-20, within a range of -0.2% to 7.8%.

Between 2015 and 2017 we only earned a RORE of 4.6%, 1.2% below that assumed by Ofwat. Whilst expenditure was in line with the efficient level Ofwat had assumed, debt costs were higher than Ofwat assumed (explaining 0.6% of the difference). Interest costs are higher for small companies such as ours, as larger companies can borrow at a lower cost. If customers prefer to be served by us rather than by a larger water company, then this additional financing cost forms part of their bill.

Bristol Water also had some outcome performance penalties, because supplies were interrupted more than expected, water quality fell below target, and fewer customers chose to have a meter installed. These outcome incentives will be reflected in customer bills as part of the 2019 price review, together with incentives that apply over the whole period including for leakage and customer service.

This performance results in lower returns to shareholders than would otherwise be the case.

Where your bill goes (2017/2018 - average bill pence per day)



# Regional strategies



Our future plans are also informed by local and regional government and business agencies, who we work with closely. Many of the future factors that we have identified have been informed by their priorities and work plan.

The West of England combined authority strategy focuses on developing skills for the future workforce, and building on the region's creativity and high-tech local business. This provides a test bed and support for entrepreneurs and academic institutions to help solve shared challenges. We have a role to play as our innovation strategy and future workforce strategy will benefit from working in alignment towards these priorities.

The City of Bristol **corporate strategy** "includes the Mayor of Bristol's vision of a flourishing and resilient city. The strategy calls for an agile and connected city that makes use of technology to build community trust and connects people through shared actions.

The strategy deals with short term and long-term issues such as the need to improve housing quality. It is environmentally ambitious to put Bristol on course to be run entirely on clean energy by 2050 and introduce a safe, clean streets campaign.

## West of England combined authority strategy

Businesses that succeed	World class skills for employment	Infrastructure fit for the future
<ul style="list-style-type: none"> <li>Supporting businesses to start up, grow and flourish.</li> <li>Supporting our businesses in developing and maintaining success in existing and emerging markets around the world.</li> <li>Attracting investment and high quality employment opportunities into the region.</li> <li>Removing barriers to completing the cycle of creativity and innovation from idea to design to commercialisation, within the region.</li> </ul>	<ul style="list-style-type: none"> <li>Improving alignment of knowledge and skills supply with existing and future employer demands to enable individuals to succeed and businesses to grow.</li> <li>Developing an integrated employment, education and skills system that is engaged and responsive to employer needs and provides clear routes into employment and to more sustainable and rewarding careers.</li> <li>Supporting and stimulating business, including SMEs, to attract and develop the talent they need to improve productivity.</li> <li>Developing innovative ways to provide local people with appropriate support, information, advice and guidance to unlock their career potential and thrive in a modern economy.</li> </ul>	<ul style="list-style-type: none"> <li>Improving connectivity in the region to increase access to jobs, reduce congestion and promote sustainable transport choices.</li> <li>Improving national and international connections to expand the regions global reach.</li> <li>Finding innovation ways of increasing the availability and affordability of a range of housing types creating communities where people want to live and work.</li> <li>Enabling employment space to provide opportunities that suit the needs of businesses at all stages.</li> <li>Supporting high quality, effective digital infrastructure to address variations in connectivity and broadband speed.</li> <li>Developing infrastructure that is sustainable for future generations.</li> </ul>

## City of Bristol corporate strategy



- Fair**  
Every person living in Bristol has the assets and opportunities to enjoy a good quality of life.
- Liveable**  
The city centre and neighbourhoods are great places for people of all ages to live, work, learn and play.
- Sustainable**  
The city and region prosper within environmental limits through adopting new behaviours and technology.
- Agile**  
Bristol citizens and leaders make agile decisions based on shared priorities and real-time information.
- Connected**  
A strong network of local communities and organisations promotes trust, cooperation and shared action across the city.

- Corporate and financial leadership
- Local community resilience
- Being trusted
- Develop our people and the business

# Working in collaboration with others

## Smart City “Bristol is Open”

### COLLABORATION

According to Navigant research, Bristol recently overtook London as the number 1 “Smart City” in the UK. It provides a unique environment for “Internet of Things” testing, an extensive partnership ecosystem, and established pathways for scaling successful projects. This provides a clear pathway for developing the vision we set out above.

It provides a large scale connectivity testbed for urban innovation, whilst the new City Operations Centre provides an evolving platform for the integration of new and existing services. We can contribute and tap into this environment. Bristol City Council and the Mayor continue to lead the way in areas such as open data access, energy innovation and community engagement. This provides the opportunity for us to work collaboratively and innovate to deliver our plans.

#### Examples include:

- REPLICATE - an integrated smart district which we can use to test our innovations.
- The Smart City Bristol projects stretches to the wider City region across South Gloucestershire and North Somerset, which aligns well with our service area.
- Traffic management and control is a major driver of the Bristol Mayor’s strategy, for instance ambitions to reduce traffic infrastructure to unlock urban rivers for the Wellbeing of communities. Our existing partnership works are integrated with these ambitions.
- The priorities for vulnerable customer monitoring align with our need to understand more about when our customers need our support.
- Reducing leakage through improved monitoring of the pipes customers are responsible for aligns with the “Bristol is Open” damp busters - frog shaped temperature and humidity sensors to target improved housing.
- Citizen sensing could help us monitor our network - in Bristol there is the ambition for citizens and communities to build, use and act as sensors e.g. measuring temperature on technology that already exists, such as smart phones.



Source: Navigant Research



# Our performance

**Transparency is important to us. Here we provide a summary of our performance against our current company outcomes. We have also published a wealth of information on our performance on our website.**

# Our Performance

In December 2017, we published [our mid-year performance report for 2017/18](#) which set out our progress in delivering our performance commitments and outcomes so far over 2015-20. The report also wherever possible compared our performance to other companies, which has informed our future targets set out in this consultation.

The report included an independent assurance statement that we had set out our performance in a fair and reasonable way.

Transparency is important to us, and together with our Challenge Panel, our customer challenge group, we constantly try to improve our approach to the presentation of our performance. For example, we think that indicating our relative position to other companies using colour-coding helps to provide customers and stakeholders with more context than just whether we are meeting our targets.

Our Challenge Panel is an independent group of interested and expert stakeholders whose role is to ensure that customer voice remains at the heart of our decision-making. It has an Independent Chair - Peaches Golding OBE - and the panel has regular access to our Board. A key part of their role is to monitor the delivery of our commitments to customers. They produce an [annual report](#) on our performance that is available on our website, which goes through each of our performance commitments from the customer's perspective.



**49,016**

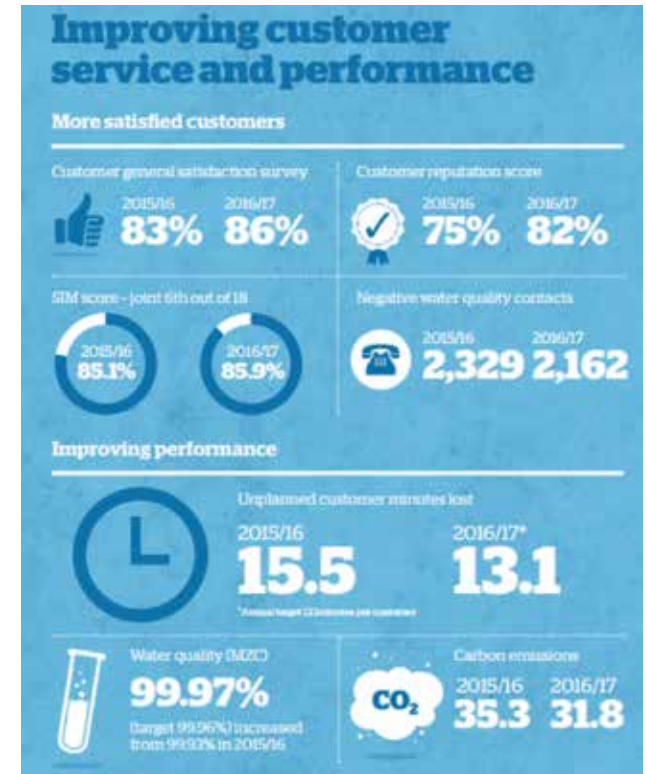
text messages were sent to mobiles and landlines to warn customers of operational issues.

**86%**

Of stakeholders rated the services we provide as excellent, very good or good.

**75%**

of stakeholders rated the quality of our communications as excellent, very good or good.



		Bristol Water performance to date						16/17 industry performance		
Performance Commitment	Unit	15/16	16/17	Trend	17/18 half-year	17/18 full year target	On track for 17/18 year end target?	Comparison to others	Lower Quartile	Upper Quartile
Unplanned customer minutes lost	Minutes/prop/year	15.5	13.1	▼	65.04	12.8	No – target missed	▼	12.5	5.4
Asset reliability – infrastructure	Improving, Stable, Marginal, Deteriorating	Stable	Stable	◀▶	Stable	Stable	Yes	N/A	N/A	N/A
Asset reliability – non-infrastructure	Improving, Stable, Marginal, Deteriorating	Stable	Stable	◀▶	Stable	Stable	Yes	N/A	N/A	N/A
Population in centres >25,000 at risk from asset failure	Population	288,589	288,589	◀▶	288,589	9,063	Yes	N/A	N/A	N/A
Security of supply index (SOSI)	%	100	100	◀▶	N/A	100	N/A	◀▶	100	100
Hosepipe ban frequency	Days	1.5	3.1	▲	N/A	10.2	N/A	N/A	N/A	N/A
Mean Zonal Compliance (MZC)	%	99.93	99.97	▲	99.94	100	No – target missed	◀▶	99.96	99.98
Negative water quality contacts	Contacts (comparators per 10,000 customers)	2,329	2,162 (8.5 per 10,000)	▼	886	2,322	Yes	◀▶	9.5	4.9
Leakage	ML/d (comparators Litres/property/day)	44	46 (87 l/p/d)	▲	45.2	45	Yes - actions in place	▲	121	88

**Key**

- Target met, potential reward due
- Target met
- Target not met
- Target not met, penalty due
- Ahead of others
- Behind the others
- Bristol in the pack

We expect to continue to meet all of the above targets for 2020 shown above. Where we are currently not on track during 2017/18, we take further actions wherever possible to meet our commitments.

We will exceed our “unplanned customer minutes lost target” for supply interruptions for 2017/18, due principally to major interruption events at Willsbridge (54.74 minutes) and Sea Mills (4.55 minutes). We have investigated the root cause of these incidents, in order to identify other locations where similar events are likely to

occur, so that we can put measures in place to try to prevent these bursts from happening, or take steps to minimise the impact on our customers if they do. We have taken a number of operational initiatives to improve our response and recovery times, including new tools and techniques to allow “live” isolations of mains following bursts and rapid re-zoning of the network.

Our Mean Zonal Compliance Drinking Water performance will not meet our target of 100%. The main cause of lower performance than in previous years is due to nickel failures in samples taken at

customer taps. These failures are outside of our control. If the three nickel failures we had at the mid point of 2017 are excluded from the calculation, our performance would not have incurred a penalty.

We have mobilised additional resources to reduce outstanding leak repairs and additional active leakage control activities have been undertaken with the aim to bring leakage levels in line with the annual target. This reflects our commitment to reduce leakage by 12% between 2015 and 2020.



		Bristol Water performance to date						16/17 industry performance		
Performance Commitment	Unit	15/16	16/17	Trend	17/18 half-year	17/18 full year target	On track for 17/18 year end target?	Comparison to others	Lower Quartile	Upper Quartile
Per capita consumption (PCC)	Litres/head/day	141.1	144.1	▲	N/A	143.6	N/A	▼	145.5	134.2
Meter penetration (household)	%	47.3	49.6	▲	51.7	58.8	No – actions in place	▼	42	69
Total carbon emissions	kg CO <sub>2</sub> e/person	35	32	▼	15.96	23	No	N/A	N/A	N/A
Raw water quality of sources	Improving, Stable, Marginal, Deteriorating	Deteriorating	Deteriorating	◀▶	Marginal	Marginal	Yes	N/A	N/A	N/A
Biodiversity index	Improving, Stable, Marginal, Deteriorating	Improving	Improving	◀▶	Stable	Improving	Yes - forecast as improving	N/A	N/A	N/A
Waste disposal compliance	%	96.1	95.8	◀▶	97.8	100	No – actions in place	N/A	N/A	N/A
Percentage of customers in water poverty	%	0.4	0.9	▲	N/A	1.9	N/A	N/A	N/A	N/A
Service Incentive Mechanism (SIM)	Top 5	85.1	85.9	▲	83.1	Top 5	No - Challenging to hit	◀▶	82.5	86
General satisfaction from surveys	%	83	86	▲	N/A	93	N/A	N/A	N/A	N/A
Value for money	%	70	72	▲	68.9	71	Yes	N/A	N/A	N/A
Ease of contacts from surveys	%	93.1	94.4	▲	92.9	96.5	No	N/A	N/A	N/A
Negative billing contacts	Contacts/year	2,301	3,096	▲	1,383	2,315	No - improving now	N/A	N/A	N/A

**Key**

- Target met, potential reward due
- Target met
- Target not met
- Target not met, penalty due
- Ahead of others
- Behind the others
- Bristol in the pack



Meter penetration is the target we are most likely not to achieve, as this is driven by customers choosing to have a meter and by the number of property moves. We maintain our plan to increase metering, and continue to promote the benefits to customers, such as through our recent “Beat the Bill” campaign.

Some of our environmental targets such as carbon emissions rely on third party energy generation so also may not be achieved.

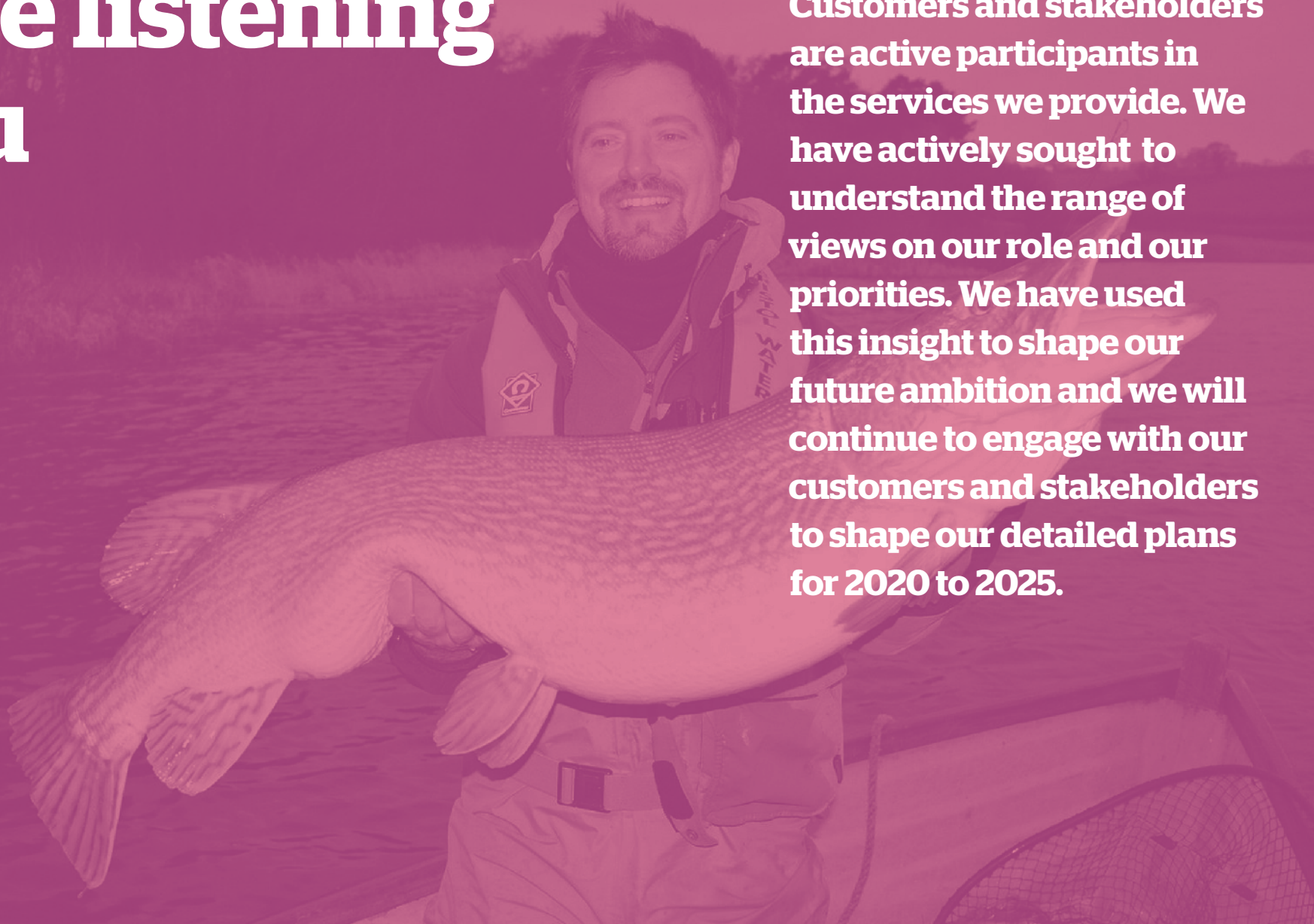
Our customer service performance measures, such as ease of contact and the industry Service Incentive Mechanism, are also not currently meeting our ambition to be amongst the leaders in the industry. Some of this can be explained by the major supply interruption events we experienced this year. Our focus is to improve the culture of the organisation by putting the customer at the heart of every decision. It is often the little things which make the biggest difference to our customers. We are working on over 40 things which we can do

quickly to give a better experience. For example, we are continuing to work on new customer channels, such as a leaflet that explains what to expect from us when we are working in an area. We are also innovating to better equip our teams to resolve issues first time and to minimise the impact of essential works on the communities we serve. Sometimes the simplest solution such as a splash net on barriers will be enough to make a difference.



# **We are listening to you**

**Customers and stakeholders are active participants in the services we provide. We have actively sought to understand the range of views on our role and our priorities. We have used this insight to shape our future ambition and we will continue to engage with our customers and stakeholders to shape our detailed plans for 2020 to 2025.**



# Who are our customers?

**Key message:** In 2017 we conducted a segmentation exercise, using our customer data to better understand who our customers are and to better understand their individual needs, so that we can deliver a better service.

These personas provide a framework, within which future research can explore the variation in views among different customers. We have already gained valuable insight by using our data to recruit members of our new Customer Water Forum and have also used the segmentation to target customers in our new metering radio campaign.

## Thirsty Empty Nesters 8%

The average age of this group of customers is 63. They have an average income of £36,000 and over half are struggling or in debt. The majority live in their own home - mostly in semi-detached or terraced houses. This group pays the most for their water - but most do not have children at home and live by themselves or with one other person. Only 6% have a water meter.

## Young Urban Renters 22%

This group of customers have an average age of 36, and an average income of £38,000. Most of them are employed, and a small majority rent the property they live in. Most are only just managing to make ends meet and could be running into debt. A small majority have a water meter, although out of all groups, this group demonstrates the least interest in cutting down their water usage.

## Comfortable Families 29%

The average age of this group of customers is 46. They have an average income of £41,000 and only half are in debt or struggling. A majority own their own homes and are employed. Most have children at home - with 3 or 4 people in the property. Only 40% use water meters.

## Safely Affluent 5%

The average age of this group of customers is 58. They have an average income of £71,000 and very few are in debt or struggling. 98% own their own home and most live in a detached house. Nearly half have children at home. Only 36% use a water meter but most are interested in saving water.

## Mature & Measured 23%

This group of customers have an average age of 73 and an average income of £39,000. Only 33% are employed, but only a few are running into debt. Most of these customers own their own homes and live with only one other person. All are interested in making efforts to cut down their water usage and most are on a water meter.

## Social Renters 13%







This group of customers have an average age of 59 and an average income of £19,000. Most are in debt or struggling, and only 33% are employed. Most of this group are in social housing, and the majority live alone or with one other person.









# Our customers have different views – further insight

We understand that our customers have different views, circumstances and behaviours. We continue to explore these differences through our ongoing engagement and will use the insight to deliver a more tailored and personal customer experience.







## Different views

-  **86%** are satisfied with the service
-  **98%** are satisfied with reliability of supply
-  **72%** think we provide good value for money
-  **82%** think we have a good reputation
-  **5%** would switch water provider if they could
-  **87%** think that Bristol Water should be involved in supporting environmental protection

## Different circumstances

-  **2%** contact us in a typical year
-  **26%** live in rented accommodation
-  **40%** have children at home
-  **20%** live alone
-  **3%** are on a social tariff
-  **9%** are drawing on savings or running into debt

## Different behaviours

-  **91%** make an effort to cut down on their water usage at home
-  **88%** turn the tap off while brushing their teeth
-  **25%** use their external tap every day during a hot summer
-  **86%** pay monthly
-  **69%** pay by direct debit
-  **50%** are metered



# Your views and opinions

Over a number of years now, we have actively engaged with customers and stakeholders to help us to develop our future plans. During 2017, we engaged with over 7000 household customers and over 1000 businesses and stakeholders to explore their opinions regarding various aspects of the water supply and service we provide.

Engagement varied in scale from large deliberative events and online surveys to in-person interviews. Engagement tools used included digital tools, general discussion forums, and valuation surveys.

Overall, the top priorities of our customers have remained largely unchanged from research carried out five years ago, with reliability, water quality, and affordability consistently prominent across most of the research. Customer valuation of service options demonstrates an overall slight decrease in customers' willingness to pay since PR14, which, when combined with qualitative insights about customers' expectations for their supply, suggest they want us to achieve more in targeted areas where investment can be justified without significant bill increases.

All customer engagement indicated that reducing leakage is a high priority for customers. The main challenge for us is how to achieve this without increasing traffic disruption, and with metering not being a popular route to reducing consumption except where customers choose this option. We are carrying out further, in-depth engagement on this topic to better understand customer views on some of these inter-related attributes.

Drought measures are a low priority for customers, due to both the lack of experience of drought, and the low risk of drought in our supply area. In terms of water resource options, customers express a strong preference towards demand reduction measures such as leakage, metering, and water efficiency efforts over investment in developing new supply options.

Customers identified protection of the environment, water quality, and vulnerable customers as the areas they felt to be most important for our future performance commitments, and in general favoured us facing financial incentives rather than just reputational incentives. Customers thought that commitments relating to our statutory duties and core service obligations should incur financial penalties. For instance customers did not support rewarding us for providing better value for money. For performance commitments that had longer-term impacts for their priority areas, customers preferred incentives that contained both rewards and penalties.

Throughout all the customer engagement, we received positive feedback from customers regarding their participation and in general experienced a willingness from customers to contribute their views.

We will continue to actively engage with our customers and stakeholders as we continue to shape our future plans.





# Your preferences

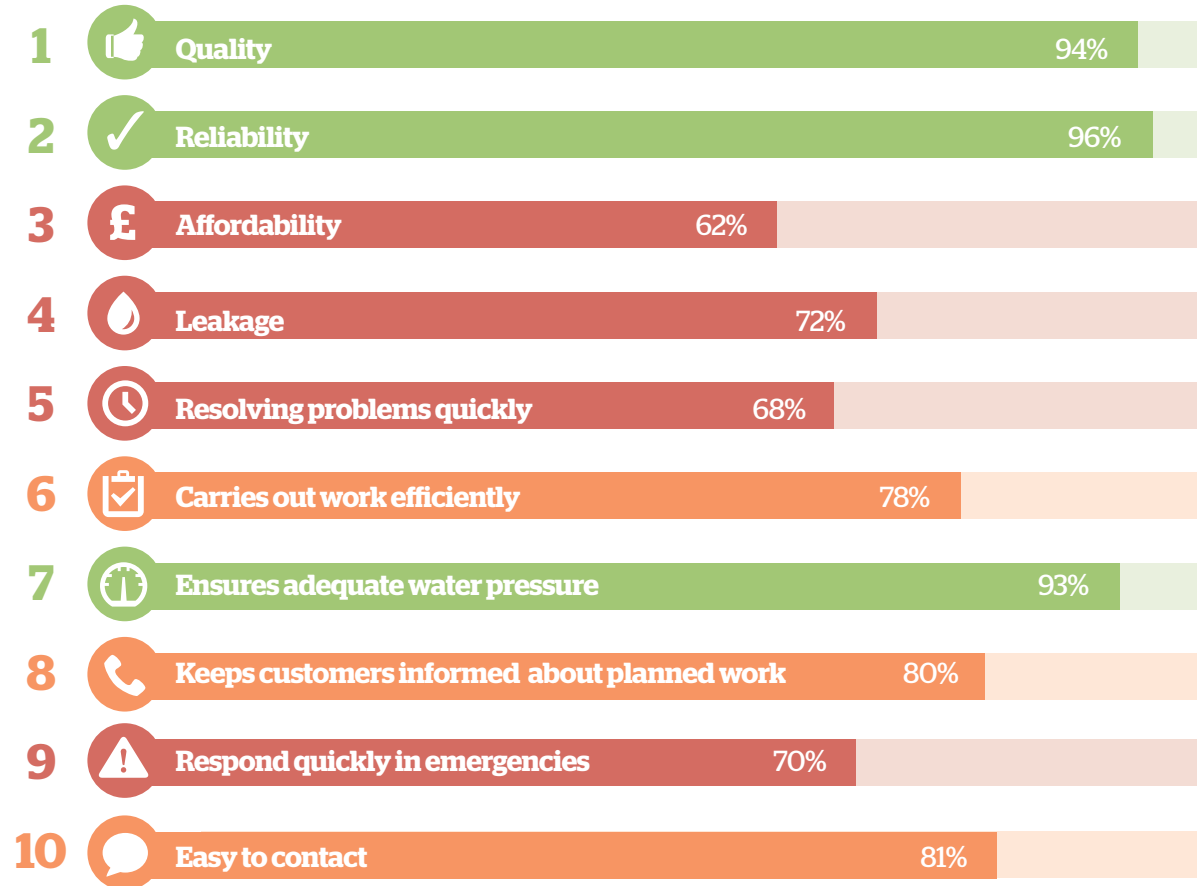
We have a range of research on customer priorities available both from the last price review, and from ongoing customer research.

Overall, the top priorities of our customers have remained largely unchanged over the years, with reliability, water quality, and affordability consistently prominent across most of the research. Most customers think we are doing well across the range of priorities, but some areas still have room for improvement.

In addition, in 2017, we refreshed our understanding of customer priorities by conducting three research events with different customer groups. These were designed to complement our ongoing research, to better understand some of the reasons behind the priorities customers choose and to start to understand how the views of different customer groups may differ. Customers on a social tariff prioritise helping people who cannot afford their bills and customers who have experienced a disruption to water supply prioritised providing a regular water supply and responding quickly in emergencies.

The annual survey we carry out shows that customers think we perform well at some of the service attributes that are of important to them - especially water quality, reliability and pressure. Areas for improvement (areas that were high priority but perceived to be of low performance) are affordability, resolving enquiries promptly and leakage.

PREFERENCES



- Seen to be area requiring significant improvement
- Seen to be area requiring some improvement
- Seen to be area where we are performing well

# Key themes that you talk to us about

Some of the key themes that resonate through all of our customer engagement are often raised without our prompting.

In terms of water resource options, customers express a strong preference towards demand reduction measures such as leakage and water efficiency efforts, over investment in developing new supply options, such as new reservoirs.

There is also an emerging theme that customers want us to do more, beyond our role of providing tap water. Our impact on the environment, and opportunities to improve it, are areas of interest when we engage with customers. Contributing to the local community is becoming more important to customers and our business. Reducing traffic congestion is a theme that our online panel members express strong preferences for.



## Water efficiency

It is clear throughout our engagement that customers are supportive of reducing water usage. Customers hold differing opinions over the value of education on water saving versus the use of water efficiency devices but some customers also see the two approaches as inseparable.



## Reducing leaks

Reducing leakage remains a top priority for customers throughout our ongoing customer contact as well as our targeted engagement. Studies in 2017 have found that customers place a much higher value on leakage than five years ago, and also in comparison to the rest of the industry.



## Protecting the environment

Understanding customer views on the environment is challenging, as people often want to be seen to be supportive of environmental issues, but in practice and in their daily lives may not prioritise environmental concerns. However, customers have expressed some willingness to pay for environmental improvements. In addition, it is regularly identified as an area for improvement and is a key area of interest for more engaged customer groups



## Reducing traffic congestion

Customers support more effort to reduce the impact of traffic disruption when we are carrying out our works



## Local community

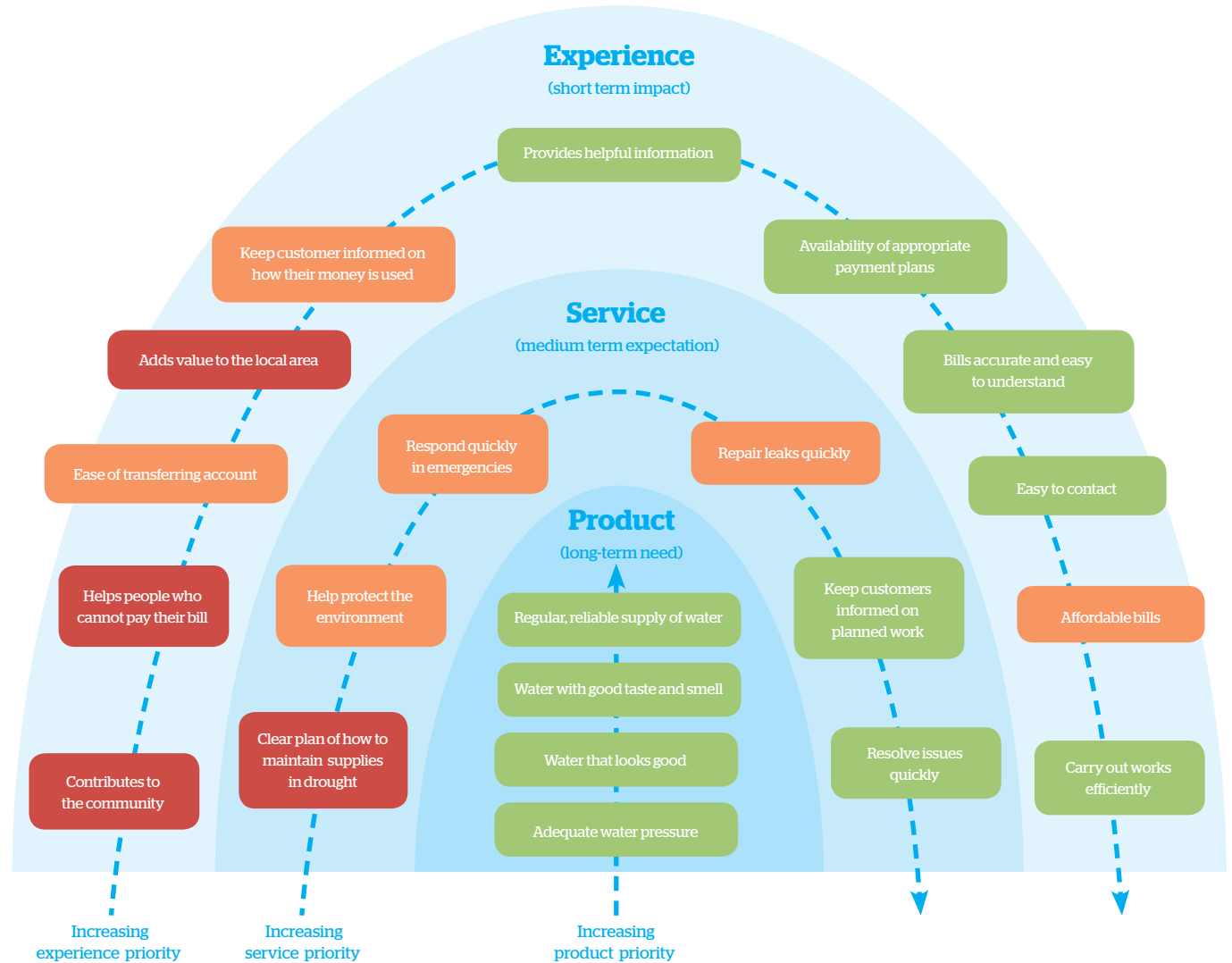
Customers participating in deliberative research articulated strong views about Bristol Water's responsibility to the local community, but had mixed opinions regarding what this should involve. Some participants advocated for educating young people about water and water conservation and working more closely with schools.

# Your priorities

Most customers think we are doing well at delivering water as a product, and they are generally happy with the service they receive, although there is room for improvement in having access to and communicating information when service problems arise. Although some elements of customer experience are performing well, we need to improve awareness and performance on some of the lower priority areas such as local community engagement in order to achieve our objective of providing excellent experiences, as well as always being trusted by customers.

Providing a clear, safe, reliable supply of water will always be customers' top priority, and generally customers are happy with our performance to date. We have more work to do on the top priority service issues for customers, such as resolving issues and repairing leaks quickly.

Customer excellence is influenced by the critical moments they experience when they contact us or need our support. Building on our already good performance means we need to work with others so customers see the benefits of our work to the environment and local communities, as well as when we are in contact with them.



- Seen to be area requiring significant improvement
- Seen to be area requiring some improvement
- Seen to be area where we are performing well

# Your experience of our service failures

We are aware that our level of service and the way that we operate can have significant impacts on our customers.

However, customers do not always contact us to let us know when they are affected.

We have therefore undertaken some research to understand which issues impacted our customers the most and whether these were seen as a priority for improvement.

The top issue that customers notice is our roadworks, which are required as we maintain and improve our network. This was also the top priority for improvement, alongside improvements to water taste and smell.

To reduce the service failures that customers most experience, improving the reliability of our assets is our main priority. Better data and use of technology will also help to reduce our negative impact on customers over the long-term.

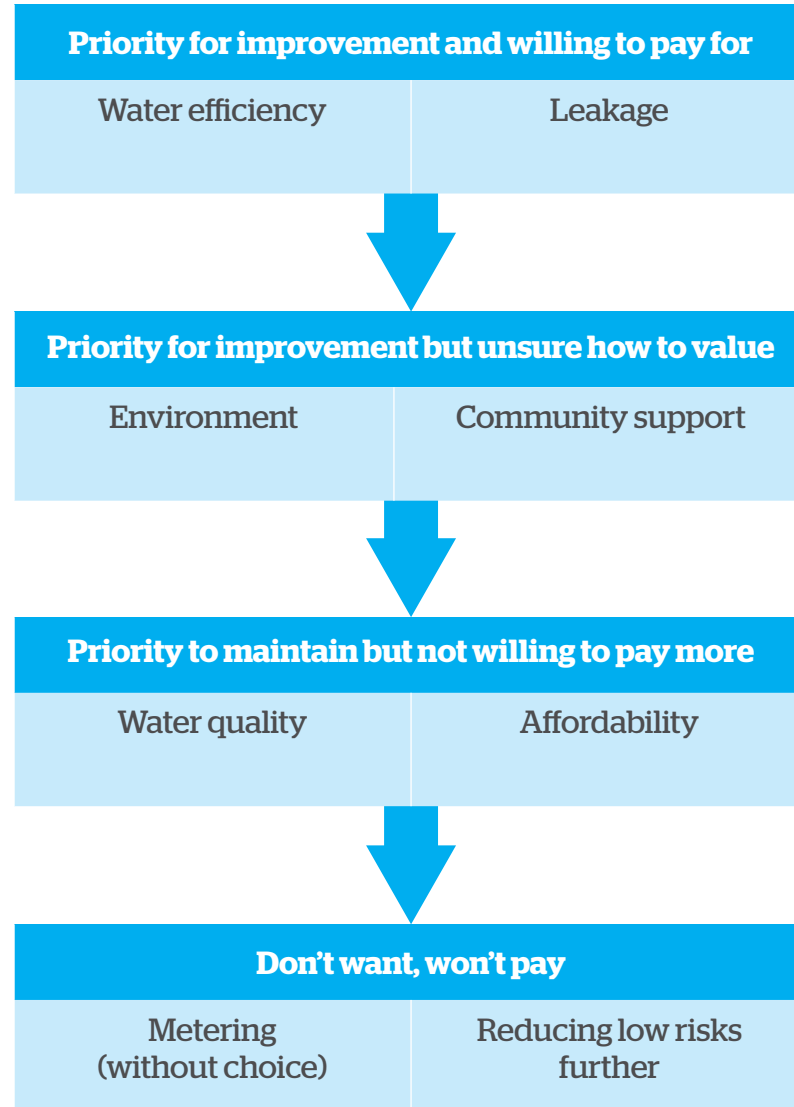
These are hygiene service factors that need to be targeted for improvement in order to provide excellent services and local community resilience.

Top service failures experienced by customers		Households	Businesses	Priority for improvement - household	Priority for improvement - business
1	Traffic disruption caused by water road works	42%	44%	24%	23%
2	Occasional low water pressure	19%	17%	15%	5%
3	Water taste & smell not ideal	14%	14%	23%	13%
4	Unplanned interruptions to supply	11%	12%	12%	6%
5	Discoloured water	9%	9%	13%	6%
6	Planned interruptions to supply	8%	10%	8%	6%
7	Hosepipe ban	1%	1%	11%	2%
8	Restrictions on essential use (lasting 2 months)	0%	0%	6%	4%



# What you want and value

Our customers expect us to be innovative to continue to deliver a great service whilst maintaining affordability.



# How you want us to plan for future water resources

Bristol is not a water-stressed supply area. Many customers living in the area have not experienced drought, as drought measures have not been required for more than 20 years.

Customers believe that the risk of drought is low and unlikely to affect them. Indeed, customers have consistently placed low values on drought measures, and hosepipe bans and Temporary Use Bans (TUBs). Businesses have more concerns and value avoiding droughts more highly, because of the impact on their profits.

During our research events on resilience, we took care to give customers detailed scenarios of drought and helped them understand the potential impacts on themselves, their community, and the wider economy. Most participants were unwilling to pay more to reduce the impact of disruptive events such as drought and felt that the current level of risk was acceptable (1 in 15 years for hosepipe bans, 1 in 33 years for TUBs).

Customers supported environmental projects that helped protect future water supplies, as long as they could be sure that any bill impact contributed directly to specific schemes.

	Households	Businesses
Reduce leakage	1	1
Education on water saving	2	3
Provide water saving devices	3	2
Water transfers from neighbouring companies	Only if it saves money	5
Increase use of current water resources	Don't want to pay for	4
Develop new water resources	Don't want to pay for	6
Implement universal metering	Don't want to pay for	Don't want to pay for

Customer investment priorities for balancing supply and demand

# Your views on our role in the future

To help us develop our long-term ambition, we ran a series of consultation workshops to explore what customers and other stakeholders wanted from their local water company. Each group had a different perspective on our role, and our future plans must balance these views.

We recognise that our customers and stakeholders expect us to take a lead in looking at the long-term big picture. As well as expecting us to deliver a reliable high quality product, they expect us to care about society, the environment and wellbeing. This included ensuring that our services are affordable and that we care for the more vulnerable. They expect us to deliver through a partnership approach, whilst demonstrating the wider benefits of our activities.

**Our customers and stakeholders also expect us to address the big challenges in society through utilising new technology and better ways of working.**



A water company that provides a reliable high quality product and service while keeping an eye on the big picture and the long term for the Bristol area. My Bristol Water leads in helping with water efficiency and protecting the environment. I see them in the community and I am proud of my local water company.

## DOMESTIC CUSTOMERS



A water company that provides a reliable high quality product and service while keeping an eye on the big picture and the long term for the Bristol area. My Bristol Water has a leading role in the business community and is a great employer.

## DEVELOPERS



A water company that takes the lead in delivering social and environmental wellbeing in the Bristol area, in its own actions and through its collaborations.

## ENVIRONMENTAL GROUPS



A local water company that is responsive, collaborative and innovative, part of a community of organisations in the Bristol area that work together. A water company whose plans help to address the big challenges in society-growing inequality, environmental pressures and a lack of trust between individuals and organisations.

## OTHER STAKEHOLDERS

# Specific concerns raised by our stakeholders

In our discussions with stakeholders, one of the main areas of concern was that social issues of affordability and economic inequality would drive a low cost of water at the expense of the environment. To address this potential conflict, our ambition focuses on local community resilience. We plan to play our part by reducing leakage and promoting water efficiency. We expect that this would not only help to lower our costs (for example through lower bad debt costs as more people can afford to pay their bill), but also would also help to ensure that the environment is protected for the benefit of future generations.

## Environmental pricing

- Market needs to capture environmental externalities
- Inevitable shift, opportunity to be ahead of the curve
- Making decisions now based on hidden environmental and societal costs
- Need to engage customers

## Engaging customers on the environment

- Gap between customer, business and stakeholder expectations
- Making environmental credentials our USP to overcome this
- Part of offering a service not just a product
- Need to bring customers with us
- And link up with other organisations using the same approach

## Economic inequality

- Some customers not paying is bad for everyone, reducing debt is a shared goal.
- Water is a basic need, but underappreciated, and could be linked more clearly with public health
- Data sharing is an essential tool to success.
- Partnerships with charities that are already working can help.
- Bring water as a force for good into the political consciousness.
- Understand our customers, including in rural areas

**Bristol Water should aim to:** reflect and act on the true environmental cost of water, in partnership with our customers.

**Bristol Water should aim to:** communicate our ambitions for the environment as a positive selling point of our business.

**Bristol Water should aim to:** use data sharing to work with partners to empower future customers to avoid water poverty.



Local community resilience



Leading efficiency



A person wearing a high-visibility safety vest, safety glasses, and gloves is kneeling on a concrete surface. They are holding a long, thin metal rod or tool, possibly for inspecting or measuring a metal railing. The background shows a building with a corrugated metal roof and some foliage. The entire image has a purple tint.

# **What Government and our regulators expect from us**

**The Government and our regulators have set out how they expect us to the look after the interests of our customers and the environment.**

# What Government expects of us

DEFRA has published a Strategic Policy Statement for Ofwat which includes their expectations for water companies delivering for customers and the environment. We summarise below some of the key messages and expectations for the water industry from DEFRA and how our objectives and outcome align to this.

## Securing long-term resilience

- Invest to meet the needs of current and future customers
- Use a broad and innovative set of options, recognising long-term pressure on water systems
- Deliver the best value for money over the long-term, considering the wider costs and benefits to the economy, society and the environment.
- Further the resilience of ecosystems that underpin water and wastewater systems, by promoting the sustainable use of natural capital and by encouraging water companies to have appropriate regard to the wider costs and benefits to the economy, society and the environment.



Safe and reliable supply of water



Local community resilience



Corporate and financial leadership

## Protecting customers

- Fair, affordable bills for all.
- Identify and meet the needs of customers who are struggling to afford their charges. provide social tariffs to reflect conditions in their areas of appointment which reach all suitable customers and offer a meaningful discount
- Provide tailored support to meet vulnerable customer needs beyond affordable bills.
- Significantly reduce bad debt
- Demonstrate an excellent understanding of future investment needs, as described earlier, so that costs are not unduly deferred to future generations.



Excel at customer experience



Leading efficiency



Excellent customer experiences



Corporate and financial leadership

## Making markets work

- Markets to drive innovation and unlock efficiencies.
- Play a vital role in markets for environmental services.
- Use market developments to further long-term resilience and protect vulnerable customers



Develop our people and the business



Local community resilience



Being trusted

# What our regulators expect of us



## Ofwat and the Consumer Council for Water

Ofwat is the economic water industry regulator responsible for ensuring we meet the conditions of our licence, setting price controls every 5 years, using incentives and market mechanisms to ensure bills are as low as possible and that we deliver service levels. Ofwat want to see that customer interests are protected, and they do this by challenging companies to improve to deliver more for customers, more efficiently. Ofwat ask the [Bristol Water Challenge Panel](#) to comment on the quality of our customer engagement and how this has informed our business plans.

Ofwat's [methodology for the 2019 price review](#) which covers the period from 2020-25 priorities expects companies to deliver

- Affordable bills for all;
- Innovative and new ways of working;
- Long-term resilience in the round; and
- Great customer service.

Customers are also protected through the work of the [Consumer Council for Water](#), an independent organisation aims to protect consumers' interests and investigate customer complaints.

Changes to our regulatory framework are an important influence on our strategy. The most important priority remains how we deliver efficient water services that protect current future customers and the environment.

We highlight some of the main aspects of Ofwat's 2019 price review methodology and how it impacts us.

Key feature of Ofwat's 2018 price review methodology	How it affects our plans
Setting a separate price control for water resources. Third parties can bid to provide water resource schemes, leakage and demand management services.	We do not expect to have any water resource schemes. We will publish water resources market information and a bidding framework for leakage and services such as water efficiency. We see scope for a water efficiency platform which provides choice for customers.
Incentives for water trading and abstraction reduction.	We do not have any plans that would be affected by these incentives, but will keep this under review.
Direct procurement market, where third parties bid to deliver discrete, major schemes.	Our future plans are too small to meet the market criteria of £100m total cost.
Efficient cost targets, both for wholesale and household retail.	We will need to demonstrate in our plan how we are efficient
A cost of capital for the industry expected to reduce from 3.7% to 2.4%. This is based on a "notional" company rather than our actual financing arrangements.	Along with other small water only companies, we have higher historic debt costs than Ofwat assume. We will need to demonstrate customer support for our financing costs as part of our plan.
Standard performance measures for leakage, asset health, water consumption and supply interruptions (target to be based on the best performing companies). A range of other performance measures, such as for vulnerability and the environment are proposed.	We propose amending our existing list of performance measures and outcome incentives. Ofwat's expectation that companies can reduce leakage by 15% may align with our customers' views. We will need to improve our current supply interruption performance to avoid a financial penalty.
A new customer service and developer service performance incentive measure.	Our objective to deliver excellent customer services aligns with this incentive, including our strong performance in the UK Customer Service Index.



# What our regulators expect of us

## Environment Agency

The DEFRA Strategic Policy Statement is supported by expectations from Natural England and the Environment Agency. Their priorities are for us to:

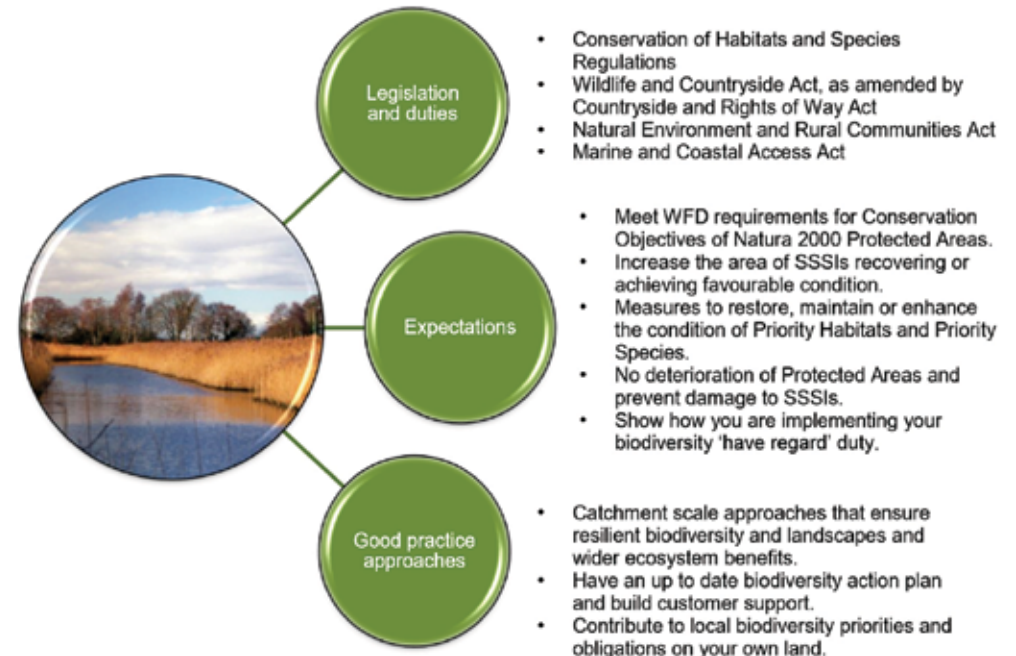
- Enhance the environment
- Improve resilience
- Sustain a high level of performance and operate in a way that best protects people and the environment.

Like DEFRA, the EA expect us to trial natural capital accounting tools. Our catchment management work and biodiversity toolkit are examples of our existing work that we can build on further.

We also have a number of small schemes to investigate and protect the environment, that we are likely to be expected to complete as our contribution to the Water Industry National Environmental Programme. Most of the work builds on our existing biodiversity and catchment management work. Some of these schemes may result in further work in the future, as they deliver improved knowledge to support future environmental planning.

### Potential environmental quality schemes for 2020-25

- Biosecurity investigations to protect the environment from invasive species. Risk assessments for raw water transfers.
- Signage at key sites such as Barrow.
- Biodiversity Action plan - linked to our biodiversity performance measure.
- Phosphorus investigations for River Yeo and Sites of Special Scientific Interest.
- Circa 10 investigations into river flow and abstractions.
- An investigation into raw water quality at Forum Springs.
- A catchment management project to manage algae for Cheddar Reservoir catchment and the River Axe.
- A catchment management measure to reduce nitrate for Drinking Water on the River Frome.
- Up to 4 sites with potential Eel passes or screens.
- Monitoring upgrades at 17 water treatment works.





# What our regulators expect of us

## Drinking Water Inspectorate

- The DWI is responsible for ensuring that water companies in England and Wales supply safe drinking water that is acceptable to consumers and meets the standards set down in law. In turn we ensure that the water we supply meet these requirements by maintaining risk assessments that consider all aspects that affect drinking water quality and through extensive sampling of water quality in the environment, at treatment works, through our network and at customers' taps.
- Our objective is to always deliver full compliance with our statutory obligations for drinking water. Our biggest long-term risks to drinking water are from:
  - Lead pipes, including those that customers are responsible for
  - Iron from corrosion of ferrous (iron) mains within the Network
  - Metaldehyde (slug pellets)
  - Issues associated with deteriorating raw water quality
- Our drinking water strategy for the 'now' and looking to the longer term is to:
  - Enhance existing catchment management initiatives to improve raw water quality.
  - Reduce the likelihood of our customers receiving discoloured water by continuing a targeted approach to replace and renovate those mains which are deteriorating and systematically flush those areas where we detect increased iron concentration in the water and/or have an increased number of discoloured water complaints. Our long-term aim is to reduce discoloured water complaints to virtually zero.
  - Reduce chlorine related taste/odour contacts whilst still maintaining excellent quality.
- Reduce reliance on phosphate dosing for plumbosolvency control as a control measure for meeting legal lead standards. Phosphate dosing is not sustainable in the long-term, although we plan a new scheme for Alderley water treatment works in 2020-25 based on the short and medium term drinking water risk. We plan to pilot lead pipe relining and replacement technologies as a longer term solution.
- Infants and children are most susceptible to the impact of increased lead concentration in drinking water. We will continue our existing project where we are working with primary schools and nurseries to reduce the risk of lead in their water supplies.
- As well as catchment management, we have been investigating solutions to secure supplies to prevent algal blooms affecting drinking water at Cheddar water treatment works. We may need to improve this site depending on the results of the current investigation which is considering the range of approaches we could take.

### What is Bristol Water doing about lead?

We treat all the water in high risk areas to reduce its ability to dissolve lead. If we come and test your water and find it is above 8 ug/l then we will replace our section of the pipe that supplies your home. Also if you decide to change your part of the pipe then we will normally change ours at no extra cost.

We have a programme to replace all our lead pipes that supply infant and primary schools within our area and we also carry out lead replacement during any renewal work we do where possible.



## Do you have a lead water pipe?

- > Lead mainly affects **young children** and **pregnant women**
- > Your home may have lead water pipes if it was built before 1970

# Looking to the future

The background image shows a coastal town built on a hillside overlooking a harbor. The buildings are multi-story and have a classic architectural style. The harbor is filled with water, and several boats are visible. The overall scene is peaceful and scenic.

**We need to plan for the long-term to address the range of future factors which affect our role. We expect changes in society to be the key factors which influence how we need to work in the future.**



# Key drivers for our future ambition

We have a long history, and whilst the quality the water we supply is high, there are themes and challenges that we need to take into account as we plan for the long-term future for water services in the area.

## Customer expectations

We are an enduring, responsive local water company with excellent customer service and we want this to continue. Customers and stakeholders are active participants in the services we provide. Our long-term ambition is based on extensive customer and stakeholder engagement, supported by using high quality data and information to plan for the future.

## Affordability

Society is changing and the needs and expectations for our services do not stay the same over time. Changes in the income levels of individual groups of customers can, over the long-term, affect the wellbeing of everyone. We want our bills to be affordable for all of our customers, both now and in the future. We will need to provide new and better services, in new ways, and plan to do this at a lower long-term cost.

## Vulnerability

When shaping our services, we will consider the differing needs of customers, to ensure that our services are inclusive for all.

## Resilience

In recent years we have strengthened our resilience in a number of areas, including customer service, operations, environment and corporate resilience. We take a long-term view on this resilience, building on the benefits we provide as an innovative, local water company and we have long-term investors who help us to be efficient in how services are financed.

## Role in our communities and the environment

As our role extends beyond the basic provision of water, we need

to work with our communities to deliver long-term customer excellence and build resilience to events and future changes through our impact on society, the local economy and the local and environment. We also aim to reduce our wider impacts by reducing energy use and producing more of our own renewable energy at our sites.

## Collaboration

The close relationships we have built with our communities give us unique opportunities, with the potential to link into smart city partnerships and innovations. Bristol and surrounding areas are becoming a hub for testing new ideas and for collaboration with research institutions and businesses at the forefront of new technology.

## Innovation

There is a rapid pace of change in technology, and it's important that we respond to this and be prepared for the future changes that affect the services that customers want and our role in providing them. Innovation in both the technology we use and the way in which we work, provides a key opportunity to meet changing customer wants and needs.

## Emerging markets

We expect to see changes in the way water services are provided and want to play a leading role to ensure that they happen. Providing customer excellence will need to transform over time into customer choice around the services they receive. In the long term, we are ambitious to lead the sector in customer excellence and grow our business, particularly as we expect that market developments will help to deliver the best value for customers. Choice may be over retailer (a choice business customers already have), but most important is choice over how services are received and how customers engage with them. Bristol Water may be enduring, but that doesn't mean we don't welcome and shape change.



Barrow Treatment Plant

# Our changing role in society

Bristol Water has always been a privately owned water company. When the large water and sewerage companies were privatised, the industry structure was driven by environmental factors - the need to improve the quality of water in the environment and as a product.

More recently the expectations on the water industry were driven by representative bodies and regulation, protecting customers through rules and incentives. Concerns about the legitimacy of companies remain despite the improvements in customer service seen in all water companies.

So what's next? - We think we will need to work harder to meet society's wants and needs – utilities need to respond to social pressures, and deliver excellent customer experiences through the services provided to them and within their community.

This means successful companies will recognise the role of society in the customer experience they provide, because:

- Legitimacy and trust in companies is at heart a social and not political or regulatory issue - the power of society will drive our response
- Product and customer service are essential 'hygiene factors' - the outcome has to be a high service level at a low, affordable, cost
- Technology is a key factor to allow these priorities to be achieved- both driving customer needs, and enabling our response.

## **Our unique role is both our heritage and our future**

Whatever our role is in the future, we need to work hard to be at the frontier of efficiency for the water industry. Even in areas such as collecting revenue from customers who can afford to pay, where we have achieved favourable performance compared to others, we need to work harder to achieve this tomorrow.

But we also need to take into account the benefits of our work to the wider communities we serve. So while we continue to reduce our cost, we must select options that deliver public health, wellbeing and environmental outcomes and which therefore have a wider value to society.

## **Responding to the needs of our communities**

For us, our enduring role in the communities we serve is our strength. We have to have a positive impact on society in the areas we serve.

Our long-term strategy for assets and the environment is also important, such as our delivering our Water Resources Management Plan, catchment management and operational resilience. Providing excellent experiences has a much shorter time horizon for our customers and communities.

So we will continue to support communities as they respond to social change - we make a continuing commitment to do this. We take a leading role through our focus on excellent water services, and by caring about the wellbeing of wider society through the way we work.

We are a society-based company. We help give our communities a more powerful voice. We have legitimacy and our role as a privately owned utility is not questioned in the same way that larger national utilities have seen recently, such as through calls for nationalisation.



# Factors affecting us all in the future

During our dialogue with our partners on how we will address the challenges we and our communities face, we have also identified some of the key future factors and innovations that we need to consider, and that our stakeholders and customers expect us to address.

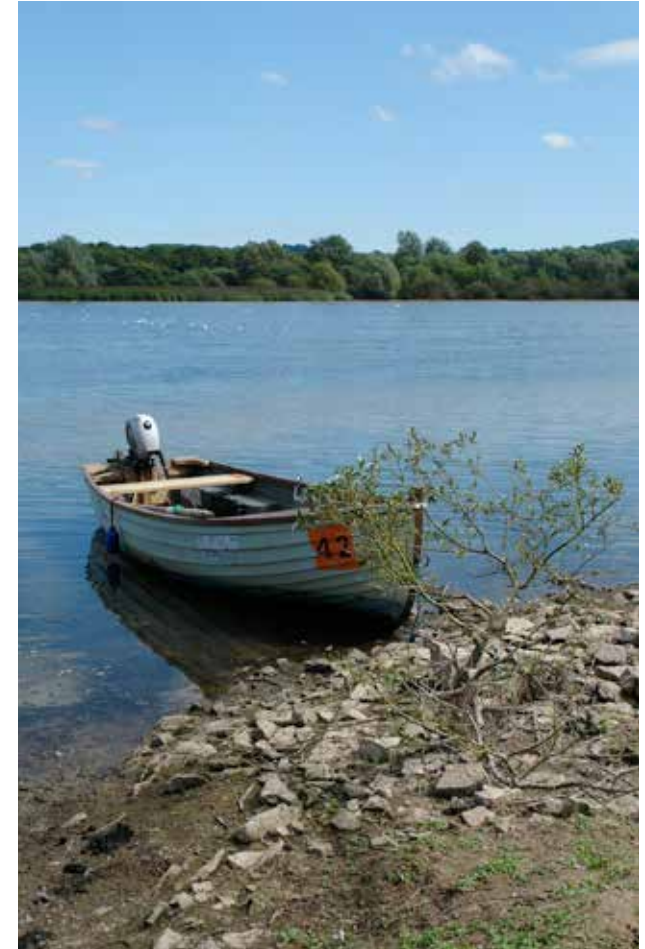
At the heart of these future factors affecting our strategy are social challenges - the rapid change and disruption to society and its wellbeing. These changes impact the expectations of us and other organisations who provide essential public services.

Technology changes are also a good example of factors which are disrupting society, for instance by affecting the skills that our workforce need to have and the skills that are available.

Technology also offers the best solution to many of the future challenges we face. How we deliver these solutions, as well as what is delivered really matters. We must work with our communities to address issues through collaboration and partnership.

In total we have considered over 100 different future factors that could drive our strategy - we've summarised the key ones in a diagram that shows some of the ways that they connect together.

We expect social factors will be the key external factors which affect our business in the future. This isn't unique to Bristol Water, but is particularly important to utilities where customers don't have as wide a choice about the services they receive as they experience from other sectors. Our long-term ambition anticipates massive change in what customers expect for the water industry and other utilities.

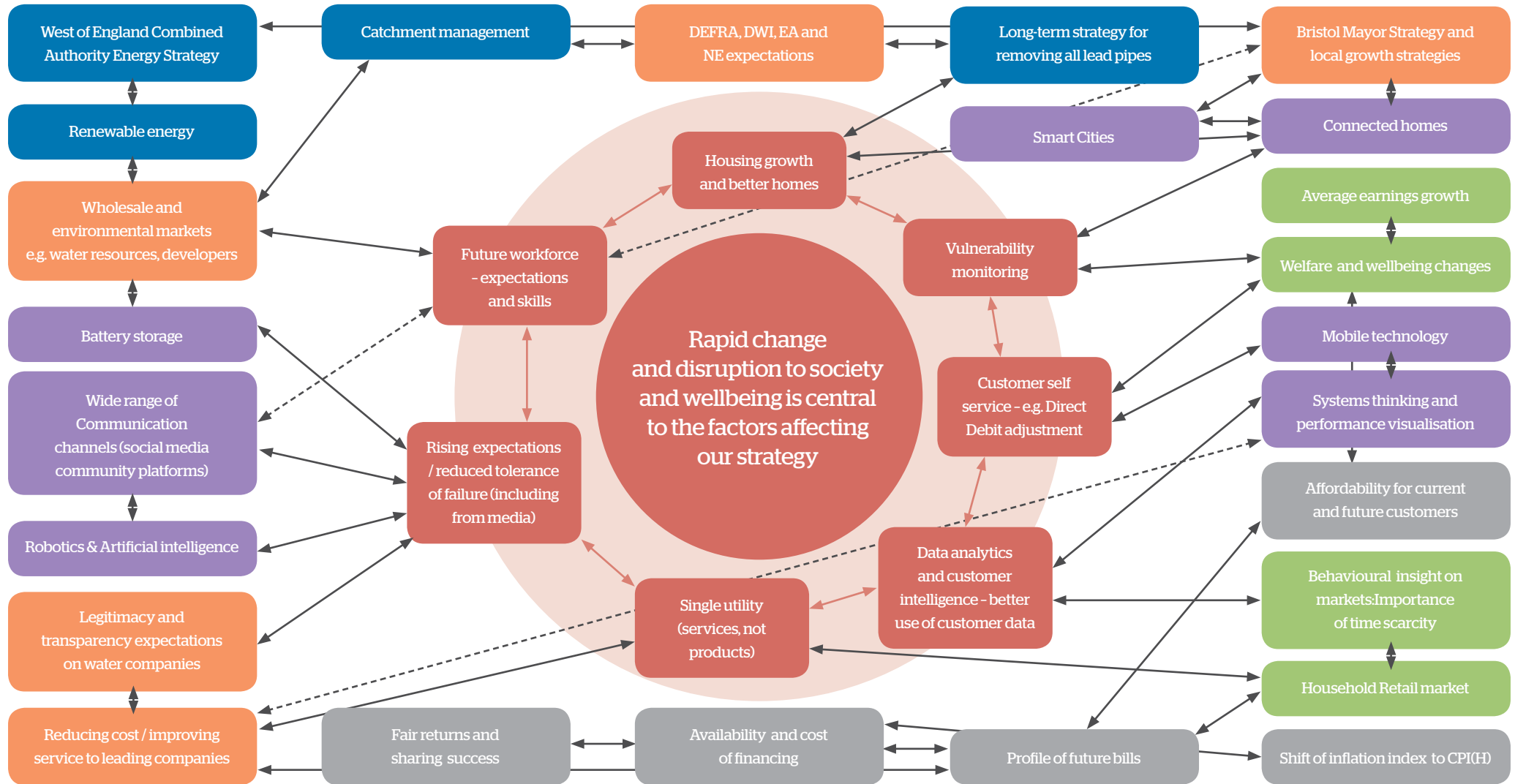


# Future factors and priorities

## The benefit of a local, resilient, community utility

### Key

- Political and Regulatory
- Economic
- Environmental
- Social
- Technology
- Financial



# Future factors and priorities

Some of the factors are derived from innovations and regulatory changes that we need to reflect in our future plans (such as wholesale bills being linked to CPI(H) rather than RPI). The connectivity between the future factors is particularly important, as this affects how we innovate and change what we do in order to adapt to these drivers of change. Some of the key future challenges and innovations we have identified that will affect our long-term plans for 2020 to 2050 are:

- **Data analytics and intelligence about our customers needs** will drive us to organise our data so that it links to customers, rather than properties and assets. This will be enabled by organisational and technology innovations that enable **systems thinking and performance visualisation**. **Mobile technology** will drive how we deliver excellent customer experiences, as well as becoming more efficient.
- **Customer self-service** such as being able to adjust direct debit payment amounts on-line will help give a better customer experience. But based on **behavioural insight into time scarcity**, we expect that self-service for some customers will help us to better target our vulnerable customer support, by indicating which customers would benefit from additional support.

Bristol is a leading “**smart city**”. This gives us the opportunity to use our data by contributing to the **Mayor’s vision for Bristol and local growth strategies**. Our future ambition recognises the growth in **connected home** technology, as well as the need for both **housing growth and better housing stock**. With better data, this will help us to reduce leakage, and also promote water efficiency. We can also help cut our costs and reduce traffic disruption through sharing smart data on traffic disruption, with details of our works already readily available on our website in a format that can be shared. For instance, we already show where standing water has been reported, helping to make leak identification more accurate.



# Future factors and priorities

Linked to housing trends we also have environmental and public health drivers. We need to develop a long-term strategy for removing all lead pipes that affect consumers, building on our existing work with priority locations such as schools and nurseries. Other local strategies require expect us to play a greater role in renewable energy, and apply further innovations to our catchment management work. This helps deliver the wider benefits to the environment and society our regulators and policy makers want to see. Market mechanisms have a role to play in targeting this in the right way. We think this can be done without affecting our partnership approach.

Ultimately society cares about the affordability of water bills and that their water company is legitimately delivering their expectations. Customers are increasingly wanting an excellent experience through services rather than just high quality products - suppliers will need to build trust beyond water as a product, and consider how they provide choice to customers, including taking advantage of new market opportunities to provide related services. We expect to use artificial intelligence to support better and quicker decision making, building on our current robotics pilot. Technologies such as improved battery storage will help us maintain supplies. Greater transparency on our performance will see a changing mix of communication channels, and building a partnership with "Bristol is Open" could help us leverage the power of the mobile technology in the hands of our customers.

We set out elsewhere in this document the cost, tax and financing factors that continue to be external challenges to our business, which also contribute in the long-term to affordable bills and being able to share our success with our partners, including fair returns to shareholders. We discussed the future factors with a range of stakeholders. Many areas of uncertainty were identified, but there was a real desire to work together on the key social, technological and environmental innovations we had identified.

	Political	Economic/ Financial	Social	Technology	Environmental
Business factors	<ul style="list-style-type: none"> <li>Reducing bad debt</li> <li>Affordability</li> <li>Brexit</li> </ul>	<ul style="list-style-type: none"> <li>Future retail markets</li> <li>Tax Rates</li> <li>Financing costs</li> </ul>	<ul style="list-style-type: none"> <li>Customer data</li> <li>Resilience response</li> <li>Single utility (data sharing opportunity)</li> </ul>	<ul style="list-style-type: none"> <li>Battery storage</li> <li>Robotics and AI</li> <li>Social media</li> <li>Electric vehicles</li> </ul>	<ul style="list-style-type: none"> <li>Grey water use</li> <li>West of England combined authority energy strategy</li> </ul>
Environmental stakeholders	<ul style="list-style-type: none"> <li>Funding and regulatory changes</li> </ul>		<ul style="list-style-type: none"> <li>Public attitudes to environment</li> </ul>		<ul style="list-style-type: none"> <li>Environmental change</li> </ul>
Domestic customers	<ul style="list-style-type: none"> <li>Political uncertainty - Brexit</li> </ul>	<ul style="list-style-type: none"> <li>Affordability for individuals</li> </ul>	<ul style="list-style-type: none"> <li>Match of skills and jobs</li> <li>Traffic</li> <li>Aging population</li> <li>Housing</li> </ul>	<ul style="list-style-type: none"> <li>Aging infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Climate change</li> </ul>
Developers	<ul style="list-style-type: none"> <li>Political uncertainty</li> </ul>	<ul style="list-style-type: none"> <li>Housing market changes</li> </ul>	<ul style="list-style-type: none"> <li>Workforce and skills gaps</li> <li>Traffic</li> </ul>	<ul style="list-style-type: none"> <li>Aging infrastructure</li> <li>Traffic increases</li> </ul>	
Other stakeholders	<ul style="list-style-type: none"> <li>Changing regulations on environment</li> </ul>	<ul style="list-style-type: none"> <li>Growing inequality</li> </ul>	<ul style="list-style-type: none"> <li>Personalisation/choice</li> </ul>	<ul style="list-style-type: none"> <li>Resource efficient technology</li> <li>Data sharing</li> </ul>	



# Future water and environmental efficiency

## CASE STUDY

## Case study

In November 2017 we held a workshop with local and national stakeholders with an interest in working together on resource efficiency, in partnership with Eunomia. The tangible actions where participants agreed to pursue collaborative action aligned well with the future factors affecting our strategy. They were:

- We will work with Wessex Water to understand the combined environmental impact from “source to sea” and to consider using joint messages on resource efficiency in our joint billing. Bristol Waste will aim to extend this to combine energy and water efficiency messages by partnering with local energy suppliers.
- With Eunomia, we will work with the West of England Local Enterprise Partnership and West of England Combined Authority (WECA) to build on the aspiration of Government’s Clean Growth Strategy by incorporating resource efficiency into regional economic, energy and industrial strategies.
- We will encourage the formation of an active network amongst the communications teams of all utility companies working in the West of England, to share best practice on engagement and build joint campaigns on resource efficiency.
- We will work with local partners such as [Knowle West Media Centre](#) to clearly articulate a vision of the positive life that can be achieved with the abundance of water that efficiency consumption (say 120 litres/person/day) provides. We will form a plan that involves communities to create the messages and incentives that would lead to more efficient behaviour. Links to the Bristol smart city initiatives and the WECA digital strategy will be made.
- Our work with Eunomia will build a list of all the initiatives and campaigns in the West of England that could be linked to opportunities to give messages on water efficiency.
- We will explore opportunities to learn from and engage with [Bristol Waste’s experiments to encourage waste reduction in Montpellier](#).



# Our ambition

The background of the slide is a blue-tinted photograph of two men running on a path. The man on the left is wearing a white tank top with the 'WaterAid' logo and dark shorts. The man on the right is wearing a dark polo shirt and shorts. They are both smiling and appear to be in good spirits. The background shows trees and a fence.

**We have set out our long term ambition based on our objectives and outcomes we plan to deliver. Many of the actions we take will deliver against more than one objective and outcome.**

**We set out what we plan to do to deliver our objectives, and what the potential targets are for the outcomes we will measure our progress against.**

**This takes into account the expectations of society and the influences on our ambition, as well as reflecting the key themes and drivers throughout this document.**

# Our new outcomes & objectives

We have revised our outcomes and objectives to reflect the change in direction we have already taken, and we believe need to continue to take.

We set out below what we plan to do to deliver our objectives, and what the potential targets are for the outcomes we will measure our progress against. This takes into account the expectations of society and the influences on our ambition, as well as reflecting the key themes and drivers throughout this document.

Many of the actions we take help to deliver against more than one objective and outcome. The most efficient steps and innovations are usually likely to be those that deliver more than one priority.

There are choices to face in balancing our expenditure with the key drivers. Over the long run, we set out an ambition for what we think we will need to achieve. The timing of this will need to change depending on the progress we make and how customer and stakeholder expectations change over time. We set out our view based on our work to date on the options we face.

## KEY DRIVERS

- Customer expectations
- Affordability
- Vulnerability
- Resilience
- Role in our communities and the environment

## OBJECTIVES



Excel at customer experience



Develop our people and the business



Being trusted



Leading efficiency

## OUTCOMES



Excellent customer experiences



Local community resilience



Safe and reliable supply of water



Corporate and financial leadership



# Excellent customer experiences



Excellent customer experiences



Excel at customer experience

## Our aim and outcomes

- Excellent customer experiences
- Bristol Water brand known for excellent customer experiences
- Recognised top customer experience in water sector (CMEX measure) and top utility in UK Customer Service Index
- Reduce water poverty - lead on affordability and reducing bad debt
- Promote water efficiency

## Key partnerships that help us deliver this

- Work with Bristol City Council and regional authorities on Smart City strategy
- Update our billing systems with Pelican
- Build customer excellence with our supply chain
- Local partnerships on water efficiency
- Debt agencies and the voluntary sector
- Working with other utilities on vulnerability

## What we plan to do

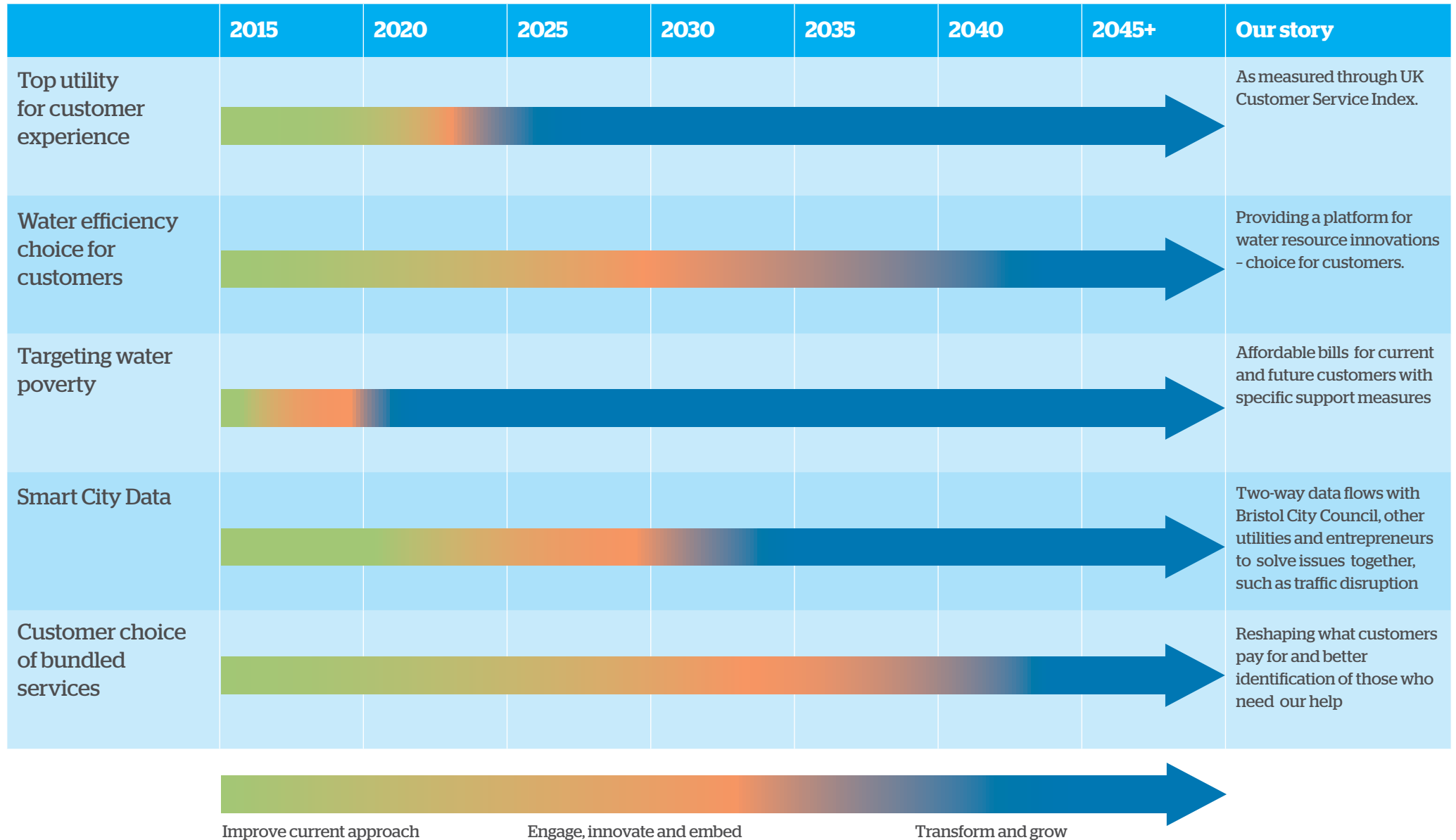
- Improve our communication channels
- Improving the use of data, e.g. linking asset information to customer data
- Transform the way that we deliver so that every interaction with us is positive e.g. reduced traffic disruption from our works
- Faster response to our customers
- Customer centric asset decisions e.g. network geographic location link to customers
- Give customers choice of services - e.g. provide water efficiency choice
- Customer self service - e.g. Direct Debit payment choices used to help trigger vulnerable service promotion
- All customers with good water pressure (including end consumers on shared connections)

## How we will do this

- Make more use of Apps and new communication routes, such as Alexa skills
- Review our end-to-end processes to focus on all aspects of customer excellence
- Mobile platform for our workforce - information at our fingertips in field
- Automated valve management and bypass capability for network speed of response
- Refocus supply interruption response - rapid reaction to reduce those currently lasting beyond 3 hours
- Use new technology through open data platforms
- Partner with supply chain for better customer-side service monitoring for connected homes e.g. in-house leak monitors
- Continuously refresh and enhance our customer and stakeholder partnership engagement and connections



# Our journey to excellent customer experiences



# Our targets for excellent community experiences

Excellent customer experiences									
Priority		PR14 targets		2024/2025 scenario forecast				Long-term ambition	
Performance commitment	Unit	17/18	19/20	Comparison to others	Minimum	Possible	Potential	2050	Commentary
C-MeX (SIM as proxy)	SIM score	86	87		87	94	96.5	TOP 10 as UKCSI	Currently top water company in UKCSI
D-MeX (Water UK Developer measure as proxy)	%	99.1	99.3		99.94	99.97	99.99	100	Fully compliant
Percentage of customers in water poverty	%	19	18	N/A	2	1	0.75	0.5	Measured using CACI data
Value for Money Survey	%	72	72	N/A	70	80	90	90	N/A
Percentage of customers receiving Vulnerability Assistance satisfied with the assistance	%	84	N/A	N/A	80	85	90	100	Vulnerability measure to be developed

The CMEX and DMEX measures of customer and developer service performance are still to be developed, so we show the existing industry measures as a proxy at this stage.

Our ambition to allow customer choice and self selection will help to deliver the long-term step change we are targeting.

## Key

■ Ahead of others   ■ Behind the others



## Develop our people and the business



## Local community resilience

### Our aim and outcomes

- Bristol Water an enduring presence in society
- Attract and retain workforce fit for the future
- Enhance revenue and exploit opportunities to build through innovation
- Deliver excellent services, not just product
- Supports our other three objectives
- Our people provide customer excellence
- Always resilient in response to events

### Key partnerships that help us deliver this

- Our local partnerships - shared effort to deliver each others strategies
- Local partnerships to reduce high risk lead sites e.g. Bristol City Council
- Our investors - supporting our financial and corporate resilience
- Working with West Country Regional Authority and EU skills on future workforce planning and development
- Work with academic partners such as the UWE

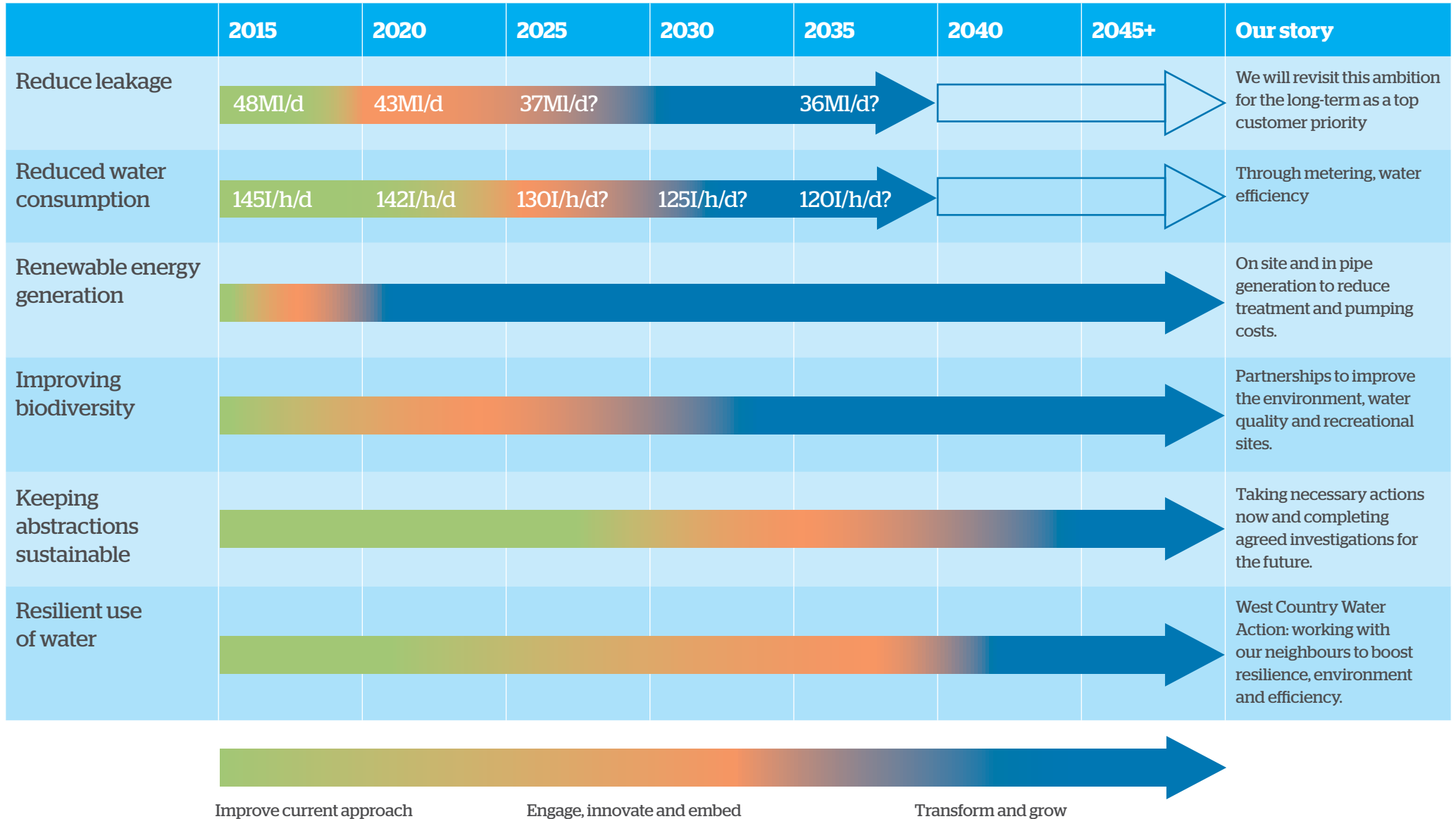
### What we plan to do

- Develop cross-utility service offerings that connect with customers and communities
- Support local academic and entrepreneurial partnerships
- Invest in and develop our people and organisation
- Build joint ventures and partnership working to get wider benefits to our business and local community resilience
- Participate in and encourage further use of competitive markets, such as for water resources and demand management
- Reduce leakage and consumption
- Collaborate to deliver resource efficient communities
- Actively promote metering
- Actively promote and develop our reservoirs as community assets

### How we will do this

- Have a fair balance of outcome rewards and penalty incentives that customers and stakeholders support
- Focus on the future - develop our asset planning to focus on long-term water, environment and biodiversity benefits.
- Bristol Water remains a great place to work with great people
- Develop our business and people so water costs are efficient and focus on value added activities.
- Future proof our workforce plan as part of our resourcing strategy - building the skills needed for innovation, efficiency and service with new technology and communication channels
- Be open to exploiting market opportunities
- Deliver excellent customer and local community experiences in everything we do
- Work with others on local environmental and resource outcomes that have wider benefits beyond water

# Our journey to achieve local community resilience





# Our targets for local community resilience

Local community resilience									
Priority		PR14 targets		2024/2025 scenario forecast				Long-term ambition	
Performance commitment	Unit	17/18	19/20	Comparison to others	Minimum	Possible	Potential	2050	Commentary
Leakage	MI/d	45	43		41	37	36	35	15% reduction builds on 12% between 2015 and 2020
Per capita consumption (PCC)	Litres/head/day (L/h/d) excluding underground supply pip losses	144	142		138	129	120	110	Aligns with long term expectations for the industry
Meter Penetration	% of properties which are charged according to their metered consumption	58.8	65.9		62	75	85	90	BW isn't allowed to introduce a compulsory metering programme as we don't cover a water stressed area.. However the company does aim to increase household metering by 90% by 2040
Raw water quality of sources	Kg of P loss reduction achieved by Bristol Water scheme	Marginal	Stable	N/A	131	140	144	150	Small changes expected but may increase as need arises
Biodiversity index	Biodiversity Index Score (increase or decrease of points depending on the impact of given intervention)	Improving	Improving	N/A	17,651	17,758	17,711	18,723	Our key measure of environmental and natural capital change
Waste disposal compliance	%	100	100	N/A	100	100	100	100	In line with existing business obligations
Abstraction Incentive Mechanism (AIM)	Number of sites	0	0	N/A	0	0	0	0	Expect to have zero sites with unsustainable abstractions

## Key

■ Ahead of others ■ Behind the others

# Safe and reliable supply of water



Being trusted



Safe and reliable supply of water

## Our aim and outcomes

- Safe and reliable supply of water - excellent product, service and incident response
- Trusted from source to tap
- Local community resilience within society
- Strong governance and transparency
- Upper quartile or frontier on water Compliance Risk Index and Event Risk Index
- Amongst top industry performers on leakage

## Key partnerships that help us deliver this

- Work with the Bristol Water Challenge Panel on challenging and communicating our performance
- Local partnerships to reduce high risk lead sites e.g. Bristol City Council
- Working with Wessex Water and our regulators to share water resources, reduce damaging abstractions, improve catchment management and address resilience
- Recognising the commitment of our people and supply chain to engaging and delivering trust in all that we do

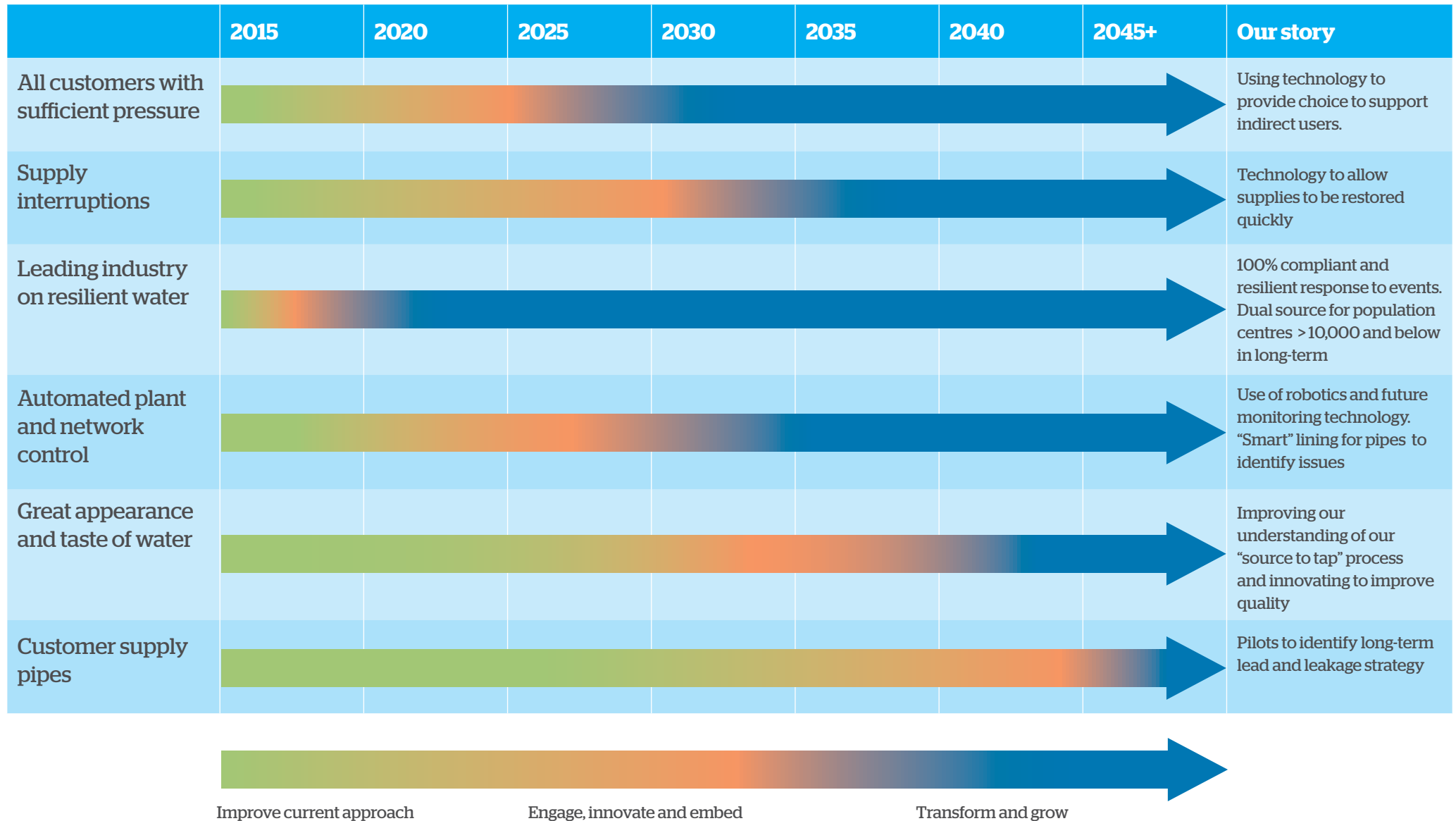
## What we plan to do

- Deliver resilient and high quality water
- Promote the recreational, health and environmental benefits of our reservoirs and catchment management initiatives
- All major population centres can be served by more than one source.
- We will build trust through communicating our longer term plans.
- We will continually improve the resilience of water supplies - this requires us to deliver across a wide range of areas, including leakage and water efficiency
- Community engagement and leadership in promoting the value of water
- Share our success and partnership working e.g. where customers help to support innovation that ultimately has wider benefits
- Promote the recreational, health and environmental benefits of our reservoirs and catchment management initiatives
- Maintain the long-term health of our assets as a minimum; improving long-term health as we deliver the service improvements that customers value.
- Deliver fair returns for our shareholders.

## How we will do this

- Build on current resilience schemes - continue to manage and reduce risks to security and quality of supply in an efficient way.
- Reduce initially to population centres of 10,000 served by more than one source and ultimately 3,000.
- Target reducing leakage by up to 15% by 2025, potentially beyond the needs of water resources
- Be proactive in promoting metering
- Complete improvements agreed with our regulators, such as to meet water quality obligations and to investigate harmful abstractions
- Build on our Biodiversity Toolkit with setting new targets
- Promote the health benefits of water
- Develop the recreation and environment benefits of our reservoirs
- Engage on our performance through visual and available data
- Pilot new approaches for our long-term lead strategy
- Propose mechanisms for how success can be fairly shared

# Our journey to a safe and reliable supply of water



# Our targets for a safe and reliable supply of water

Safe and reliable supply of water									
Priority		PR14 targets		2024/2025 scenario forecast				Long-term ambition	
Performance commitment	Unit	17/18	19/20	Comparison to others	Minimum	Possible	Potential	2050	Commentary
Compliance Risk Index	Score/20	1.43	1.22		2.78	0.7	0	0	Aim to be fully compliant
Supply interruptions	mins/property (all interruptions >3 hours)	12.8	12.18		04.20	02.45	01.50	01.00	Interruptions to supply is consistently a priority for customers
Mains bursts	Per 1,000 km of mains	153	142		142	112	89	N/A	Continue to reduce level of bursts in long term
Unplanned outage	Proportion (%) of a temporary loss of the company's maximum production capacity in the reporting year, weighted by the duration of the loss	N/A	N/A		0.4	0.2	0.1	0	Aim to be fully compliant
Drought risk	Number and percentage of population at risk of experiencing severe restrictions (such as standpipes or rota cuts) in a 1 in 200 year drought	Drought measure to be developed. c.0 at 1 in 15 year service standard for hosepipe bans that customers support retaining							
Water quality - Appearance contacts	Contacts per 10,000 people	13.2	9.3		12.5	9.3	3.2	1.0	Minimum level - no actual discolouration
Water quality - Taste/Odour Contacts	Contacts per 10,000 people	4.3	3.0		3.6	2.5	1.2	1.0	Minimum level - no actual discolouration
Risk of low pressure	Number of properties	69	69		50	30	20	0	Other companies in industry have 0 events
Turbidity at water treatment works	No.	0	0		0	0	0	0	Aim for 0 failures
Unplanned non-infrastructure maintenance	No.	3,976	3,976		3,976	3,976	2,300	N/A	Not a long-term target
Population at risk from asset failure	Population centre size protected	25,000	25,000	N/A	25,000	10,000	5,000	3,000	Key focus area for the long term

Key: ■ Ahead of others ■ Behind the others ■ Bristol in the pack

Drinking Water Event Risk Index to be developed to accompany Compliance Risk Index



# Corporate and financial leadership



Leading efficiency



Corporate and financial leadership

## Our aim and outcomes

- Industry leading efficiency across a range of service aspects
- Pushing the frontier of innovation and efficiency forward, not being a laggard in any significant area of service or cost
- Earning outcome rewards from our innovations, with fair returns to shareholders
- Low long-term financing costs
- Safe working environment and practices

## Key partnerships that help us deliver this

- Maintaining active and long-term investors in Bristol Water
- Maintaining an efficient balance of debt and equity financing
- Working with our supply chain on efficiency and innovation
- Partnerships with our local stakeholders, such as to reduce traffic congestion in Bristol and surrounding areas through “Smart City” working
- Building our innovation partnerships

## What we plan to do

- Optimising our use of water resources and water treatment, in line with our Drinking Water Safety Plans
- Ambitious targets to reduce costs further
- Implement smart technologies in energy cost reduction and increase renewable energy generation
- Apply world class asset management processes
- Apply continuous improvement and lean cost reduction to everything we do
- Continue to build long-term financial resilience
- Achieve a low and efficient cost of financing
- Zero tolerance for health and safety failures for our workforce, our supply chain and our communities

## How we will do this

- Partner with other companies on specific efficiency initiatives to share both best practice and explore new delivery opportunities
- Invest in renewable energy and energy efficiency
- Develop our robotics and artificial intelligence and connected systems strategies
- Continue continuous improvement (including process redesign)
- Engage our people in innovation, through expanding “Brainwaves”
- Use smart technology, for instance for metering
- Partnership with Canal & Rivers Trust to improve water quality and reduce cost of water resources
- Reduce costs by reducing leakage and water consumption
- Deliver excellent customer services, as this will reduce retail costs including bad debt

# Scenarios for the future

**Our plans for 2020-25 will be a stage on our journey towards our long-term ambition. Given the high quality product and service we already deliver, we face choices about how quickly we make improvements. Customer views on the affordability of their bill is an important consideration.**

**We are carrying out research to explore whether customers want us to improve services faster or slower depending on the other factors that influence bills, such as how costs change as we innovate.**



# Medium-term scenarios (2020-2025)

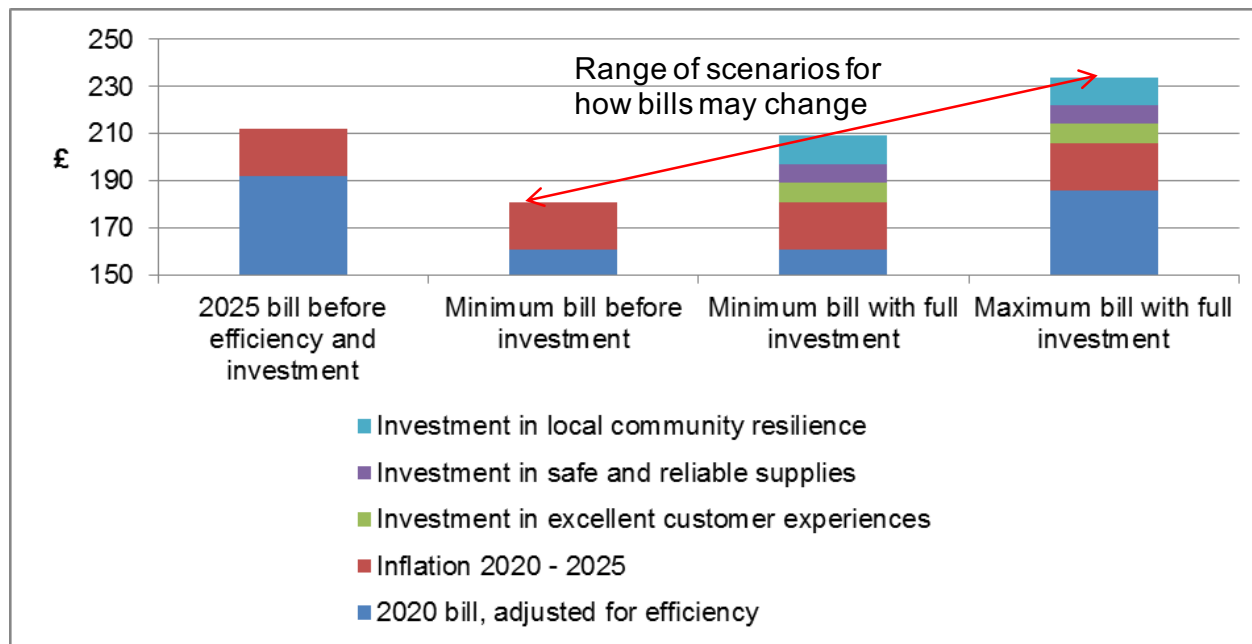
We have set out in this plan the future long-term factors affecting us and the short and long term options for how quickly we improve the outcomes we deliver for customers, our communities and the environment.

Our average bill is currently £185, below the national average of £189. Our average bill in 2020 is currently forecast to be £192. Inflation over 2020-25 would increase this to around £212, if costs and services only changed in line with this.

Before considering the cost of future investment to improve services, bills are likely to reduce after 2020 to pass efficiencies, adjustments for our past performance, and an expected lower financing cost for the water industry back to customers. This is likely to reduce bills by between £6 and £31, the range reflecting uncertainty in how costs and efficiency opportunities will change in the future. As a small company, we have higher debt cost than larger companies, which also affects this range.

We can then consider the additional cost of delivering the range of improvements in services set out in this document. We show below a plausible range of potential outcomes. Customers have a choice, as even after considering the cost of improvements we have to make, it is likely that bill changes will be less than inflation and could reduce overall. This reflects the good level of service and resilience that we already provide to customers. So there is a choice for customers about how quickly we improve services in the future beyond the minimum requirements we face.

We are carrying out research to explore whether customers want us to improve services faster or slower depending on the other factors that influence bills, such as how costs change as we innovate. We will consult further on the prospects for bills and services for 2020-25 by consulting on the scenarios in our draft business plan in April 2018, in advance of submitting our plans to Ofwat in September 2018.



# Potential choices for our outcomes for 2020-25

	Excellent customer experiences	Local community resilience	Safe and reliable supplies	Corporate and financial leadership
<p><b>Minimum</b> Average bill in 2025 between £181 and £213, after inflation.</p>	<ul style="list-style-type: none"> <li>• Top utility for customer experience</li> <li>• Water efficiency service as now</li> <li>• 62% of customers metered</li> <li>• Keep water poverty as now (1.8%)</li> <li>• Expanding communication channels</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce leakage to 41MI/d</li> <li>• Efficient renewable energy generation</li> <li>• Investigate future environmental improvements</li> <li>• Maintain recreational sites as now</li> </ul>	<ul style="list-style-type: none"> <li>• Top water quality</li> <li>• Reduce supply interruptions to 8 minutes per customer per annum (from 12 minutes)</li> <li>• All population centres &gt; 25,000 can be supplied by multiple sources</li> <li>• Discoloured water as now</li> <li>• Current drinking water and catchment projects continue</li> </ul>	<ul style="list-style-type: none"> <li>• No Health &amp; Safety events</li> <li>• Maintain credit rating</li> <li>• Around average in the industry on efficiency</li> </ul>
<p><b>Possible options by 2025</b> “Inflation over 2020-25 would increase bills to around £212, if there were no other bill or service factors changing</p>	<ul style="list-style-type: none"> <li>• Widen choice of water efficiency</li> <li>• 75% of customers metered</li> <li>• Customer control on what to pay and when</li> <li>• Water poverty reduced to 1%</li> <li>• Better information for customers when we respond to events</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce leakage to 37MI/d by 2025</li> <li>• Water consumption reduced by 3%</li> <li>• Community partnership working - improving the local environment</li> <li>• Biodiversity improved</li> </ul>	<ul style="list-style-type: none"> <li>• Water quality risks from unusual events reduced</li> <li>• Reduce supply interruptions to 4.2mins</li> <li>• More population centres &gt; 10,000 can be supplied by multiple sources</li> <li>• Discolouration reduced by 35%</li> <li>• Customer lead pipe lining pilot</li> </ul>	<ul style="list-style-type: none"> <li>• Expand into other services</li> <li>• Partnerships with universities</li> <li>• Leading efficiency</li> <li>• Expand innovation and use digital technologies</li> </ul>
<p><b>Potential options to go further</b> Average bill in 2025 between £199 and £231, after inflation</p>	<ul style="list-style-type: none"> <li>• 90% of customers metered (by 2040)</li> <li>• Choice of services</li> <li>• Water poverty reduced to 0.4%</li> <li>• Smart City Bristol data</li> <li>• Reducing traffic disruption</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce leakage to 36MI/d or beyond</li> <li>• Water consumption reduced by 11%</li> <li>• Expand access to recreational sites</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce supply interruptions to 2 mins</li> <li>• Discolouration reduced by 65%</li> <li>• All population centres &gt; 10,000 fully protected</li> <li>• Self monitoring network</li> </ul>	<ul style="list-style-type: none"> <li>• Local entrepreneurs support</li> <li>• Build innovation partnerships with other local communities</li> </ul>
<p><b>Range of impact on average bill by 2025</b></p>	<p>£0 to £8</p>	<p>£0 to £12</p>	<p>£0 to £8</p>	<p>Helps to lower bills through efficiencies</p>



# Long term future scenarios

## Why our plans will change and adapt

We have set out our long-term ambition for how we see priorities for increasing the excellence of the experience we provide to customers, and how we also need to boost our work that supports local community resilience. The way we deliver our plans will change over time. In our view, and those of our stakeholders, we want to work in a way that reflects our role in the local community. This means we look to innovate through building local partnerships. An alternative approach would see the future for the water industry being driven by large companies operating through national markets, rather than through community based companies such as Bristol Water. For instance there may be situations where we have to reduce our costs or change services in response to national targets, which could delay some of our local objectives because of pressures on affordability. Based on our ambition, we are interested in your views on how we can balance our role in wider national markets with our local community focus. However, we need to focus on customer excellence in any event, irrespective of the markets and performance incentives we face as a company.

Increasing customer excellence

### “Data driven national markets”

In the “data driven national market” scenario, services are delivered at a low cost efficiently by large, national based organisations who have a wider set of data. Risks are managed through national standards and centralisation of data. Competition for household customers with specialist wholesale service providers would be an example of this - with a range of choices (for instance bundled water and energy offerings). **In this scenario we would need to compete with other new entrants in providing services and choice in different ways.**

### “Choice of service for you and your community”

In this scenario better use of individual customer data and better information on utility networks allows choice of service for individual customers. Community issues are addressed through open data and predictive analytics allowing service providers to respond efficiently. Customers would have access to data on services to them and the community. **We would compete with others to provide a choice of service tailored to the needs of individual customers and communities.**

Increasing focus on local community resilience

### “One size fits all”

In the “one size fits all” scenario, short term cost pressures and affordability would mean that national standards would be set and there would be little opportunity to focus on local customer excellence (as opposed to service). Bills would be minimised in the short term, but long-term pressures on local resilience could emerge. **In this scenario we would be compared on a national basis, and may have less flexibility to address local issues.**

### “Focus on your community”

In this scenario we would focus initially on building a local infrastructure and partnership approach to deal with the environment and social challenges that face the Bristol Water region. We would focus on protecting the local environment, reducing consumption and leakage and investing to reduce traffic disruption. We would tailor our approach to each local community, rather than individual customer choice. **As costs may be higher initially compared to the data driven market or one size fits all scenario, we would also expand our range of social tariffs**



**We'd love to hear  
your views**

**We are actively seeking  
your feedback on our future  
ambition to inform our plans  
for 2020 to 2025.**

# We will use your views to shape our future plans

We hope you've enjoyed reading about our future ambition - this is a consultation and your views will shape our future plans.

We are running further engagement events on our plans. As part of our consultation we plan to work with partners such as the University of the West of England to test our ideas and align our plans to regional innovation and delivery opportunities.

We will use your views to shape our future plans- you can email your contributions to [strategyandregulation@bristolwater.co.uk](mailto:strategyandregulation@bristolwater.co.uk)

**Our suggested questions that we would particularly welcome responses on are:**

- To help us think about the future we asked you what our role should be in the Bristol area. Your answers informed our own statement of our future role. Do you have any comments on our role and how it reflects your own view of us?
- Our long term ambitions respond to our understanding of the world around us. Do you have any comments on the future factors we've identified, or any that we might have missed?
- We've also developed four scenarios that describe different ways the future for water services may evolve in the long term. Do you have any comments on the future scenarios we've identified?
- We have set out how we think we can fulfil our role in the future, responding to the factors and scenarios described above. What do you think?
- Our long-term ambition focuses strongly on customer excellence and local community resilience. Do you agree with this focus and our aims?
- We can't deliver our ambition alone and our plans focus on building on ways in which we already collaborate with others. Do you have any ideas about how we can work together with other organisations to deliver our vision?

**Join in the conversation on:**

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using #bristolwaterclearly

[▶ Also see the videos on our YouTube channel](#)