

# Life beyond the pandemic

How Severn Trent will help deliver the UK's Green Recovery – creating jobs, improving the environment and providing better value to customers.

A briefing for customers and other stakeholders.

WONDERFUL ON TAP

SEVERN  
TRENT

## Foreword by our chair

I am delighted that the water sector has been asked to play its part in the country's Green Recovery from the Covid-19 pandemic. We do not underestimate this responsibility and the role we can play in helping to meet the economic and social challenges that our country faces.

We are proposing a package of over £730m of investment that will deliver long-term, sustainable benefits for current and future generations in our region, through improving the environment and creating jobs. I am particularly proud that our Company is using this opportunity to propose schemes that address long-term issues that we know are important to our customers, such as developing net-zero carbon water resources, delivering a step-change improvement in river water quality, making our towns more resilient to flooding, and removing lead from customers' supply pipes.

We are passionate and well-placed to support the Green Recovery. As a stable, exceptionally well-run organisation with a dedicated workforce, we have an excellent track record in delivering the best possible service for the communities we serve. This is reflected in the strong operational, environmental and customer outcomes we reported in our November interim results announcement. The Environment Agency has also recognised our industry-leading environmental performance and we were delighted to have been awarded 4\* EPA status again this year, with one of the best performances on pollutions in the sector. The Board is confident that Severn Trent is on track to substantially deliver its performance commitments for the remainder of the financial year, and outperform for our customers.

The schemes we are proposing will benefit customers in many ways, through:

- transforming important stretches of the River Avon and the River Teme so they are healthy enough to swim in for the one million people living nearby;
- increasing water supplies by enough to serve a city the size of Leicester in a net-zero carbon way, helping to deliver net-zero water by 2030;
- trialling a large-scale rollout of a nature-based approach to reducing the risk of flooding in Nottinghamshire, in collaboration with the Local Authority and working with the local council;
- replacing old lead pipes in up to 30,000 homes to eradicate the source of lead in some customers' water, reduce leakage, and protect customers from the unexpected cost of having to replace their supply pipes;
- introducing 157,000 smart meters to support leakage reduction, help our customers to manage their water footprint, and reduce demand during peak usage periods; and
- accelerating our environment programme to improve 500km of river five years earlier than planned.

On top of the long-term benefits for customers and the environment, these investments will directly create around 3,000 jobs at a time when, now more than ever, the Midlands economy needs them. We will also be using our state-of-the-art Academy to help to train people from our local communities for the roles we are creating.

We are acutely aware that some of our customers will be experiencing affordability pressures at the moment. In assessing which proposals to take forward, we were conscious of not adding unnecessarily to customers' bills and, as such, are pleased to confirm that the investments we propose will not result in any customer bill increases next year, and will have an annual average household bill impact of £6 in the period until 2025. Our independently conducted research found that over 70% of our customers were willing to pay this amount, while 83% of customers supported our package of schemes as a whole, with a further 14% saying they do not mind in principle.

The Board is grateful to our customers, communities and wider stakeholders for their energy and commitment in supporting us to develop our plans to this stage. We have been delighted and encouraged by their positive engagement and feedback.



Christine Hodgson,  
Chair



## Dear customer,

You don't need me to tell you how Covid-19 has brought tragedy into our communities and wreaked economic havoc.

I can't remember a time when our region has been in such need of good news. But as we move towards spring and mass vaccination, there is reason for optimism. Things will begin to feel normal again. And one day we will be able to enjoy each other's company without masks and social distancing.

The Green Recovery is a key element in the Government's plans to get the country back on its feet. And water companies like Severn Trent have been challenged to play their part.

This briefing outlines our response, which includes over £730m worth of investment to create jobs, improve the environment and, ultimately, save customers money in the long term. We'll also keep bills affordable by bringing in new finance to fund 85% of the projects upfront.

Our goals are ambitious but achievable:

### **Make rivers safe for swimming**

We're going to transform stretches of the River Avon and River Teme so that they're healthy enough to swim in, and reinvigorate the pathway to how rivers in the UK can achieve 'good ecological status'. These investments will make a difference to the quality of life for around one million customers who live nearby. Across our region, we'll be creating more leisure opportunities, improving wellbeing, and bringing in a whole series of environmental initiatives that will benefit wildlife as well as local communities.

### **Provide more water for more customers**

We want to make sure that we're ready for the future by increasing water supplies by enough to serve a city the size of Leicester. And we'll do it in a net-zero carbon way too, revealing new insights we can share with other companies to support the water sector's aim to be net-zero by 2030. Part of our plan is to re-purpose a disused local asset to store flood water – and this will have the added benefit of reducing flood risk for 4,000 at-risk homes and businesses close to the River Severn.

### **Protect homes from flooding**

A new 'nature-based' approach is another way in which we're going to reduce flooding. Working closely with local councils to install natural surface flood defences such as green embankments, ponds and grassed areas, we'll kick off in Nottinghamshire. We're aiming to protect around 90,000 people, reduce the broader harm that flooding brings to local communities and give local people a more pleasant natural environment to enjoy.

### **Be leaders on removing lead**

Customer-owned supply pipes are a hidden financial and health liability for many people – over 40% of households don't have the savings to fix a burst, and up to half of all pipes could contain lead, which the World Health Organisation states is unsafe at any level in drinking water. Instead of tackling the lead by adding more chemicals, we're going to fix the problem at the source. In an ambitious pilot, we'll work with local plumbers across Coventry to replace 25,000 pipes. We'll also trial new approaches to 5,000 homes in other areas to reveal insight on how to tackle this national problem, withdraw chemical use, and reduce the 25% of leaks that come from these customer-owned pipes.

### **Help customers save water**

We're rolling out a large-scale trial of 157,000 smart water meters. These will help customers use water more efficiently, while also helping us reduce leakage by enough to supply a town the size of Market Harborough. This will help reduce the need for future investment in water resources that the Government has forecast is needed across the entire country.

### **Accelerating environmental improvements**

We'll support environmental improvement to 500km of river, through accelerated delivery of our Water Framework Directive statutory obligations and improvements to storm overflows – delivering benefits five years earlier than we would have done without this opportunity to contribute to the Green Recovery.

These investments will make a real difference – the Severn Trent region will be greener, safer, more resilient to climate change, and more prosperous. We calculate that, alongside the 3,000 jobs supporting the projects, these investments could create an additional 7,000 indirect jobs – a total impact of 10,000 jobs – fuelling the Green Recovery by helping families back into work. We're keen to recruit local people, and our new state-of-the-art Academy has a big role to play here. It has the facilities and staff to train people from the ground up, giving us the ability to improve skills across our region.

The good news is that we can make these investments whilst keeping our bills affordable. We can fund the investment without bill hikes by raising new finance from investors, in much the same way that a house renovation project could be part-funded by a mortgage. We estimate that the cost to customers will be just £6 extra per year on average – so despite the big improvements we're intending to make to everybody's quality of life, your water will still be amongst the cheapest in the country.

The next step is for Defra and water industry regulators, including Ofwat, to review our plans. If we get their approval, we'll be able to start work within a matter of weeks.

I'd like to close by thanking all our customers for the help and support you gave us while we were developing these plans. Your feedback has guided us at every turn, and given us confidence that you're right behind our efforts.

The last 12 months have been terrible for so many of us. Here's hoping for a much better 2021 and beyond, and a Green Recovery that benefits everybody in our region.

With best wishes,



Liv Garfield,  
Chief Executive



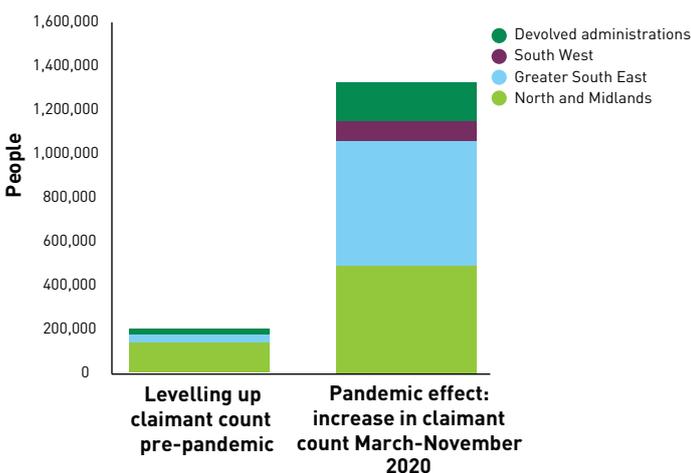
## Why we need to act now

The health, economic and social costs of the pandemic are truly breathtaking. This is just a snapshot of the Covid-19 fallout:

- Unemployment is rising – and expected to hit 2.6m nationally by mid-2021 according to Government forecasts.
- Firms are struggling – the Midlands Engine reports that 69% of business in the West Midlands and 64% in the East Midlands have seen turnover fall by at least 20% due to the pandemic.
- Manufacturing is declining – and expected to reduce by a further 12% because of Covid-19, according to Make UK. Our region is the heartland of UK manufacturing, and this extra fall in an already declining sector is grim news.
- Government debt has grown – rising to over £2,000bn to help support the nation through the pandemic, while the need to invest in our future remains.
- Mental health is suffering – while it's hard to quantify, many of us have experienced challenges to our mental health. Our region needs more outdoor opportunities to restore our wellbeing.
- 'Local' has never been so important – every lockdown has reinforced the value of leisure facilities that are close to home. The Midlands is the only part of the country with no coastline, and that makes rivers, lakes and other water features more important than ever.

We can see the impact being felt by people in very real ways. Analysis by the Centre for Cities shows that Covid-19 has led to an unprecedented rise in the number of people claiming unemployment-related benefits in some otherwise economically successful cities and large towns. In our region, existing challenges including 'levelling-up' have been compounded by the pandemic – as the following graph illustrates.

### Comparison and distribution of the levelling-up and pandemic challenges across the UK.



See: [www.centreforcities.org](http://www.centreforcities.org), Cities Outlook 2021

And that's just the post-pandemic picture. The long-term environmental and demographic challenges haven't gone away. More extreme weather means more floods and more droughts... a growing population means more demand for water... and water companies have to find solutions, while also reducing our environmental footprint.

## So what's the answer?

Our view is that while this is a tough challenge, it's not insurmountable. More than anything else, we all need to work together – that means the Government, the public sector and private companies all pulling in the same direction, drawing on the strengths of each other for the good of the country. We've developed six proposals that we believe will help the UK recover. They'll create new jobs, a greener environment, find more cost-effective solutions and create a more resilient network that will keep the water flowing for our children and grandchildren.



## Your support is at the heart of our proposals

Each of our Green Recovery proposals is based on our knowledge of our region – and has been subject to extensive engagement with the people who matter most: our customers.

We wanted to discover which issues most concerned you and whether you supported us taking action to address them. How can we improve? What value do you place on any improvements we achieve? And – very important in the current economic climate – are our ideas affordable?

Building on our recent engagement with 32,000 customers for our 2020-25 plans, we undertook a new programme of research that's involved over 4,000 participants through a wide range of channels. This research focused on how our customers' lives have changed during Covid-19, and how they view different aspects of our proposals. We've also drawn on a range of ongoing insight work, including our tracker of over 4,000 customers so far this year, our online community of over 14,000 customers (Tap Chat), and watching for changes in operational data, such as payment habits. We've been careful to make sure that our research is inclusive of the diversity of people who live in our region.

A big take-out from all this insight activity is that customers strongly support our aims:

- In deliberative research, participants were enthused and engaged by our ideas and have helped shape different features of our proposals.
- In a survey of 1,000 Tap Chat members, 98% supported or strongly supported our package of investment areas.
- In acceptability research involving over 2,000 household customers, we found that 83% supported us, and 14% didn't mind our proposals in principle.
- When we asked customers to identify an acceptable amount that could be added to bills, over 70% were willing to pay the equivalent of £6 a year on the average household bill.

## A good track record...

Now the big challenge starts. As the UK moves into recovery mode, we're ideally placed to play our part – and the table below shows how we've met the key criteria that Ofwat has set for companies that want to take part in the Green Recovery.

Ofwat test	Assessment	Summary evidence
Excellent current delivery	✓	<ul style="list-style-type: none"> <li>Overall, 80% of our performance measures are on track or exceeding the target.</li> <li>We're delivering industry-leading waste service performance.</li> <li>Our current investment plans are already ahead of schedule.</li> </ul>
Demonstrated social purpose during the pandemic	✓	<ul style="list-style-type: none"> <li>We did not join the furlough scheme – we've not taken any Government subsidy and have guaranteed our employees' jobs.</li> <li>We've developed personal payment plans for any customers struggling with their bills.</li> <li>We've accelerated payments to small and medium-sized suppliers on receipt of their invoices – helping cashflow as they struggle to survive.</li> <li>We're offering 500 internships to long-term unemployed young people from the Midlands as part of the Government's Kickstart scheme.</li> <li>We've donated £2m to local organisations to help communities through the pandemic, and over £1m of funding has been allocated through the Severn Trent Community Fund to 67 key projects in our region.</li> <li>We've donated £3.5m to the Severn Trent Trust Fund, to support customers struggling with debt.</li> </ul>
Investment plans are on track	✓	<ul style="list-style-type: none"> <li>Not only have we been able to keep up construction activity during the pandemic, we've accelerated key programmes, including renewable energy and our environmental obligations.</li> </ul>
Have taken steps to accelerate future planned investment	✓	<ul style="list-style-type: none"> <li>We've proposed bringing forward £168m worth of schemes planned for 2025-30, focused on river water quality.</li> </ul>
Maximise funding from other parties	✓	<ul style="list-style-type: none"> <li>We've already identified the potential for around £50m in third-party funding, and have agreed to coordinate programmes with local councils and others to maximise their impact.</li> </ul>
Deliverability capability	✓	<ul style="list-style-type: none"> <li>We're ahead of schedule with current investment – and our track record proves that we can deliver the very biggest projects.</li> <li>We've completed the £300m Birmingham Resilience Scheme to time and to budget.</li> <li>A review of our supply chain demonstrates the capacity and capability of our (largely Midlands-based) supply chain.</li> </ul>

## ... but now it's time to do even more

We're proud of what we've been able to do in recent years – but now it's time to up our game and do even more to deliver the Green Recovery.

When we developed our proposals, we focused tightly on the things that customers told us they valued most, as well as bringing the greatest long-term benefits to the Midlands.

The individual projects outlined below don't exist in isolation. This is an interconnected package of measures, with each project supporting all the others. For example, creating flood-resilient communities will also help prevent our sewers becoming deluged with rainwater. That in turn will mean less use of storm overflows – so our rivers will be cleaner. And those cleaner rivers will help us provide more net-zero drinking water.

Creating bathing rivers	
<b>What:</b>	<ul style="list-style-type: none"> <li>● Transform 49km of rivers in total, in stretches between Coventry and Stratford on the River Avon, and around Ludlow on the River Teme.</li> <li>● Share lessons throughout the UK, so other organisations can learn from our experience and follow suit.</li> </ul>
<b>How:</b>	<ul style="list-style-type: none"> <li>● Work with farmers to prevent pollution from an area the size of Greater London (150,000 hectares of farmland) getting into rivers, because run-off from farmland is a significant cause of river pollution.</li> <li>● Install ozone effluent disinfection at six sewage treatment works (STW) and significantly rebuild the STW at Warwick.</li> <li>● Build new storage and sewer capacity so that we can either disconnect or significantly reduce the environmental impact of 25 storm overflows.</li> </ul>
<b>Benefits:</b>	<ul style="list-style-type: none"> <li>● People will be able to swim safely in these rivers – bringing new leisure and fitness opportunities to a million local people.</li> <li>● The environmental benefits will include enhanced biodiversity and aquatic life.</li> <li>● Cleaner rivers don't just mean greater physical and environmental wellbeing – they also support growth in the river-based economy, for example through the riverfront transformation in Stratford.</li> <li>● By increasing effluent reuse, we'll be able to provide greater water resource capacity.</li> <li>● We'll create around 330 jobs directly and a further 310 within our sector.</li> </ul>
<b>Indicative cost:</b>	<ul style="list-style-type: none"> <li>● £153m.</li> </ul>

Decarbonising water resources	
<b>What:</b>	<ul style="list-style-type: none"> <li>● Provide an extra 109 ML/d of new water with a net-zero carbon impact – that's enough water to serve Leicester.</li> </ul>
<b>How:</b>	<ul style="list-style-type: none"> <li>● Start use of the 65 ML/d abstraction licence we bought from a decommissioned power station at Rugeley.</li> <li>● Working in partnership to create combined flood/drought storage. This will effectively provide 40 ML/d of 'new' water.</li> <li>● Transport water via rivers, saving engineering costs and reducing carbon.</li> <li>● Upgrade treatment works to accommodate new sources of water.</li> <li>● Help 3,000 financially-stressed businesses save money and reduce waste by retro-fitting grey water and smart storage systems, saving up to 4 ML/d.</li> </ul>
<b>Benefits:</b>	<ul style="list-style-type: none"> <li>● 109ML/d of additional water supply, providing increased resilience to hotter, drier summers and wetter winters, thereby securing water resources for future generations.</li> <li>● Enhance 46 hectares of habitat to deliver a net gain in biodiversity.</li> <li>● The project will help protect 4,000 homes and businesses from flooding.</li> <li>● We'll share the lessons we learn with other organisations – helping the UK understand how to bring new capacity into supply in a net-zero way.</li> <li>● We'll create around 240 jobs directly and a further 220 within our sector.</li> </ul>
<b>Indicative cost:</b>	<ul style="list-style-type: none"> <li>● £206m.</li> </ul>

Taking care of customers' supply pipes	
<b>What:</b>	<ul style="list-style-type: none"> <li>● Replace old, privately-owned lead and/or leaking water supply pipes in 25,000 homes in socially-deprived areas of Coventry.</li> <li>● Replace c1,000 lead and leaking pipes in a smaller, rural community in Shropshire to enable withdrawal of chemical treatment – this will set the path for the long term solution to reducing chemical dosing.</li> <li>● Work with the community in Worcester to offer grants and work with local plumbers to incentivise the replacement of c4,000 supply pipes. This will involve a controlled test to understand customers' preference for who carries out the work.</li> </ul>
<b>How:</b>	<ul style="list-style-type: none"> <li>● Prioritise areas based on lead risk, estimated leakage and deprivation.</li> <li>● Trial lead detection technology and new replacement techniques, such as 'core and vac' techniques used in the gas industry.</li> <li>● Seize opportunities for joint supply pipe separation and increased metering.</li> </ul>
<b>Benefits:</b>	<ul style="list-style-type: none"> <li>● Protect up to 30,000 customers from the harmful effects of lead in drinking water.</li> <li>● Create a blueprint for disengaging from chemical dosing.</li> <li>● Reduce leakage by around a million litres a day – this is especially important because around 25% of leakage happens in our customers' own pipes.</li> <li>● We'll create around 240 jobs directly and a further 200 within our sector.</li> </ul>
<b>Indicative cost:</b>	<ul style="list-style-type: none"> <li>● £98m.</li> </ul>



Building sustainable, flood-resilient communities	
<b>What:</b>	<ul style="list-style-type: none"> <li>● Creating the first catchment-scale flood-resilient community by rolling out a range of nature-based solutions to reduce the risk of flooding, starting in the Mansfield area.</li> <li>● Installing over 15,000 blue-green interventions to store the equivalent of 58,000m<sup>3</sup> of surface water in nature.</li> </ul>
<b>How:</b>	<ul style="list-style-type: none"> <li>● Work in partnership with the local council and others to install and maintain a mixture of 'blue-green' soft infrastructure – for example, rain gardens, drainage ponds and permeable hard paving.</li> <li>● Target areas to prioritise financially vulnerable customers.</li> </ul>
<b>Benefits:</b>	<ul style="list-style-type: none"> <li>● Significantly lowering flood risk for around 90,000 people</li> <li>● Creating around 15 hectares of biodiversity-rich habitat.</li> <li>● Reducing 58,000m<sup>3</sup> of storage requirement in our sewers.</li> <li>● Improving water quality, including reducing the risk of storm overflows being triggered at around 20 discharges.</li> <li>● Greatly improving local recreational amenities.</li> <li>● Creating around 390 jobs directly and a further 380 within our sector.</li> </ul>
<b>Indicative cost:</b>	<ul style="list-style-type: none"> <li>● £85m.</li> </ul>

Smart metering	
<b>What:</b>	<ul style="list-style-type: none"> <li>● Install 157,000 household smart water meters across Coventry and surrounding areas in Warwickshire. Trialling smart meter technology that will help us reduce peak demand usage.</li> </ul>
<b>How:</b>	<ul style="list-style-type: none"> <li>● Target water-stressed areas with a programme of 91,000 replacement meters and 66,000 new installations.</li> </ul>
<b>Benefits:</b>	<ul style="list-style-type: none"> <li>● Raising awareness and helping customers to save c3Ml/d of water through more efficient use and leakage reduction.</li> <li>● Helps us target high users during periods of high demand – resulting in fewer interruptions for all customers.</li> <li>● Helps customers to save money on their water bills.</li> <li>● Creating around 80 jobs directly and a further 60 within our sector.</li> <li>● Raising customers' consciousness of environmental impact/ carbon footprint of their usage and unchecked leakage – therefore saving carbon.</li> <li>● Improves data capture and therefore better understanding of our water balance.</li> </ul>
<b>Indicative cost:</b>	<ul style="list-style-type: none"> <li>● £22m.</li> </ul>

Accelerating environmental improvements	
<b>What:</b>	<ul style="list-style-type: none"> <li>● Delivering 35 additional phosphate removal projects.</li> <li>● Introducing additional monitoring and investigative measures at 150 sewer overflows and fast-tracking improvements at 100 overflows.</li> </ul>
<b>How:</b>	<ul style="list-style-type: none"> <li>● Upgrade chemical dosing and installing enhanced tertiary solids removal using modern technologies.</li> <li>● Wherever possible, maximise the use of chemical-free solutions such as enhanced biological phosphate removal (EBPR), and, in some cases, constructed wetlands.</li> <li>● Increase event duration monitor coverage from 78% to 100%.</li> <li>● IT improvements to facilitate near real-time, public reporting of sewer overflows.</li> <li>● Interventions such as raising weir height or increasing pump capacity on short-duration, low-volume sewer overflows.</li> </ul>
<b>Benefits:</b>	<ul style="list-style-type: none"> <li>● Improving over 500km of river.</li> <li>● Supporting aquatic wildlife to thrive.</li> <li>● Creating around 280 jobs directly and a further 270 within our sector.</li> <li>● Delivering environmental improvements five years sooner than they otherwise would have been.</li> <li>● Net-zero solutions to make a first step at decoupling environmental improvements from increased carbon.</li> </ul>
<b>Indicative cost:</b>	<ul style="list-style-type: none"> <li>● £168m.</li> </ul>



## Doing the right thing by our customers

We have a unique opportunity to deliver even more for our customers, community, and environment. To demonstrate our commitment we're proposing a different regulatory framework that provides added protection for customers.

- Only 15% is directly going on to bills - we'll fund 85% upfront by raising new finance which is then recovered over a longer time period.
- We'll create 10 new performance commitments that set out what we need to deliver before we can recover our costs in 2025.
- Any efficiencies from the Green Recovery will be retained in full by customers, instead of the 50% sharing system already in place across the rest of our 2020-25 investment programme.
- We'll publish an Annual Green Recovery Report that shares our wider learnings on technologies, process, costs and benefits with all companies and stakeholders.
- We'll keep any service benefits from our Green Recovery investment separate when presenting our 2020-25 performance against our agreed targets.

## What happens next?

Nobody is better placed than Severn Trent to help deliver the post-Covid Green Recovery that Britain needs. Recognised as a socially purposeful company – one that brings together a spirit of public service with all the advantages of private investment – we're ready, willing and able to do what's necessary.

We're submitting our proposals to Defra and Ofwat at the end of January 2021 – and, if approved, we'll start work on the new investments within a matter of weeks.

### Further information

There's more information about the projects outlined on our website at: [stwater.co.uk/regulatory-library](http://stwater.co.uk/regulatory-library)

