

SEVERN TRENT

Derby City Council: Communities Scrutiny Review Board

23 January 2023

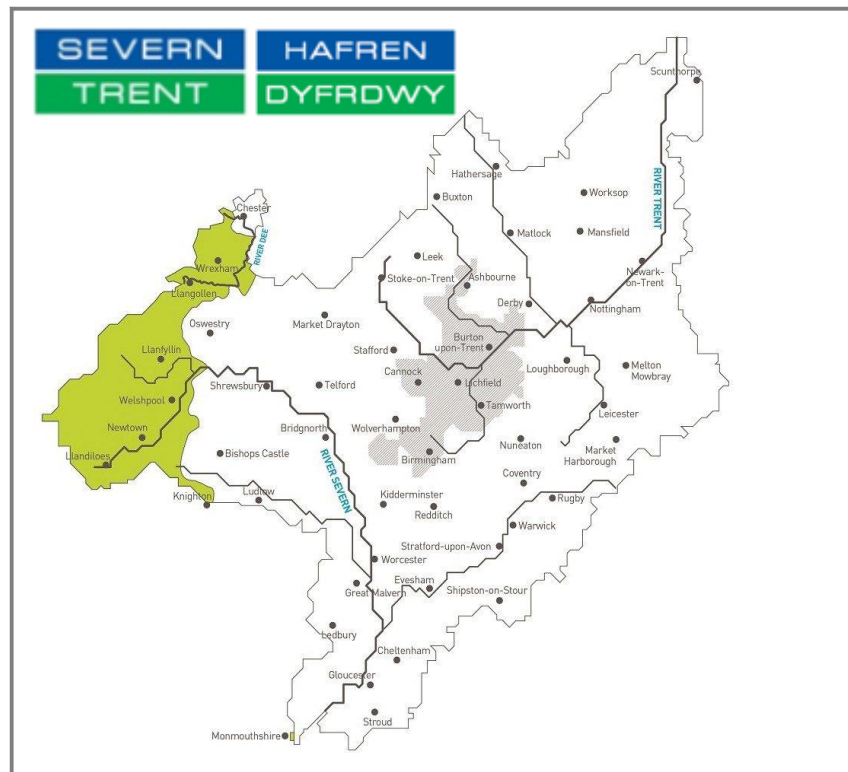
WONDERFUL ON TAP



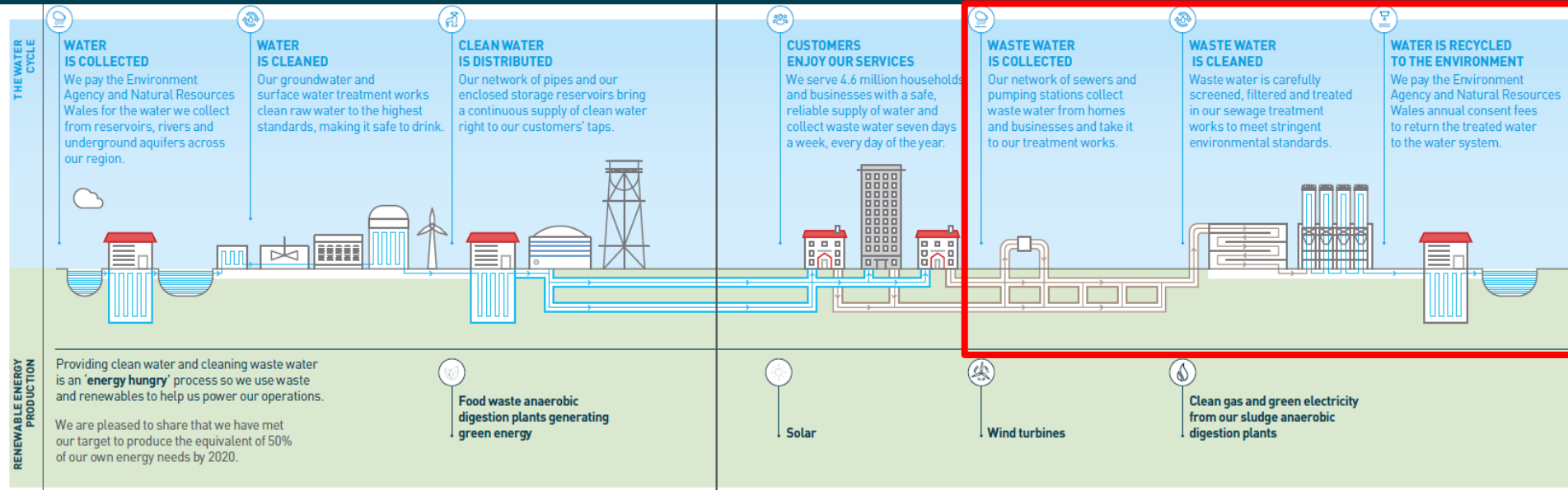
SEVERN TRENT & HAFREN DYFRDWWY

- We provide c.8m people across our region with water and wastewater services. Employ over 6,000 people and are supported by an extensive supply chain.
- Awarded 19 out of a possible 20 Environmental Performance Assessment stars over the last five years and hopeful we will retain our 4* rating next year.
- Our Great Big Nature Boost plans to revive 12,000 acres of land, plant 1.3m trees, and restore 2,000km of rivers by 2030.
- Have signed the Carbon Triple Pledge – will be carbon net neutral by 2030.
- Investing £566million in our green recovery programme. This includes a scale nature-based approach to reduce the risk of flooding in Mansfield.
- We hosted 500 Kickstart placements and this year had the biggest intake of apprentices and graduates.
- Over the last two years have supported 400 local charities donating over £4m plus a further £1.6m as part of our Coronavirus Fund
- Second lowest combined bills in the land – just over £1 a day – with support for 215,000 customers to avoid water poverty.

Midlands-based FTSE 100 company

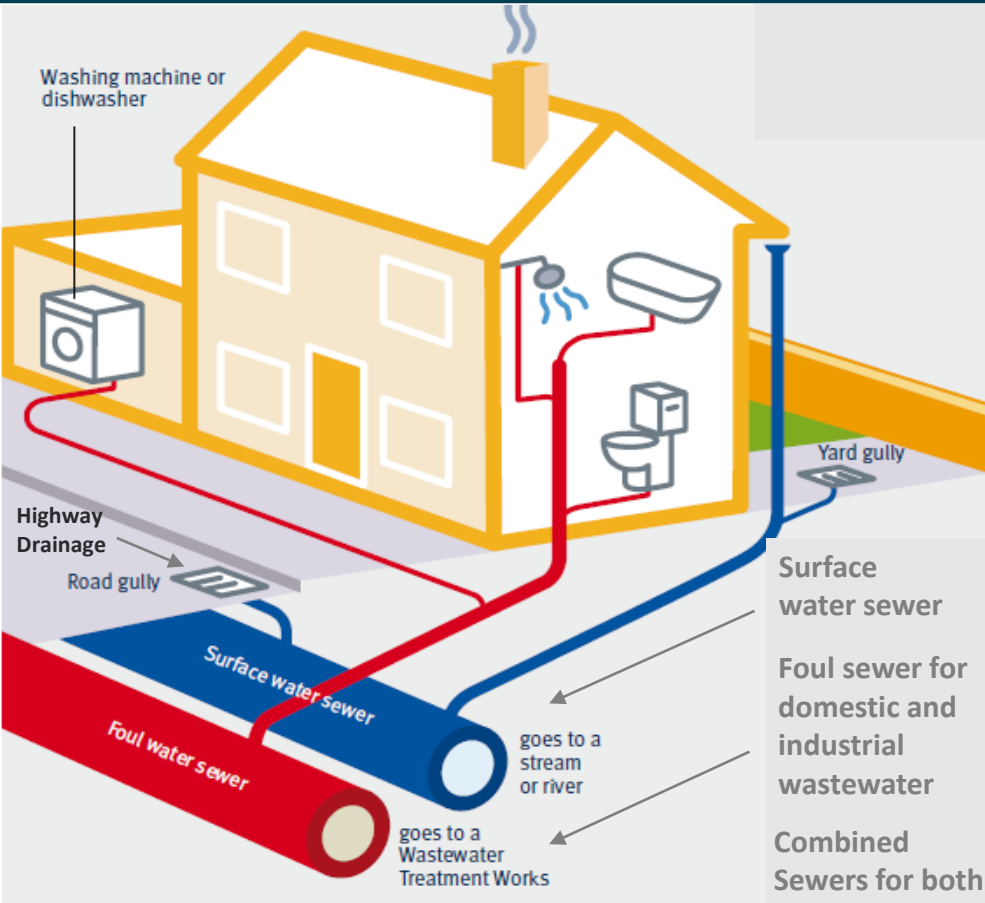


SEVERN TRENT – WHAT WE DO



Today we will be focusing on our sewerage network and the wastewater treatment process:

- We look after the hidden infrastructure of pipes and sewers that transport wastewater to be treated.
- There are over 93,000km of pipes, that's over 3 return trips to Australia.
- We work 24/7 to keep the pipes flowing to stop blockages, sewer flooding, protect public health and the environment.
- Each day we manage 3.1 billion litres of wastewater
- Our water and wastewater assets and treatment works can also be impacted by things like river flooding.



Under the Water Industry Act we provide, maintain, improve and extend a system of public sewers for the collection of;

- Domestic wastewater
- Surface water runoff from roofs
- Industrial & commercial effluent
- Highway drainage by agreement

This is a qualified duty, not an absolute duty, as there is a requirement to prioritise resources to the areas most needed.

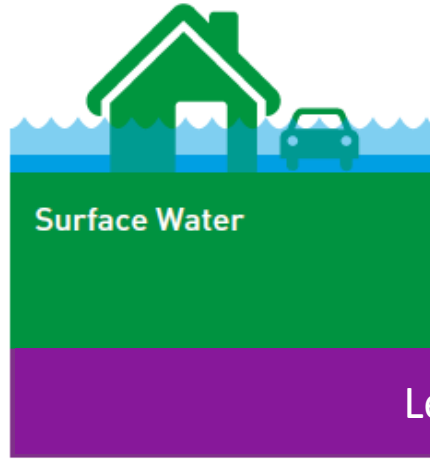
The Water Act also provides a **right to connect**, meaning anyone can have their drains and sewers connected to a public sewer. We are **not** a statutory consultee in the planning process.

SEWER OWNERSHIP

- We look after the large public sewers serving communities and businesses.
- In 2011 our sewer network increased by approx. 37,000km following the Water Industry Scheme of Adoption of Private Sewers Regulations 2011 (PDaS).
- This means that we are now responsible for all laterals and drains outside customer property boundaries.
- Homeowners are still responsible for maintaining their private drains. Which can cause some confusion.

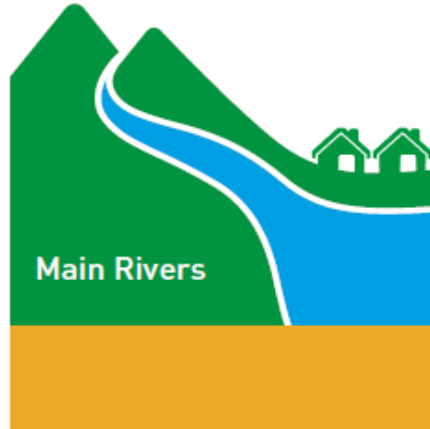


TYPES OF FLOODING



Lead Local Flood Authority

*in private riparian ownership



Environment Agency

WHO'S RESPONSIBLE?

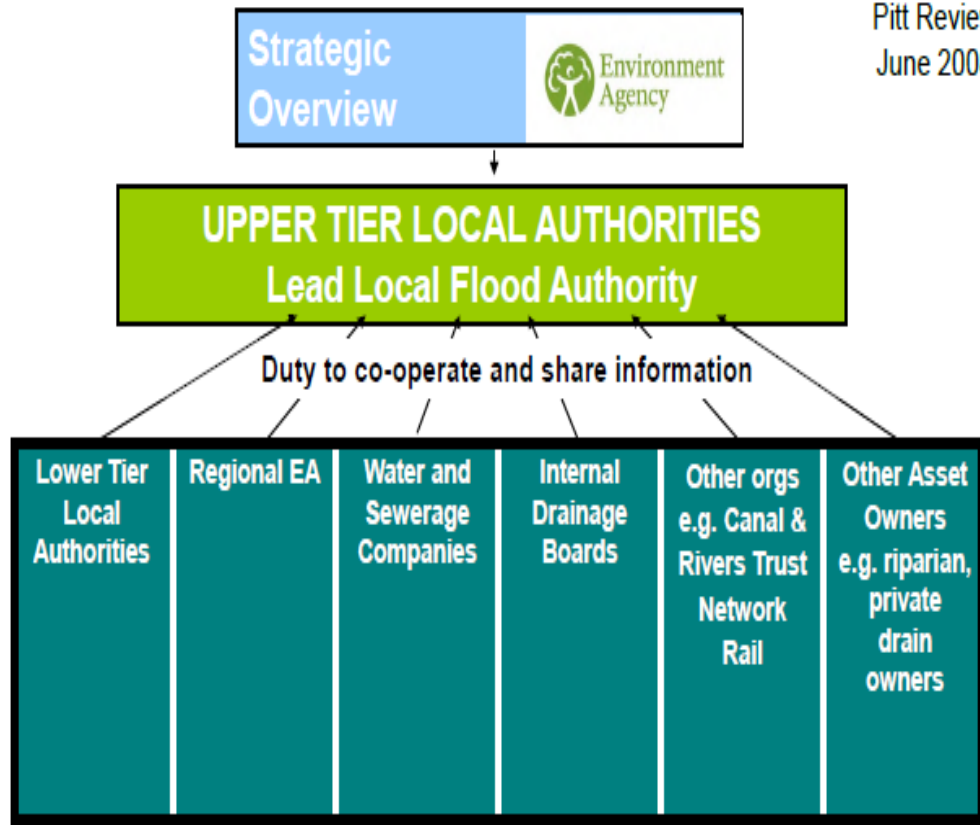
Pitt Review
June 2008

The Flood and Water Management Act 2010 sets out the duties and responsibilities for all the Flood Risk Management Authorities: *such as*;

- A local flood risk management strategy - LLFA
- Duty to cooperate – All
- Duty to share information – All
- Investigate flooding – LLFAs

This means agencies work together to;

- Establish the flooding mechanism.
- Establish responsibility for the flooding.
- Consider what can be done by each authority to alleviate the flood risk (both short and long term).
- Solutions can often be partnership schemes.
- Any solution is dependant on its viability and the frequency and level of impact being experienced.



WHAT'S IN OUR TOOL KIT

Remove Rainwater



Build New Capacity



Mitigate and Adapt

Green communities

- Surface water management for new developments
- Surface Water Separation
- SuDS (sustainable urban drainage systems)
- Grey water reuse



Capacity Investment

Hydraulic flooding issues are often complex. We design the best solutions from a range of techniques:

- Sewer upsizing
- Online & offline storage
- Catchment transfers
- SuDS & Surface water features



Property Mitigation (PLR)

Installation of property level mitigation, such as flood doors, gates and non return valves.

While mitigation reduces the risk to properties, flooding may still impact on residents.

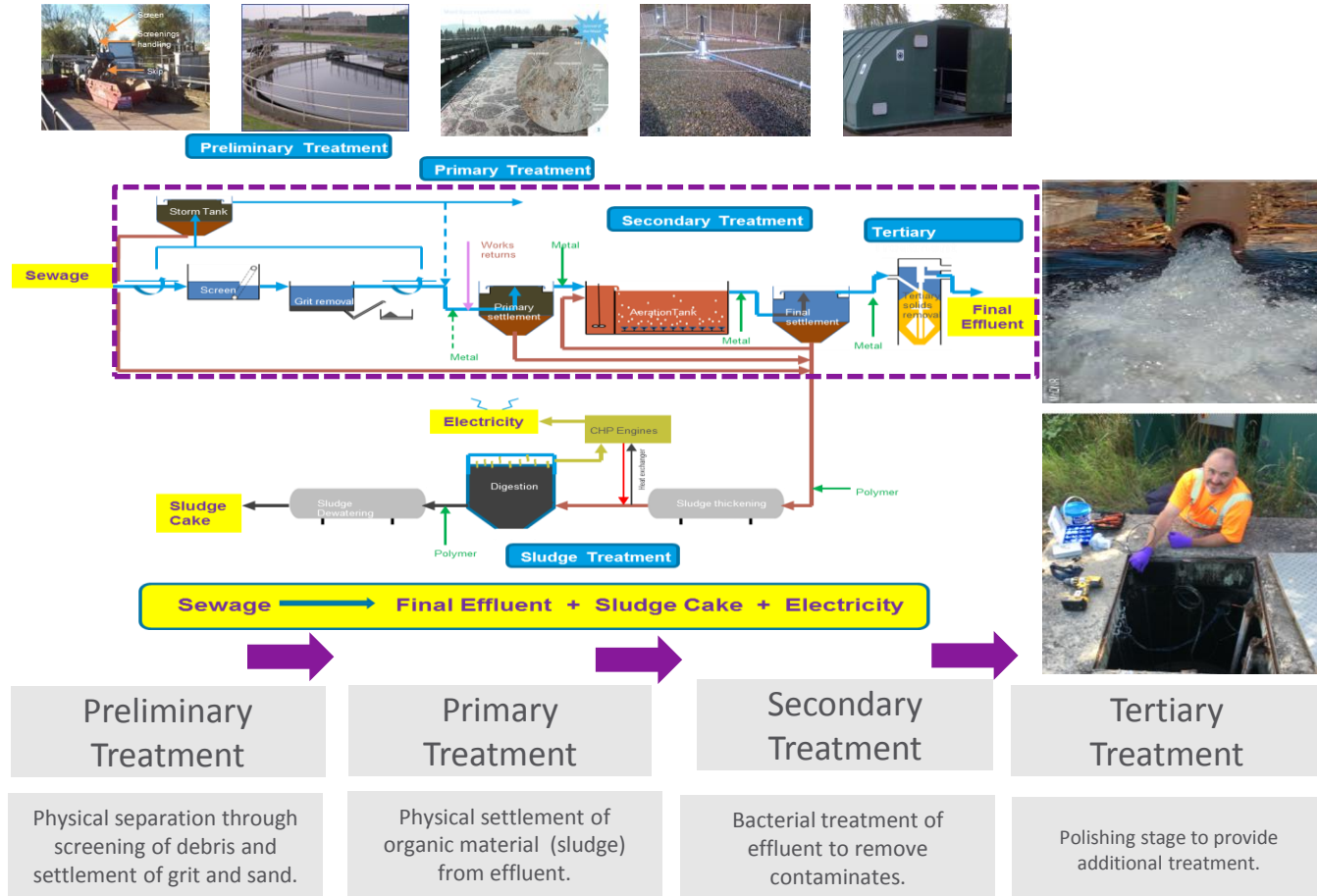


WE OPERATE A RANGE OF TREATMENT TECHNOLOGIES TO THE HIGHEST STANDARDS

- Each **catchment is different** in its content – the amount of domestic properties served the amount of trade load into the system, the amount of storm flows all create a cocktail of flow and loading to the works.

- Works are designed/ sized** to cope with this variation with a focus on the treatment appropriate to this influent and the permit we have to comply with.

- The basis for most of our treatment processes is **physical** removal of solid matter, then **biological and chemical** treatment of chemical parameters.



OUR ROLE IN THE ENVIRONMENT AND RIVERS

- We welcome the **Government's Storm Overflows Discharge Reduction Plan** published in August 2022. This aligns with our [Get River Positive commitments](#) published in March 2022 that are underpinned by five key pledges that pave the way for the restoration and revitalisation of the region's rivers. We have committed to:
 1. Ensure storm overflows and sewage treatment works do not harm rivers
 2. Create more opportunities for everyone to enjoy our region's rivers
 3. Support others to improve and care for rivers
 4. Enhance our rivers and create new habitats so wildlife can thrive
 5. Be open and transparent about our performance and our plans
- We believe these commitments go further and faster than any comparable company we know of in Europe.



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OUR RIVER PLEDGES



- A healthy natural environment is absolutely vital to how we operate and ultimately to the wellbeing of our community.
- In 2022 we were awarded the highest 4-star rating by the Environment Agency for the third year.
- But we know that there is more to do and in March 2022 we launched our Get River Positive programme.



CORE PLEDGES:

OUR RIVER PLEDGES

Improving the health of our regions' rivers is a team game. We believe that water companies need to show more leadership. We need to listen, be transparent and set out a credible way forward. And that is why we are committing to Get River Positive: our five step plan to the healthiest rivers in the UK.

Get River Positive is underpinned by five key pledges that pave the way for the restoration and revitalisation of our regions' rivers.



Ensure storm overflows and sewage treatment works do not harm rivers



Create more opportunities for everyone to enjoy our region's rivers



Support others to improve and care for rivers



Enhance our rivers and create new habitats so wildlife can thrive



Be open and transparent about our performance and our plans

SEVERN
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HAFREN
DYFRDWY

love every drop
anglianwater

RIVER PLEDGES

Our five pledges to help transform the rivers in our region by 2030

We have reduced phosphate and ammonia from our operations since 1990s by **80%** and **72%** respectively

27% of RNAGs¹ are attributable to the water industry and we are **supporting others** to reduce their share too

We have **further to go** and welcome recent focus and tougher environmental targets



Our pledges

1. No harm to rivers from our operations

2. Bathing quality rivers & wider access

3. Support others to improve & care for rivers

4. Enhancing & creating new habitats for wildlife

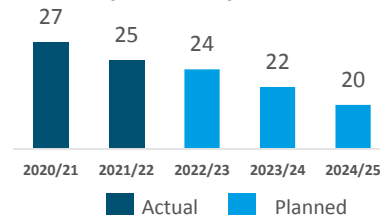
5. Transparent reporting on progress



Cleanest River Plan



We will reduce the average number of spills to 20 by 2025



We will reduce the number of RNAGs¹ to ZERO by 2030

TODAY	960
2025	700
2030	ZERO

1. The Environment Agency's analysis of Reasons for Not Achieving Good Status (RNAGs) record the source, activity and sector involved in causing waters to be at less than good status.

IN ADDITION, WE HAVE OUR GREEN RECOVERY PROGRAMME


£566 million new investment to boost the economy and creating c.2,500 jobs

...delivering even greater benefits for customers...

...tackling long term problems and sharing the learning...

...continuing to build long-term trust in the water sector.



 Flood resilient communities

Increased flood resilience to 90,000 people



Taking care of supply pipes

up to 26,000 homes protected from lead



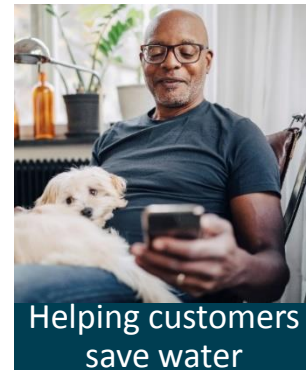
 Bathing Rivers

Improvements across 49km



Decarbonising water resources

69 Ml/d net zero water



Helping customers save water

157,000 smart meters



Faster environmental improvements

over 500km of rivers improved to meet WFD

Journey to Net Zero

Our **Triple Carbon Pledge** and **Science Based Targets** commitment.



Triple Carbon Pledge

(For scope 1 and 2, offsets included)

by **2030** we have committed to



Net Zero

carbon emissions
across our business



Energy from

100%

renewable sources

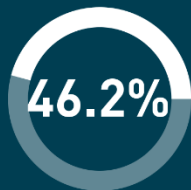


100%

electric fleet
where available

Science Based Targets

(For scope 1, 2 and 3, offsets not included)



Reduce Scope 1 and
2 emissions by 2031

46.2%

aligned to the IPCC Paris 1.5°C



70% of our
suppliers
have an engagement
target by 2026



Reduce emissions
from use of sold
products by

13.5%

Scope One

Direct emissions
from owned
or controlled
sources.



Scope Two

Indirect emissions from
the generation of purchased
electricity, steam, heating
and cooling consumed.



Scope Three

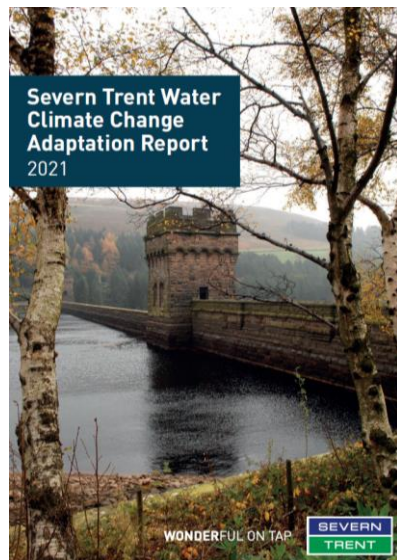
Includes all other indirect
emissions that occur
in a company's value chain.



Adapting to the changing climate

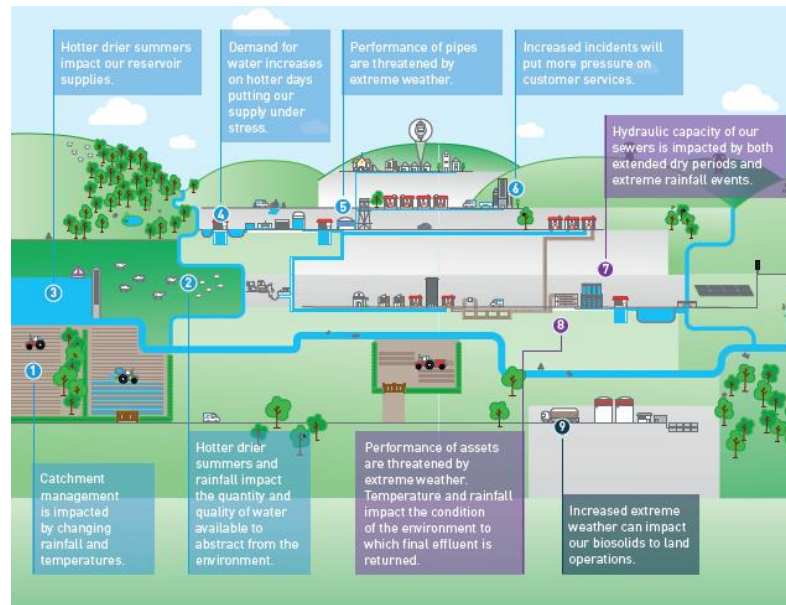
The changing climate poses a particular challenge to us as a water company. Our natural environment catches, holds, carries and helps purify our water and the climate drives many of our critical functions; from the filling of our reservoirs to the ways in which our customers use water.

In parallel with our efforts to mitigate climate change by delivering our ambitious carbon targets, it will be important to increase resilience to expected changing climate conditions and more frequent extreme events, in order to deliver a great service to our customers over the long term. To do this it is vital that we understand the risks we face as the climate changes, we need to deal with climate impacts now, and better plan and adapt for the future. We are planning for two degrees but preparing for four.



Our third Adaptation Report, published in December 2021 describes how the climate impacts our operations, how we assess climate risks and how we plan to manage them.

The report details the actions we are taking, including increased focus on nature-based solutions in our catchments, such as landscape initiatives slowing the flow of floodwater and reducing the need for expensive hard engineered downstream solutions.



- We have a range of ways customers can contact us:
<https://www.stwater.co.uk/help-and-contact/contact-us/>
- 0800 783 4444 (24 hour)
- Via Twitter (24 hour)
- Via Webpages
- Via WhatsApp
- Via Facebook
- For customers who experience sewer flooding we will respond quickly (normally inside 4hrs) and undertake an investigation and clean up.
- We will also provide advice on next steps and for sewer flooding a GSS payment (refund of sewerage charges).
- We work with other parties on multi agency flooding issues.



<https://www.stwater.co.uk/content/dam/stw/my-water/document/your-guide-to-sewer-flooding.pdf>