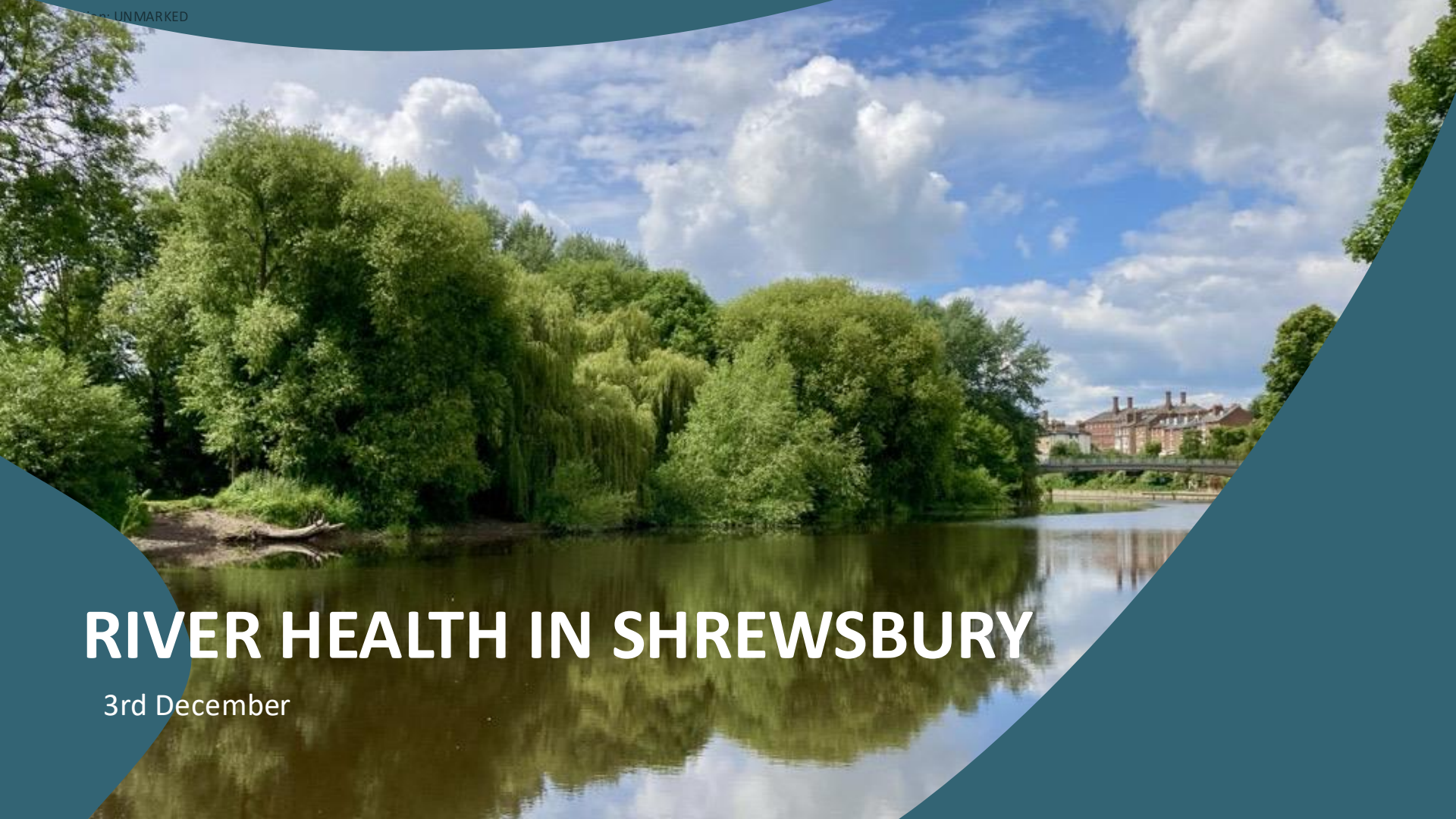




RIVER HEALTH IN SHREWSBURY

3rd December

OUR TEAM THIS EVENING

- Wilfred Denga - Capital Delivery Business Lead
- Angela Mayson - River Insights & Improvement Manager
- Phil Keyse – Asset Strategy Lead
- Hannah Lister – Environmental Engagement Manager

ABOUT SEVERN TRENT

Customers served:

- 8 million people
- 4.6 million homes and businesses

Water put into supply:

2 billion litres daily

Wastewater drained and treated:

3.2 billion litres daily



ENVIRONMENTAL PERFORMANCE SNAPSHOT



EPA 4*

We are the only water company to receive 4* status for 6 consecutive years.

This is testament to the real, lasting change we're delivering for the environment. It's the result of hard work, major investment over many years and strong collaboration with our partners and communities.



RNAGs

Our operational area includes over 778 waterbodies. We reduced our contribution to RNAGs in our region's rivers to 14% in 2023, a significant improvement. Through our work installing complex schemes over the last 12 months, our RNAGs contribution has reduced further to 10.8% and we are on track to meet our goal of less than 2% by 2030



Spills

We are delivering the industry's fastest and most ambitious spills reduction programme, as we aim to halve spills by 2030 and strive towards global best practice.

We are proud that this huge engineering programme has put us on track to reduce the average number of spills from storm overflows by over 25% from our 2024 levels, reducing spills to an average of 18 per year by December 2025

GET RIVER POSITIVE

- Our region's rivers are crucial for maintaining ecosystems, are a place for our customers and communities to enjoy and are at the heart of what we do.
- That's why we are keen to play a leading part to protect them and drive further improvements to our region's rivers, whilst also supporting others to do the same.
- Back in 2021, we developed five ambitious pledges to help us focus our efforts on river health.



PLEDGE ONE

Ensure storm overflows and sewage treatment works do not harm rivers



PLEDGE TWO

Create more opportunities for everyone to enjoy our regions' rivers



PLEDGE THREE

Support others to improve and care for rivers



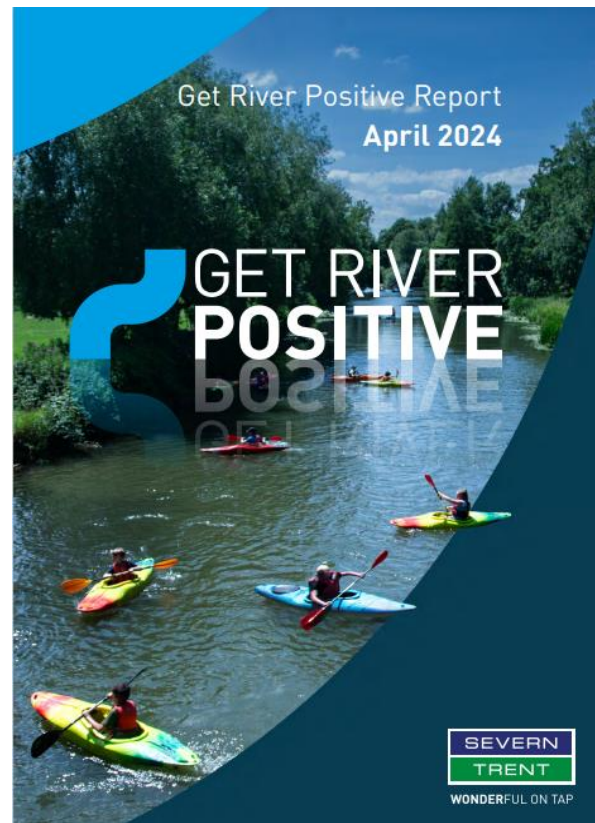
PLEDGE FOUR

Enhance our rivers and create new habitats so wildlife can thrive



PLEDGE FIVE

Open and transparent about our performance and our plans



[Get River Positive Annual Report 2024](#)

[Get River Positive Website](#) contains more details on our pledges.

BATHING DESIGNATION – WATER QUALITY MONITORING

Angela Mayson

River Insights and Improvement Manager

REASONS FOR NOT ACHIEVING GOOD STATUS

Measuring the ecological health of a river

REASONS FOR NOT ACHIEVING GOOD STATUS (RNAGs)

Our operational area includes over 778 waterbodies.

What is an RNAG?

The Environment Agency have developed a measure for river health known as **Ecological Status**. When these are **less than good status** they assign **Reasons for Not Achieving Good Status (RNAGS)** to different sectors.

The assessment considers a number of river health factors (Biology, water quality, chemistry & physical modification).

In 2023 we were responsible for **16%**, this year it's down to **10.8%**.

Our ambition is that by 2030 less than 2% of the RNAGs attributed to our wastewater operations (based on those currently assigned to us today).

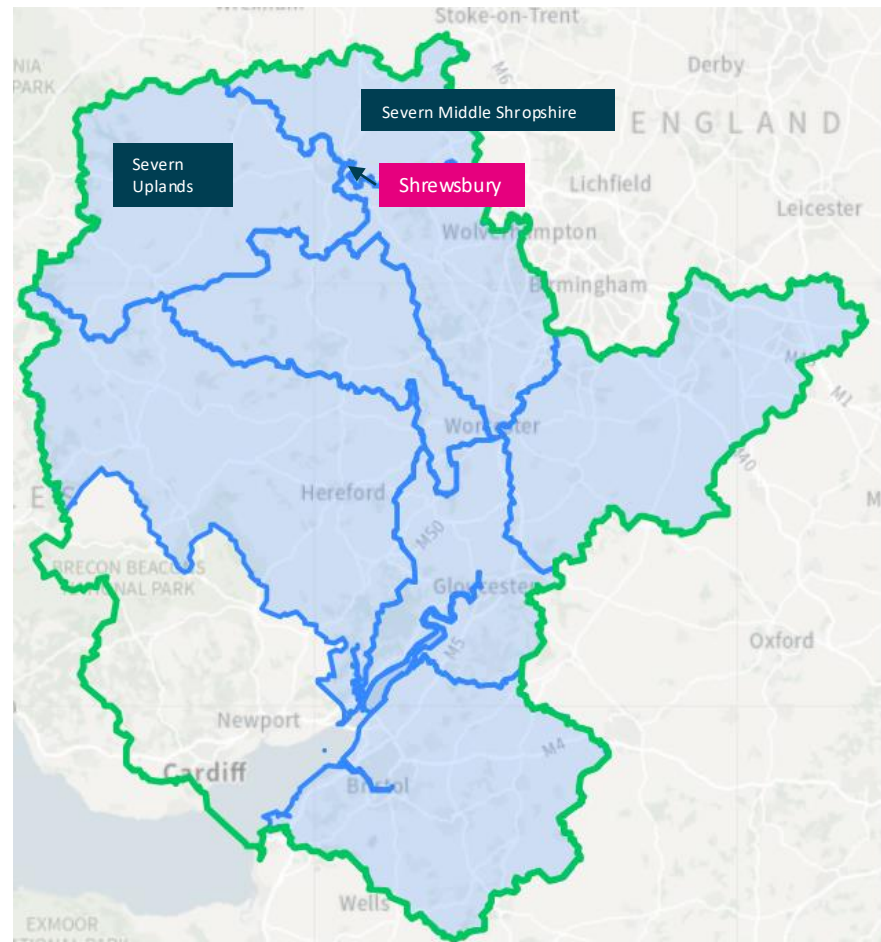
We work all around the catchment and with partners to support river health.



SHREWSBURY CATCHMENTS

Two River Management Catchments flow into Shrewsbury

- The Severn Uplands Management Catchment
- Severn Middle Shropshire Management Catchment

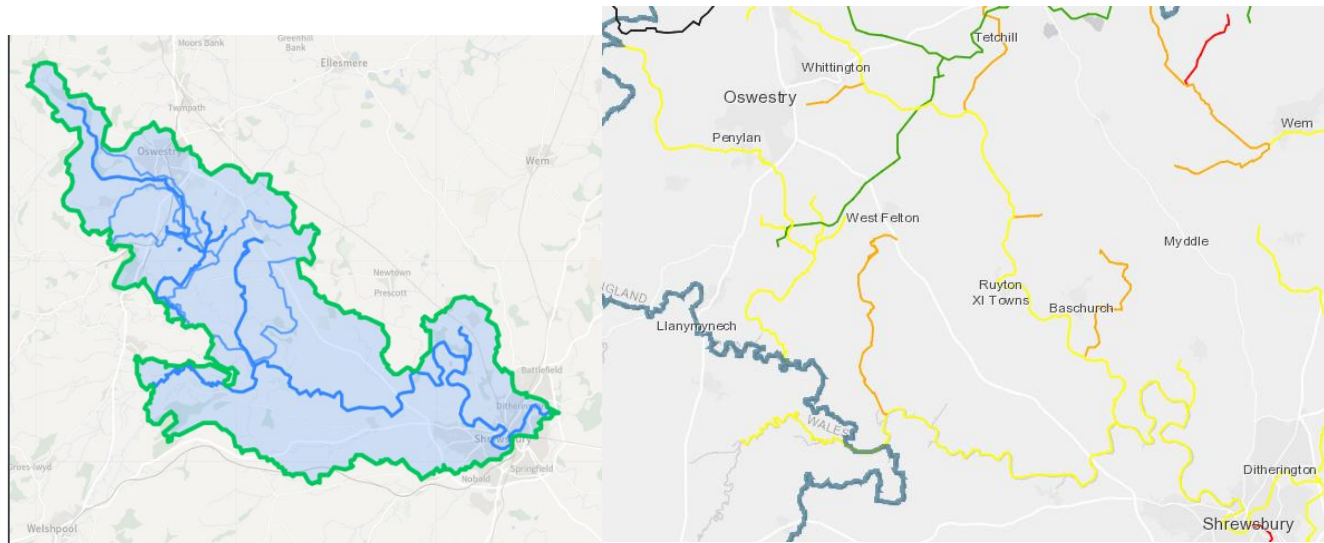


MORDA AND SEVERN NORTH OPERATIONAL CATCHMENT

Sector	RNAGs number
Agriculture and rural land management	14
Domestic General Public	2
Local and Central Government	2
No sector responsible	16
Sector under investigation	4
Urban and transport	2
Water Industry	6
Total	46

There are 46 RNAGs in the Severn Uplands Management Catchment

6 of them are attributable to Severn Trent (13%)



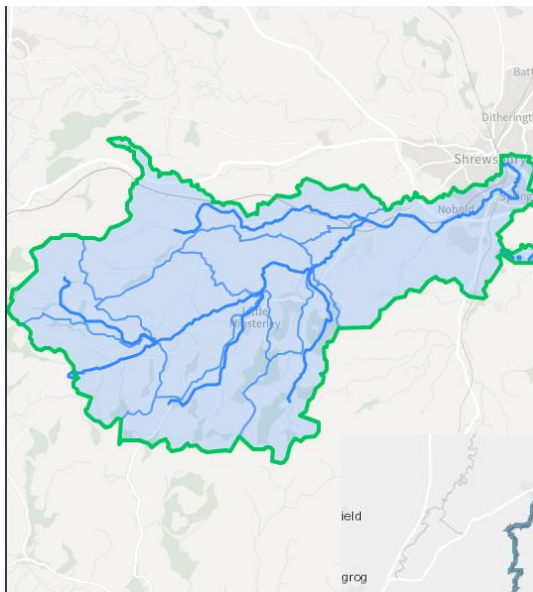
[Classification](#) | [River Basin Management Plan: maps](#)

REA BROOK OPERATIONAL CATCHMENT

Sector	RNAGs number
Agriculture and rural land management	46
Domestic General Public	8
Industry	3
Mining and quarrying	16
No sector responsible	29
Other	1
Water Industry	11
Total	114

There are 114 RNAGs in the Severn Uplands Management Catchment

11 of them are attributable to Severn Trent (10%)

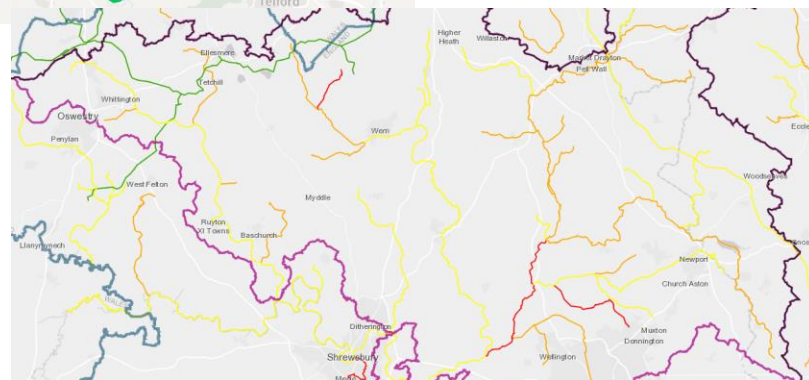
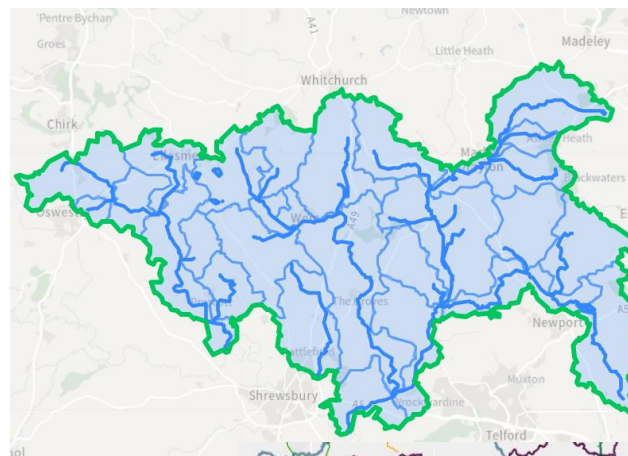


PERRY RODEN AND TERN NORTH SHROPSHIRE OPERATIONAL CATCHMENT

Sector	RNAGs number
Agriculture and rural land management	154
Domestic General Public	5
Industry	1
Local and Central Government	1
No sector responsible	54
Other	2
Recreation	1
Sector under investigation	7
Urban and transport	1
Water Industry	45
Total	271

There are 271 RNAGs in the Severn Uplands Management Catchment

45 of them are attributable to Severn Trent (10%)

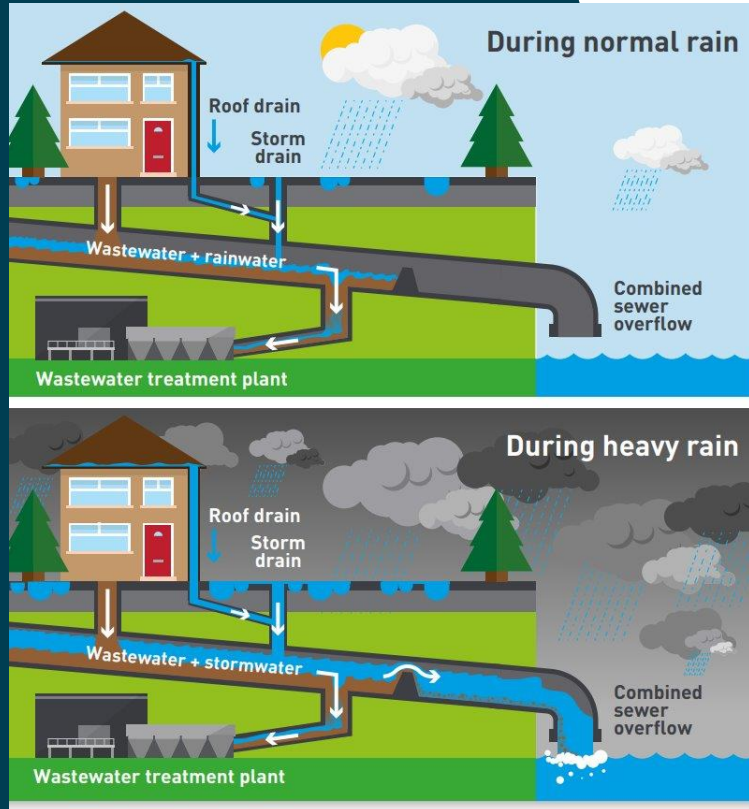


[Classifications data for Perry Roden and Tern North Shropshire Operational Catchment | Catchment Data Explorer](#)

OUR SPILLS PROGRAMME

Phil Keyse
Strategic Asset Planning Lead

WHAT IS A SPILL... AND HOW DO THEY IMPACT RIVERS?



- During heavy rain, our **Storm Overflows (CSOs)** will release water into rivers in what we call a 'spill'. This wastewater goes back into the water way to help prevent flooding in homes and businesses.
- These spills only occur when there has been heavy rainfall and the sewage treatment works, that would normally clean the rain and sewage, cannot cope with the input.
- **CSOs are an outdated design** and not made to cope with our increased population. Considering this, along with all the adverse weather, if we were building the sewage system again today, we would not use them.

GOVERNMENT TARGETS FOR RIVER HEALTH

2035

2045

2050



Improving High
Priority Sites

75% of sites
improved
to reduce
overflows



Minimising Health
Risks

Less than one spill
per season OR
significant
reduction in faecal
bacteria in
bathing waters



Improving High
Priority Sites

All sites improved
to reduce
overflows



Limiting overflows
during Extreme Rainfall

No storm overflows
permitted to operate
outside of unusually
heavy rainfall, or to
cause any adverse
ecological harm

WHAT WE ARE ALREADY DOING TO IMPROVE OUR RIVERS

Already achieved



Over 2700 interventions at overflows to reduce number of spills into rivers



Spills in 2025 estimated to be halved compared to 2024



Region's rivers now the cleanest they have been since the 1980s



£2.4 billion to be invested in cleaning up rivers (2025-2030)



Continue to reduce the use of storm overflows

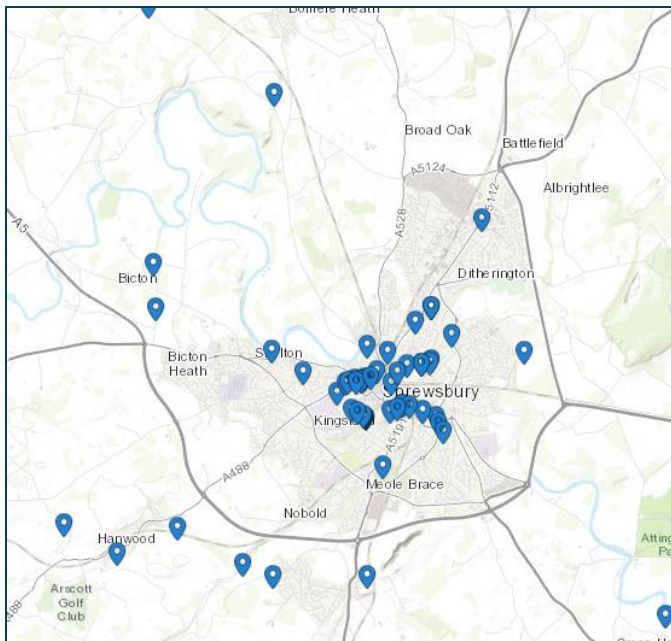


Improving sewage treatment standards to further reduce impact on the environment

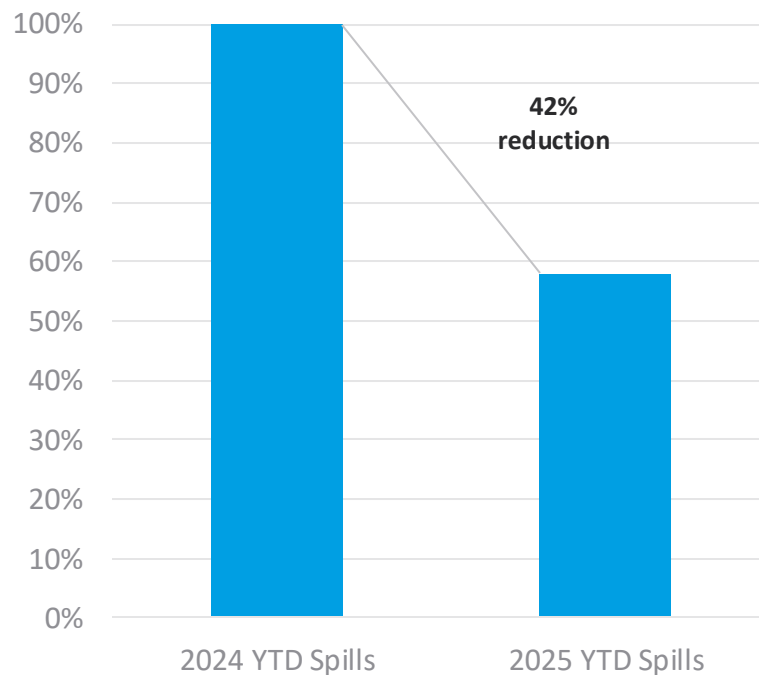


Fit 1,000 river water quality monitors at high priority sites

HOW OUR SPILLS PROGRAM IS MAKING A DIFFERENCE



PERCENTAGE REDUCTION IN SPILLS IN SHREWSBURY YTD 24/25



SEVERN TRENT'S £470 MILLION INVESTMENT IN SHROPSHIRE

Cleaner Rivers

- £140 million to reduce spills from storm overflows across Shropshire.
- 116 storm overflow solutions already delivered this year.
- Target: By 2030, reduce Severn Trent's responsibility for rivers not achieving good ecological status to less than 2%.

Boosting Water Supply

- £80 million expansion of Shelton Water Treatment Works in Shrewsbury to secure water supplies for the county.

Modern Infrastructure

- £46 million investment to install 119 miles of new waterpipes in Shropshire.
- Part of a wider £420 million programme to cut leaks by 16% by 2030 and 50% by 2045.
- Smart water meters for customers in upgraded areas

Jobs and Skills

- 49 new local jobs in Shropshire.
- Around 7,000 new jobs region-wide over the next five years.
- New apprenticeships and skills programmes to tackle water poverty.

Affordable Bills

- Severn Trent bills remain the second lowest in England.
- £575 million affordability package to support 1 in 6 households (around 700,000 customers).
- Schemes include Big Difference, WaterSure, and Customer Assistance.

Community Support

- £410,000 already awarded to 50+ Shropshire organisations since 2020.
- Share of a new £10 million community fund for local charities.

WASTE RECYCLING SITE SOLUTION EXAMPLES

Monkmoor STW

- Flow to Full Treatment (FFT) increased from 642l/s to 665l/s, allowing the site to treat more flow before getting overwhelmed in high rainfall events.
- Weir Height increase, this has increased the capacity in our storm tanks so we can store more effluent.
- Automated Storm Tank returns, allowing for water stored in the storm tanks to return automatically at any time.



Pontesbury STW

- Variable Speed Drive Installation, another type of automated storm tank return to allow for quicker returns. Particularly useful during multiple rainfall events one after the other.
- Auxiliary TerraTank installation to increase storm storage on the site.
- FFT Increased by c27% to increase the amount of flow treated before spilling to storm tanks.
- Variety of different Infiltration solutions in the catchment to prevent non-foul water ingress.



Much Wenlock STW

- Weir Height increase/Increase in FFT, this has increased the amount of flow which can pass through to treatment before spilling into our storm tanks.
- Installation of Even Products Auxiliary tanks to increase the amount of storm storage on the site.
- Increased storm return set point, this has increased the amount of flow to be able to return from the storm tanks per second, emptying the tanks quicker to free up storage.



Hook-A-Gate SSO

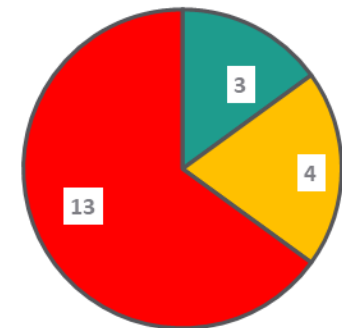
- Installation of inline Non-Return Valve in the storm line to prevent the river interacting with the asset and causing false spills/overwhelming the network.
- Installation of Pressure Monitor on the pressurised sewer main to be able to better assess performance and give us an early warning of any issues.
- Catchment Infiltration work stopping ground water interaction with our network.



COMBINED SEWER OVERFLOWS IN SHREWSBURY

There are 20 Combined Sewer Overflows (CSOs) in the Shrewsbury area. Through a thorough desktop assessment and site review process, we have identified multiple solutions on each CSO as part of our wider commitment on river health.

Breakdown of CSOs in Shrewsbury by 2024 Spills

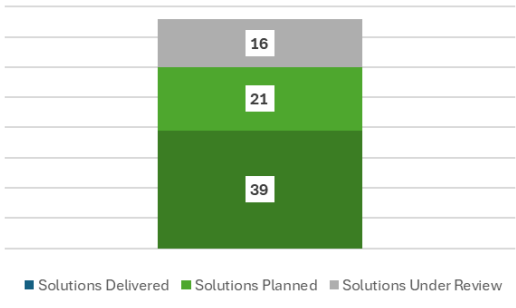


■ 0 Spills ■ 1-20 ■ > 20 spills

Just over 65% of the overflows in the Shrewsbury area spilled >20 times in 2024. As part of our commitment, we have targeted these sites as a priority for solution delivery.

On our sites in the Shrewsbury area, we have delivered 39 solution interventions and currently assessing feasibility for 16 interventions.

Status of Solution Interventions for Sites



■ Solutions Delivered ■ Solutions Planned ■ Solutions Under Review

3

Average number of solutions delivered for sites spilling 20 times or more

6

Different spills solutions being enrolled in Shrewsbury across three areas: storage, treatment, and separation

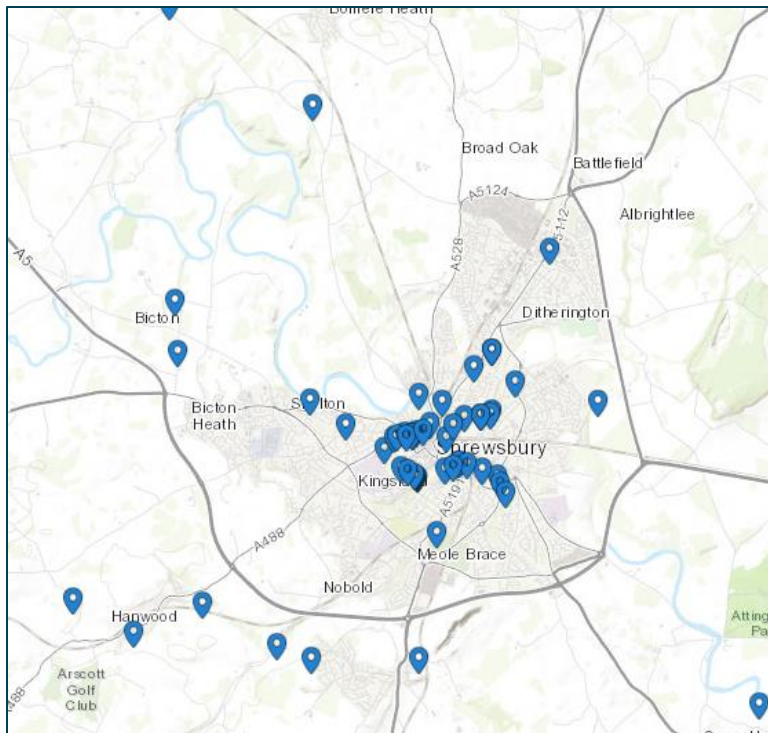
STORM OVER FLOW PERFORMANCE AND MONITORING

NSOH Map

Grey Pins

EDM Performance and Operability

THE NATIONAL STORM OVERFLOW MAP



[Storm Overflow Map](#) | [In My Area](#) | [Severn](#)
[Trent Water](#)

Event Duration Monitoring (EDM):

- The National Storm Overflow map was launched in Nov 2024.
- 100% of our Storm Overflows have Event Duration Monitoring (EDM) fitted
- EDMs track how often and for how long these overflows discharge. This data helps us take action and make rivers healthier.
- Monitors record water levels every 2–15 minutes when an overflow occurs.
- Data is shared annually with the Environment Agency.
- EDM informs the Storm Overflow Assessment Framework, which identifies where improvements are needed.
- Challenges include debris, flooding, wildlife, and poor mobile signal—but we’re tackling them head-on.
- Monitors measure water level only (not water quality or volume), but they give us the insight we need to act.

Our commitment: Through our Get River Positive pledges, we’re leading the way in protecting our regions rivers—and we’ll keep reporting back on progress.

INVESTMENT MAP UPDATE



WONDERFUL ON TAP



Log in



Accessibility

Search



[Your account](#) [Your services](#) [Water meters](#) [Emergencies](#) [Help and contact](#)

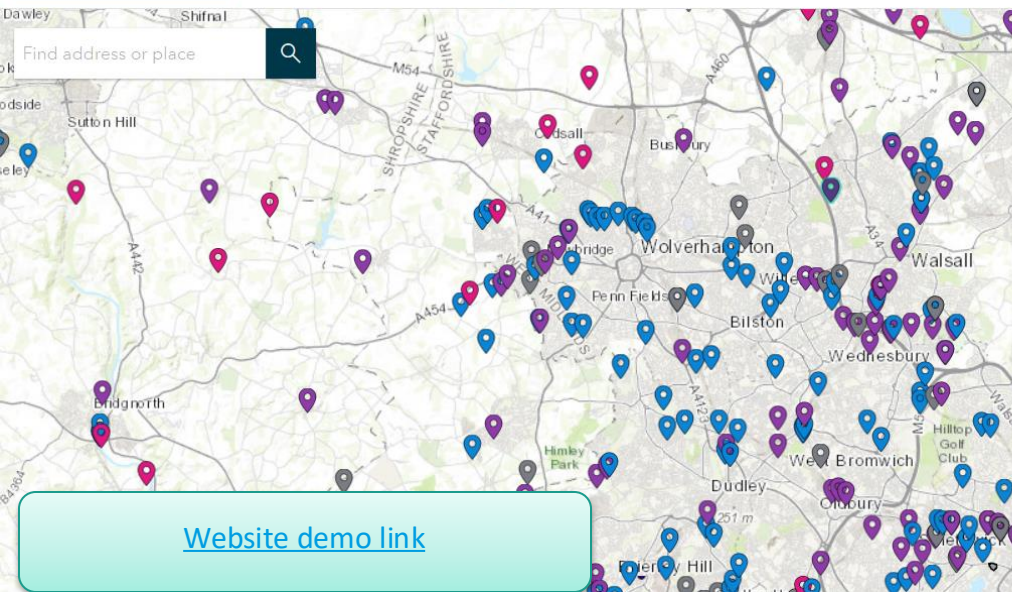
Storm overflow map

Bathing rivers map

Get River Positive

About this map

Filters



[Website demo link](#)

Planned works



Storage

Using storage tanks and raising weir heights means we can hold excess wastewater. We can treat it via our usual process instead of having it trigger overflows into local rivers, which is critical during periods of storms and prolonged rainfall.

Scheduled for: 2025 - 2030

New screen

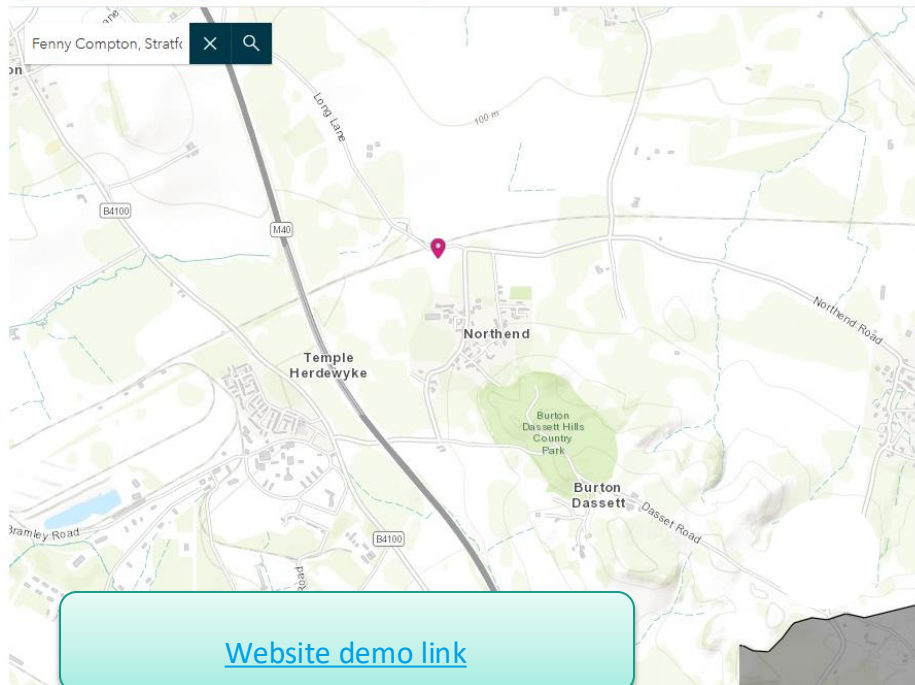
We install screens as they're designed to capture debris and litter that are carried in the wastewater, such as wet wipes, these screens avoid any debris then entering the water course.

Scheduled for: 2025 - 2030

Activate Windows

Go to Settings to activate Windows.

INVESTMENT MAP UPDATE

[Log in](#)[Accessibility](#)[Your account](#)[Your services](#)[Water meters](#)[Emergencies](#)[Help and contact](#)[Storm overflow map](#)[Bathing rivers map](#)[Get River Positive](#)[About this map](#)[Filters](#)[Website demo link](#)

Storm overflow plan

At this site we have refurbished a reedbed, restoring it to full health. This reedbed naturally filters waste water and supports our treatment process at site. This is one of the ways we are using nature based solutions to treat sewage and storm water preventing overload on the system and reducing the use of the storm overflow. We will continue to monitor this site and will take further action, as needed, to continue improving the local river and water course quality.

Delivered works



Pipe protection

We protect local drains to stop them getting flooded, helping cut the number of spills. This can include stopping water flowing into the sewer network from the river particularly during heavy or prolonged periods of rainfall.

Completed

Wetland treatment

These are natural solutions, like manmade reed beds that filter out

Planned works



Wetland treatment

These are natural solutions, like manmade reed beds that filter out harmful substances before they can get into rivers and streams.

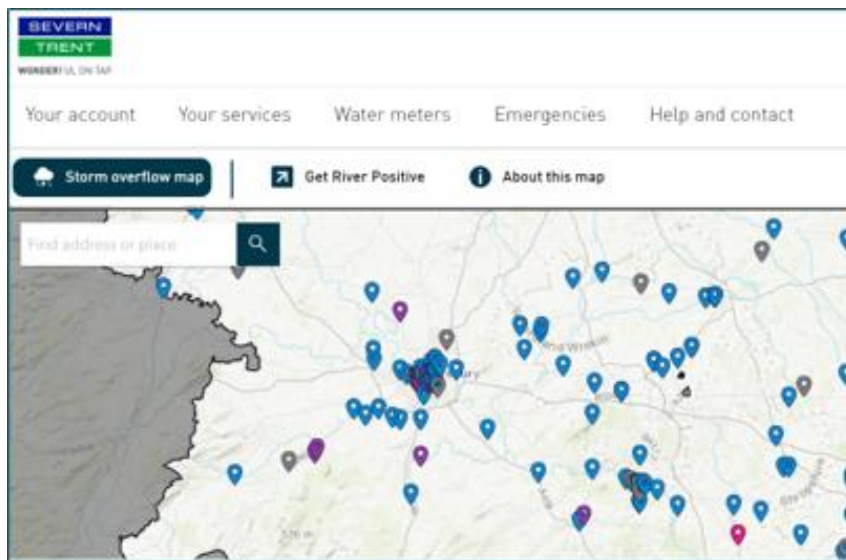
Scheduled for: 2020 - 2025

Sustainable Drainage Systems (SuDs)

These environmentally beneficial drainage systems are designed to reduce rainwater reaching the drains and watercourses to stop

EDM OPERABILITY

The organisation is continuing to improve its EDM operability and is currently operating at over 97%.



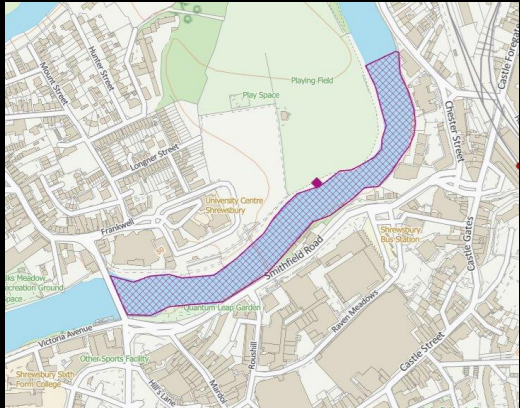
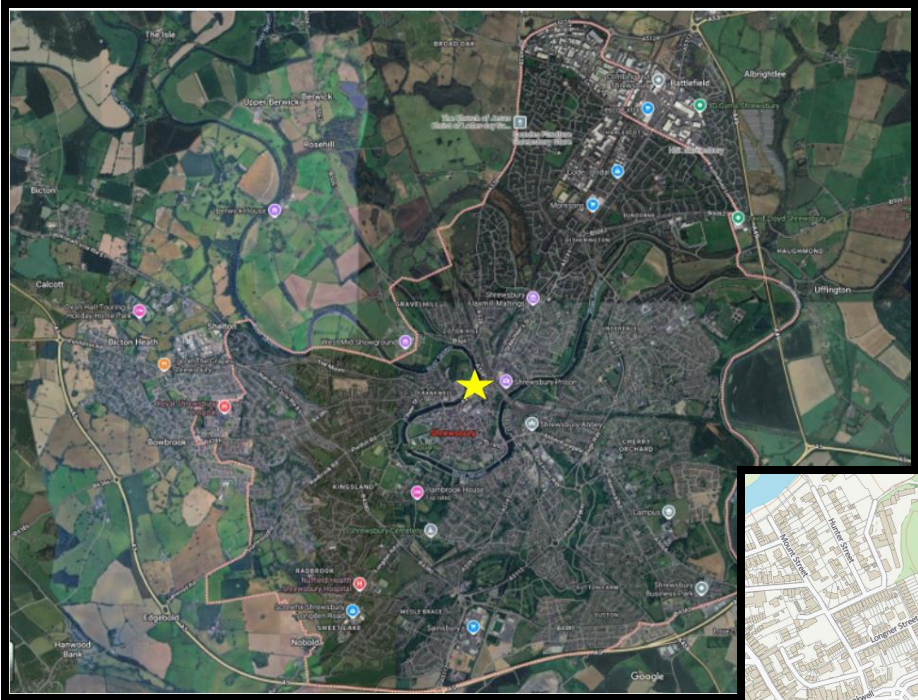
- Our Telemetry team implemented a fast-track plan in May 2025 to achieve <25 grey pins on our regions map
- Grey pins performance currently YTD average - 19 across our whole region.
- We've invested £3.2 million to upgrade our monitoring sites (including all in Shrewsbury) with advanced radar sensors, giving us more accurate data and faster response when issues arise.
- We've invested in making our equipment easier to access and more reliable, so we can monitor water quality more effectively and fix issues faster. E.g. moving the aerial above ground improves telemetry, meaning data is sent more consistently and accurately.
- We've invested £1.2 million to increase system checks from hourly to every 30 minutes, improving monitoring accuracy

WASTE NETWORK IMPROVEMENTS

Waste Network Optioneering for AMP8 Bathing Designation &
AMP7&8 Spills Reduction Programme

Wilfred Denga
Delivery Business Lead

SHREWSBURY BATHING DESIGNATION



The most recent classification is **Poor**, based on samples taken from 2024 through to 2025.

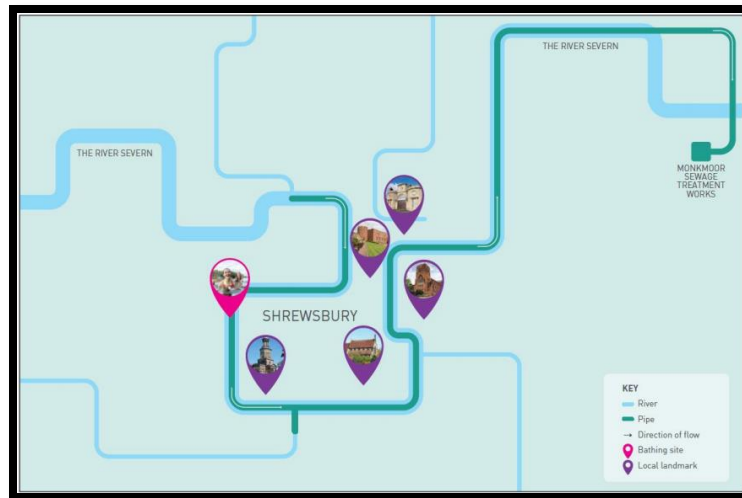
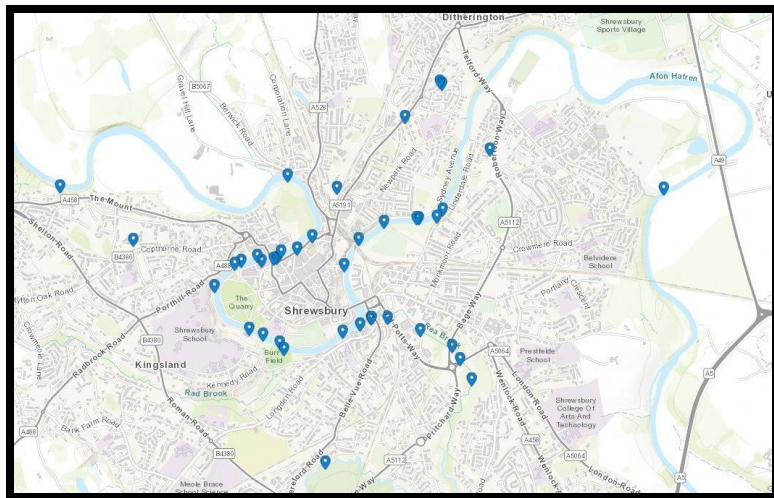


Poor bathing water quality



Advice against bathing

SHREWSBURY UPDATE



Challenges and considerations

- Challenging timeline!
- River Flood Risk / EA Flood Defences (Coleham & Frankwell)
- Ground conditions across catchment and below ground services
- Sensitive building & Structures – Network Rail, Historic and Listed buildings in centre of loop + Smithfield and Riverside redevelopment
- Development & Catchment Growth - Shrewsbury North West Relief Road ?
- Effective engagement with local Stakeholders & Community Groups

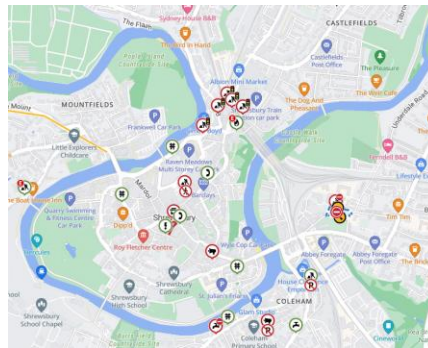
SHREWSBURY UPDATE

Activity (in consultation with EA):

- Investigating river impact: flow, flooding etc.
- Ground conditions: ecology, geology, services, etc
- Understanding constraints: other projects and activity by other withing area that can impact solutions.
- Determining cost of solutions

Solutions being investigated include:

- Tunnelling options (small & large) to reduce CSO spills.
- Online and Off-line Storage in the network
- Network Upsizing
- Surface water separation: SUDS, separation of systems.
- Standalone local CSO solutions (**some locations in progress!**)



SHREWSBURY NETWORKS ENHANCEMENTS

Outfall Flap Valves

We are ensuring that all outfalls in the Shrewsbury Catchment which are affected by the River Severn are fitted with a Flap Valve to prevent the river from entering the sewer and overwhelming the system. If the site already has a Flap Valve we are ensuring these are fully operational. This may include in-line non-return valves.

Catchment Water Butts

We have been out in parts of the Shrewsbury Catchment offering some customers the opportunity to have a Water Butt installed on their roof drainage pipe. This means less water getting into our foul system and saves water for use in the garden without using the hose!

Sewer Infiltration Lining

We have been surveying our network and locating areas of ground water ingress. This could be getting in via a joint in the pipework or a slight crack – if found we have been lining the inside of the pipe to seal off and stop the infiltration from happening.

“Shut Out” Manhole Sealing

In areas where the River overtops its banks and floods in Shrewsbury, we’ve been trialling a method called “Shut Out” which seals manhole covers using a gel like substance to stop the water from the river seeping through the manhole covers.

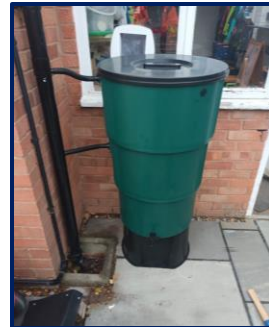
Data Assurance/Monitor Maintenance

We’ve been checking our EDM monitors, ensuring they’re measuring at the right height and are in good condition to give us the correct data.

In-line Non-return Valve



Installed Water Butt

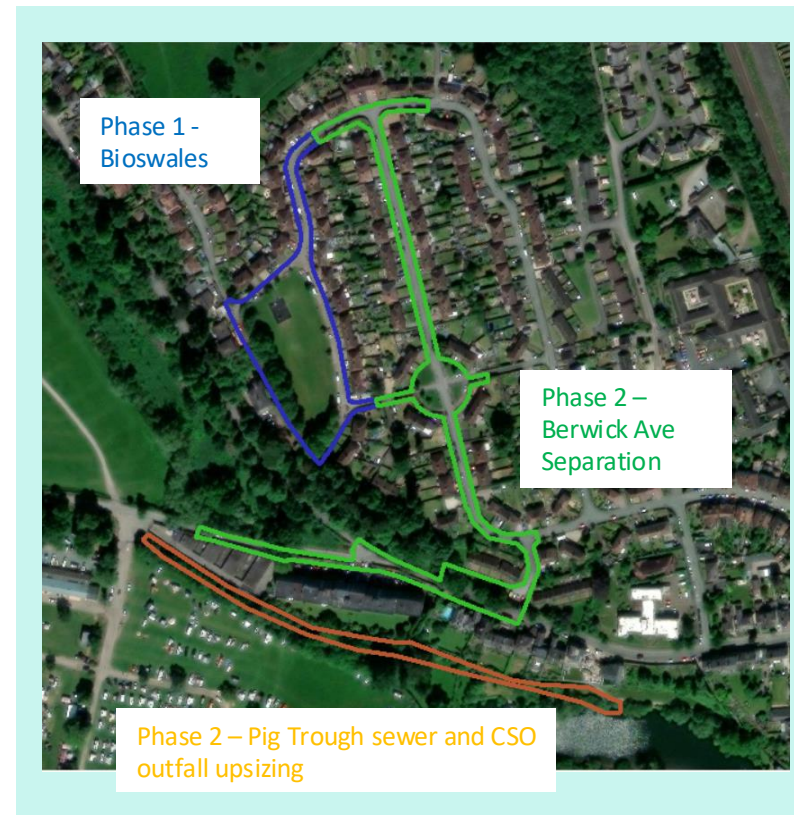


Shut Out Manhole Sealing



THE FLASH, SHREWSBURY

- Surface water separation scheme on the catchment area upstream of Flash Gardens. Aim is to reduce surcharging manhole flooding events, notably at the Flash CSO.
- Phase 1 – Installation of 2no. bioswales designed for removing surface water from our network through ground infiltration. This has now been completed.
- Phase 2 – Interception of highway and roof drainage into a new surface water system along Berwick Avenue and discharging to the watercourse. Includes works on the existing sewer in Pig Trough and Flash CSO chamber. Works start 2026.



SEVERN VALLEY WATER MANAGEMENT SCHEME

- Recognise that SVWM has potential to change the management of water in the catchment for benefit of all
- Supporting the SVWM partners develop their plans in the Upper Severn Valley by:
 - a) Identifying synergies with the development of our statutory plans for:
 - Wastewater management (Drainage and Waste Management Plan - DWMP)
 - Water resources (Water resource Management Plan - WRMP)
 - b) Working together on a data led approach to guide opportunity assessment
 - c) Collaborating on assessing the wider benefits of nature-based-solutions for the catchment
- Considering the impacts of SVWM on bathing water programme
- Supporting the work of the Severn Uplands CaBA group and Marches Forward Partnership

WORKING WITH OTHERS

Hannah Lister
Environmental Engagement Manager

STAKEHOLDER ENGAGEMENT

Ongoing

Engagement with Shropshire Council & Shrewsbury Town Council

- Held an introduction/optioneering meeting
- Collaborated on survey work, ensuring local input
- Grateful for their engagement and the valuable local knowledge and insights they have provided, which have helped shape our approach.

Landowner engagement

- Land access requests for surveys

In the pipeline

- Shropshire Bathing Rivers Group
- River Communities and recreational river users
- Shropshire Archaeology
- Local residents
- Up Sewage Creek
- River/local businesses
- Environmental groups
- Exploring how our Agricultural teams can provide support to landowners
- Wider customer base
- **We would like your input – are we missing any key stakeholders?**

RIVER RANGER TEAM

Since January 2022, our team of 10 River Rangers have worked with customers, citizen scientists, community groups and environment organisations to protect and enhance our local rivers.

- Since forming the team have carried out over 14,500 region-wide watercourse inspections.
- Including 430 in Shropshire this year.

Steve Caldwell
covers Shropshire

You can get in touch with the team:
RiverRangers@severntrent.co.uk



COMMUNITY FLOOD TEAM

We recently announced our new Community Flood Team who will be out and about across the region speaking to our customers and communities. They will support our operational teams during flooding incidents, and proactively support communities to become more flood resilient.

*Our purpose is to **build trust, resilience, and understanding** between Severn Trent and the communities we serve by proactively engaging on issues of flooding and climate change.*

Phil Mark covers
Shropshire



THANK YOU

Q&A



WONDERFUL ON TAP