

WORKING TOGETHER TO GET THE BEST OUT OF OUR ASSETS

# COTSWOLDS SEWERAGE SUMMIT

08/07/24

Sarah-Jayne O'Kane

WONDERFUL ON TAP



# WHAT WE WILL COVER

- How we plan our investment
- Share a summary of the Severn Trent catchments and key wastewater assets in the Cotswolds District
- What plans do we have for future improvements in the Cotswolds?
- River quality and improvement plans

# HOW WE PLAN FOR INVESTMENT

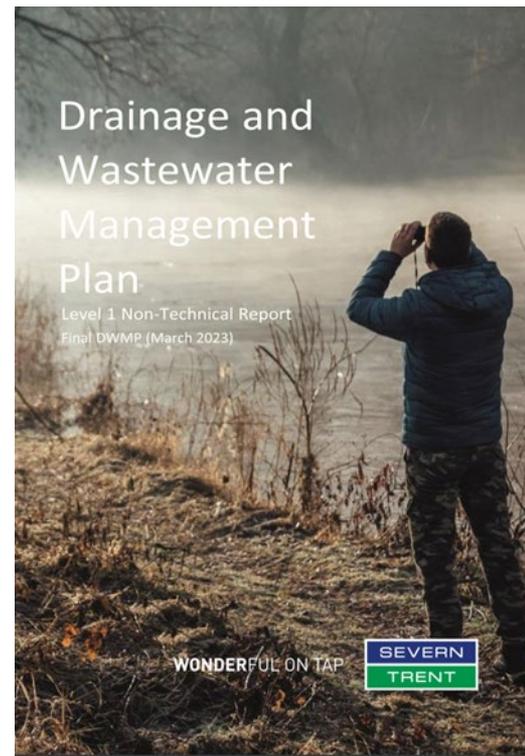
# DRAINAGE AND WASTEWATER MANAGEMENT PLAN

## What is it?

- A strategic plan to 2050 of how we will extend and maintain a robust and resilient drainage and wastewater system to manage future pressures of **climate change**, **population growth** and **urban creep**.
- It sets out the best value investment plan requirements over the next 25 years, underpinned by hydraulic modelling & following industry guidance.

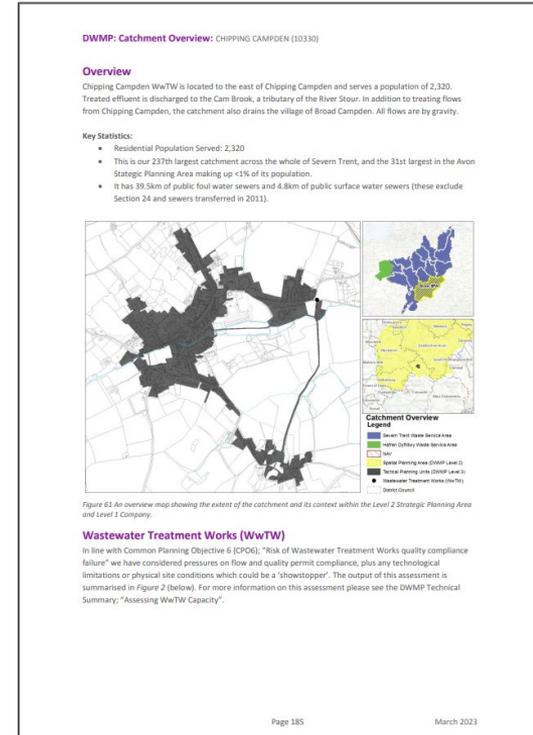
## What does it include?

- **Shows the investment needed** to aligning to the Governments Storm Overflows Discharge Reduction Plan
- Shows how we are **working in partnership** to address sewer flooding risks
- Provides the **evidence base** to support our PR24 Business Plan submission to Ofwat for 2025-2030



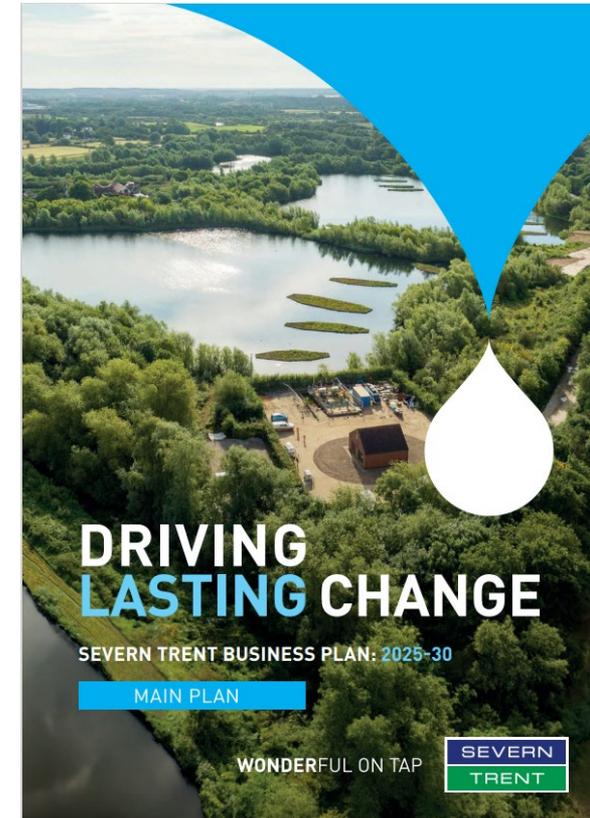
# DRAINAGE AND WASTEWATER MANAGEMENT PLAN

- Shows information from the DWMP Assessment at individual catchment level. This provides details such as:
  - Catchment Summary
  - Wastewater Treatment Works long term constraints
  - Current and future risks
  - Viable options within the catchment



# OUR BUSINESS PLAN

- Our DWMP has fed into our PR24 Business Plan – it outlines that **£4.4bn** investment required on Storm Overflows over the next 25 years.
- Between 2025 and 2030 **£1.1bn** investment is planned for Storm Overflows across the Severn Trent Region.
- It focusses on ensuring that our activities are not the reason for watercourses not achieving good status.



# STORM OVERFLOW IMPROVEMENTS IN 2024

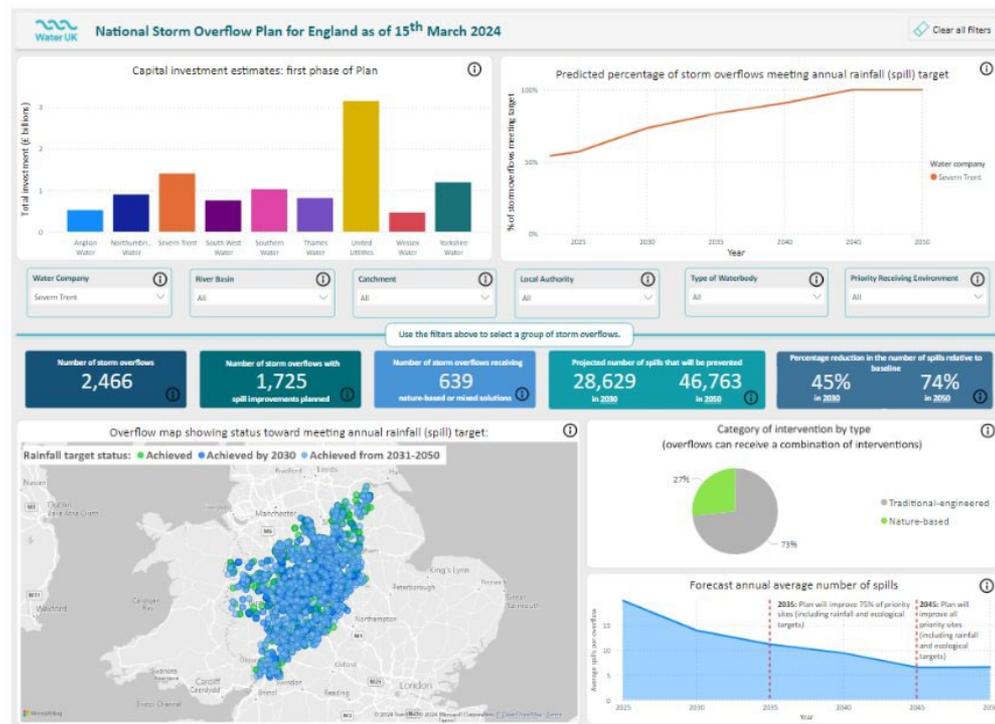
- Across the Severn Trent region we are planning to deliver storm overflow solutions across 900 locations, with a total investment for 2024/25 of £450m aiming to reduce total storm overflow spills by 20% per year.
- This includes:
  - New **storage solutions** to capture and store more flows
  - A large-scale community trial of over 8,000 free **water butts**
  - New 'nature based' solutions including the creation of 70 new **reed beds** to treat sewage from storm overflows.
  - Enhancements to **increase the flow of sewage to treatment works**
  - **Flap valves** to prevent river ingress into the network
  - A **Zero Spills hub** dedicated to storm overflow improvements

Catchment	Spills Improvement Planned 2024/25
Avening	Yes - Treatment and storage
Blockley	Yes - Treatment, storage and infiltration reduction
Chipping Campden	Yes - Storage
Honeybourne	Yes - Maintenance Activities
Stanley Downton	No



# STORM OVERFLOW ACTION PLAN

- The National Storm Overflows Plan can be viewed on Water UK's website.
- For all English Water companies, it shows the plan for each storm overflow up to 2050.
- It shows how the targets of the Government's Storm Overflows Discharge Reduction Plan will be met for all storm overflows.
- These targets include:
  - Ensure all storm overflows are NOT causing harm to watercourses
  - Ensure all storm overflows spill no more than 10 times in a typical year
  - Ensure all storm overflows have appropriate screening controls
  - Ensure all storm overflows in designated bathing waters are reduced to 1 spill per bathing season (May-Sept)
- £11.2m planned across the Cotswolds District to address 4 storm overflows by 2045.

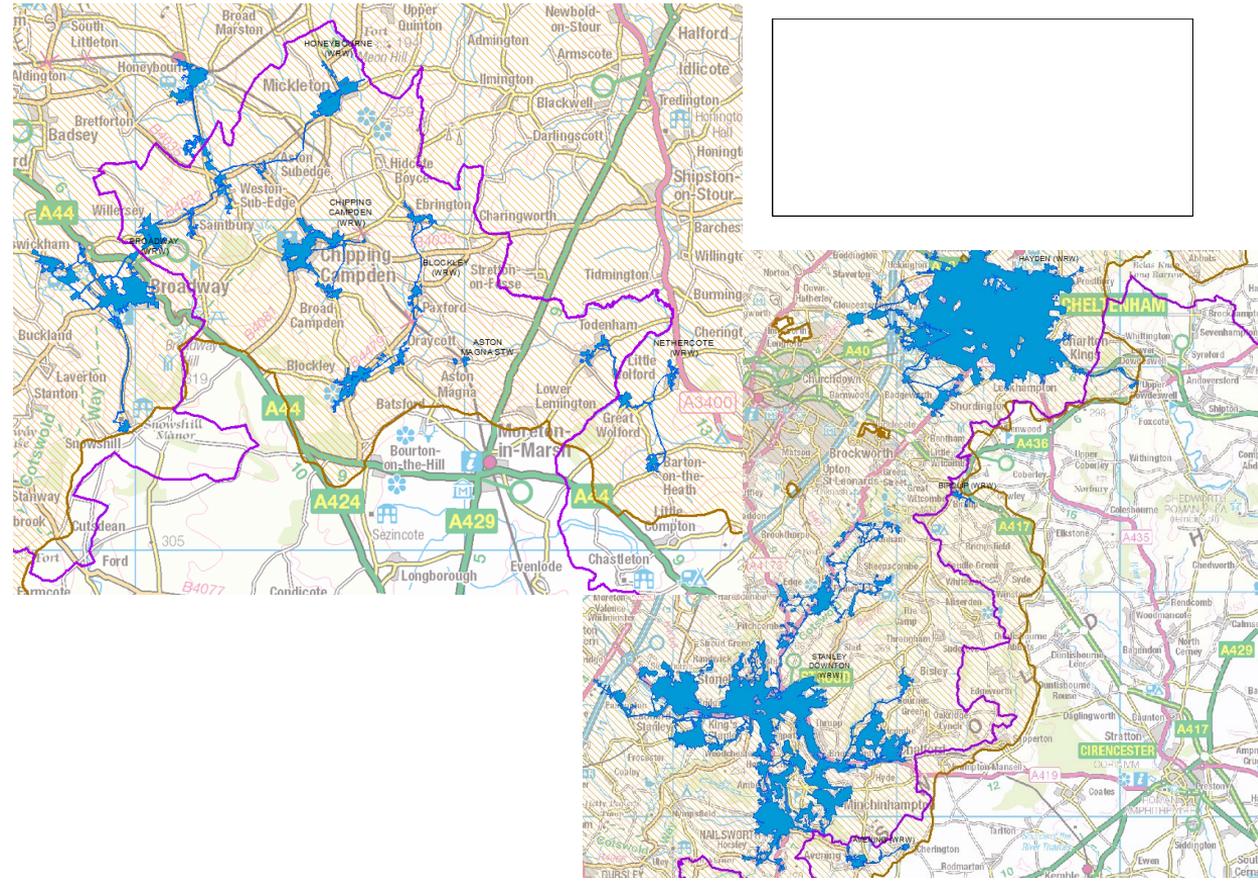


# SEWERAGE INFRASTRUCTURE IN THE COTSWOLDS

# BACKGROUND

- There are 10 ST catchments within the Cotswolds District:

Catchment	Population Equivalent
ASTON MAGNA STW	205
AVENING (WRW)	1,036
BIRDLIP (WRW)	224
BLOCKLEY (WRW)	1,954
BROADWAY (WRW)	4,101
CHIPPING CAMPDEN (WRW)	2,376
HAYDEN (WRW)	123,061
HONEYBOURNE (WRW)	5,292
NETHERCOTE (WRW)	567
STANLEY DOWNTON (WRW)	77,859



# TREATMENT CAPACITY

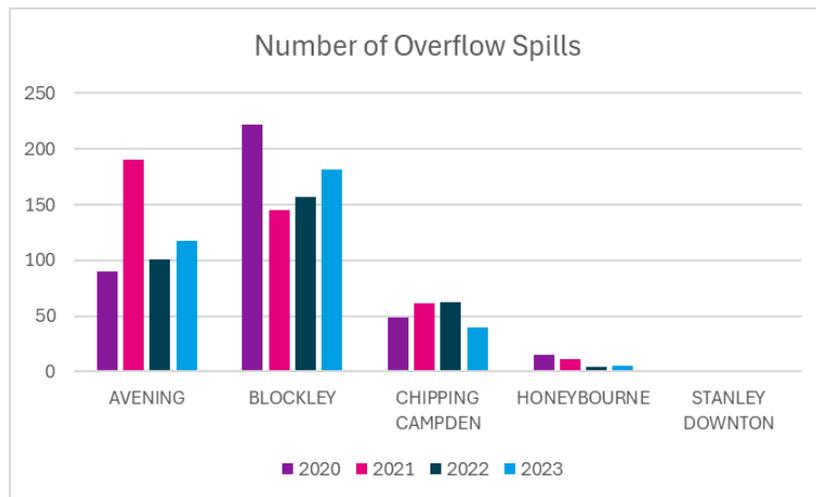
Catchment	Population Equivalent	Current Estimated Spare capacity (dwellings)	Estimated Spare Capacity Risk
ASTON MAGNA STW	205	N/A	N/A
AVENING (WRW)	1,036	1224	LOW
BIRDLIP (WRW)	224	333	LOW
BLOCKLEY (WRW)	1,954	252	MEDIUM
BROADWAY (WRW)	4,101	-292	VERY HIGH
CHIPPING CAMPDEN (WRW)	2,376	5,106	LOW
HAYDEN (WRW)	122,278	25,197	LOW
HONEYBOURNE (WRW)	5,292	2,573	LOW
NETHERCOTE (WRW)	567	450	LOW
STANLEY DOWNTON (WRW)	68,536	38,883	LOW

Key	Estimated Spare Capacity (RAG)
Not Measured	Non Measured - Scale of WwTW is below that requiring flow monitoring
Low	Not expected to be an issue
Medium	Marginal concern subject to size of development
High	Probable issue
Very High	Issue Currently being investigated

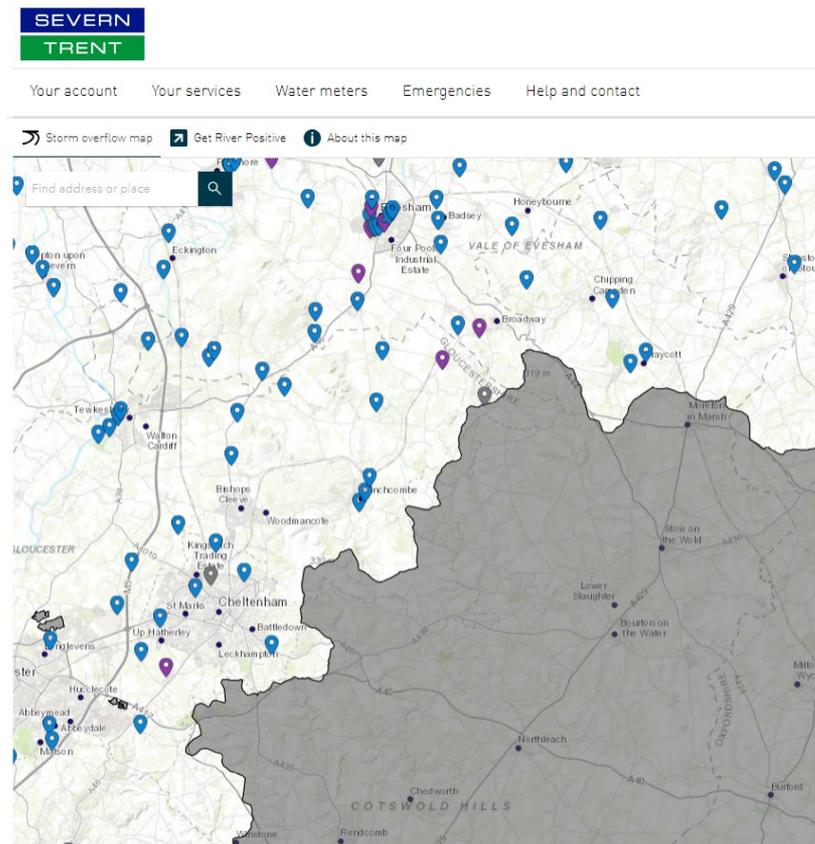
Broadway Treatment Works has a capital investment scheme ongoing to install a new oxidation ditch, completing by March 2025. This will resolve capacity issues here by increasing flows to full treatment.

# STORM OVERFLOWS

We have 7 Storm Overflows across 5 catchments within the area Severn Trent covers in the Cotswolds.



Our Storm Overflow Map can be accessed from the Severn Trent Website



# INVESTMENT PROGRAMME

### Filter pane

Reset filters

WINEP Other

AMP7 AMP8 AMP9+

Infra Non-Infra

Waste

Investment Area  
All

Operational Area  
All

Geographic County  
All

Management Catchment  
All

Surface Water Body  
All

Groundwater Body  
All

Council District  
Cotswold District

Parliamentary Constituency  
All

Site or Investment Name  
All

### Investment Area

- River water quality
- Storm overflows
- Wastewater treatment

Investment Count  
14

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SEVERN  
TRENT

Investment Area - Teams and Contacts

Last Refresh 15-Feb-25

Sum  
£17.40M

### Totex by Investment Area

Investment Area	Water or Waste	Infra / Non-Infra	Site or Investment Name	Investment Detail	WINEP Driver Code (Primary)
River water quality	Waste	Non-Infra	Blockley (STW)	Phosphate load removal in the river Stour (Avon catchm't)Phosphate removal at Blockley STWImprove Sewage Treatment Works treatment to meet an amended permit limit	EnvAct_IMP1
Storm overflows	Waste	Non-Infra	Blockley - Field Off Draycott Road (CSO)	The storage requirement is 675.55 m3. This is a grey hybrid preferred option. This will require a new screen on the outlet.	SODRP
Storm overflows	Waste	Infra	Blockley (STW)	The storage requirement is 675.55 m3. This is a grey hybrid preferred option.	SODRP
Storm overflows	Waste	Infra	Chipping Camden STW (SSTO)	The storage requirement is 675.55 m3. This is a grey hybrid preferred option.	SODRP
Storm overflows	Waste	Infra	Tetbury - Avening STW (CSO)	The storage requirement is 675.55 m3. This is a grey hybrid preferred option.	SODRP
Storm overflows	Waste	Non-Infra	Mickleton - Cotswold Edge (CSO)	This is a grey hybrid preferred option. This will require a new screen on the outlet.	SODRP
Storm overflows	Waste	Non-Infra	Saintbury - The Cross (CSO)	This is a grey hybrid preferred option. This will require a new screen on the outlet.	SODRP
Wastewater treatment	Waste	Non-Infra	Blockley (STW)	U_MON4c - install flow meter inc civils	U_MON4
Wastewater treatment	Waste	Non-Infra	AVENING (STW)	U_MON4c - install flow meter inc civils	U_MON4
Wastewater treatment	Waste	Non-Infra	CHIPPING CAMPDEN (STW)	U_MON4c - install flow meter inc civils	U_MON4

# EXAMPLES OF INVESTMENT

**Blockley Treatment Works** – We've invested £3.7M here to increase the capacity of the works. We can now treat an additional 61% increase in flow through the works. This work was completed in Feb 2024

**Long Compton** – c£1M of work has gone on here to meet a new phosphorus permit - chemical dosing and aeration of existing reed bed  
We also have plans in AMP8 to add additional capacity to accommodate expected growth

**Nethercote Treatment Works** (serves Great Wolford, Little Wolford, Toddtenham and Barton-on-the-Heath, about 4 km NE of Moreton-In-Marsh. We invested £2.3M to rebuild the works with an RBC, new reed bed and chem dosing to achieve the new P permit.

**Cherington Treatment Works** – we're now able to treat 70% more wastewater at this site due to new inlet pipes and new permits.

**Honeybourne Treatment Works** - it sits just in Stradford DC, but serves Mickleton, Aston Subedge, Weston-sub-Edge and Willesey – we have invested £8.3M to upgrade the inlet works, Tertiary Ammonia Removal plant, Tertiary Solids Removal plant, and chemical dosing.

We are investing at four works on the edge of the Cotswolds - **Alderton, Ashton under Hill, Beckford and Toddington** to accommodate growth, which is precipitating increased capacity and tighter permit limits (higher standard of water recycled to the environment). Solutions are still being developed, but will be £15-20M across these works

**Broadway Treatment Works** has a capital investment scheme ongoing to install a new oxidation ditch, due to be completed by March 2025. This will resolve capacity issues here by increasing flows to full treatment

# APPROACH TO NEW DEVELOPMENT



We are consulted on new developments planned in our catchment



We respond to Local Planning Consultations and Planning Applications. This includes Water Cycle Studies, Strategic Flood Risk Assessments and encouragement of water efficiency standards.



We undertake Sewer Capacity Assessments to identify where there may be risks and where improvement activity may be required.



We work with developers to ensure their plans reduce surface water connections to the foul sewer network and use approved building standards.

# PLANS FOR MANAGING WASTEWATER AND WATER QUALITY

# GET RIVER POSITIVE

- Rivers matter to us and nature. They are crucial for maintaining ecosystems 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 forward further improvements to our environment, whilst supporting others to do the same.
- We developed five ambitious pledges for us to be able to track our progress against
- After a successful year, the Advisory Panel members have all agreed to continue and we have enhanced the panel through the representation of an additional river user group PaddleUK alongside our land use and habitat experts.



## 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



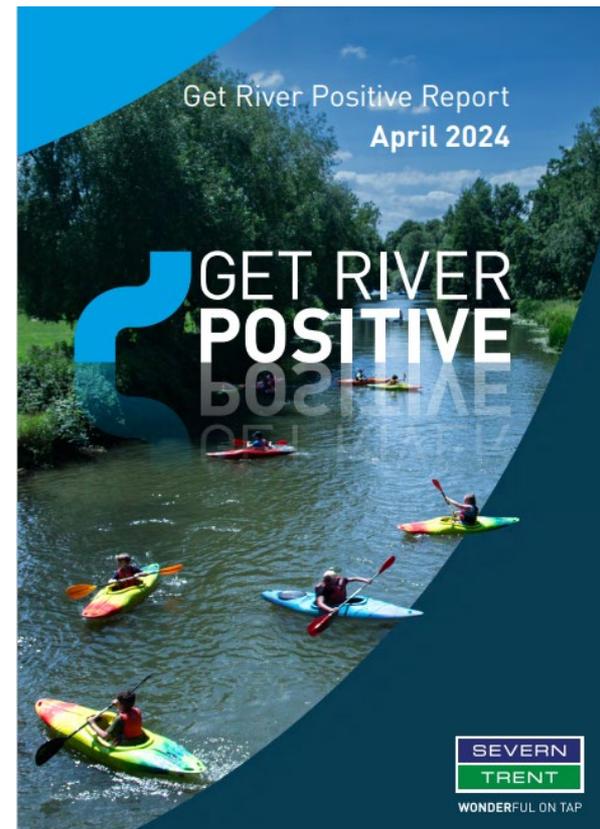
## PLEDGE FOUR

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.

# GET RIVER POSITIVE

FACT SHEET  
APRIL 2024

## Our network:



**3.1 billion**  
litres of wastewater treated  
every day and manage  
**>92,800km**  
of pipes



**300 million**  
data points about how  
our storm overflows  
are performing  
in a year



**100%**  
of our  
storm overflows have  
event duration  
monitors

## Our progress:



Continuing to invest  
**£100m**  
a year on our  
waste network



Increasing **sewer  
capacity** and  
**storage** to slow  
the flow of storm water  
during wet weather



We continue to work with  
our **Advisory Panel**  
who oversee our progress  
against our river pledges.  
We expanded membership  
this year to  
**seven** experts

## Our bigger efforts:



Moving **two**  
stretches of river  
towards bathing  
quality by **2025**



Received the highest  
**four-star rating**  
from the Environment Agency  
for the fourth year running in  
2023 and are confident  
we will be awarded the highest  
rating for an unprecedented  
fifth year in 2023



Severn Trent is  
currently responsible  
for **14%** of RNAGs  
in our region



**10** River Rangers,  
working in  
communities and with  
partners to improve  
river health

## RAIN RAIN RAIN

You've seen some of the  
wettest months on record.

**35%**

more rain  
in the region  
compared to 2022.

**30%**

close to **30%** of river  
gauge stations in our  
region recorded their  
highest ever levels in  
**October** during  
Storm Babet.

## WHERE DOES THE RAIN GO?

Our sewers deal with  
rainfall on roads and  
built-up areas. But they can  
sometimes get too full.



During wet weather  
**storm overflows**  
act like a release  
valve and **protect**  
homes from flooding.

**Heavy rain** means that  
the majority of  
**storm overflows** spill  
is rain water.

We can now see  
**300million**  
data points on our  
monitored overflows  
every single year.



## WE'RE WORKING ON IT

We're improving the  
network. That means fewer  
spills from storm overflows.



**£384m**  
current programme  
of investment

**Our aim:** no storm overflow  
to spill more than  
times a year,  
on average.



**£1.1bn**

in **2025-2030**  
to meet targets at least  
**five** years ahead of  
those set by regulators  
and Government.

## HOW WE'LL DO IT

Here's where you'll  
see the difference.

**1**

**Separation**  
Keeping rainwater  
out of our  
sewer  
system.

**2**

**Treatment**

Treating more sewage  
reduces spills.

**3**

**Storage**

Additional capacity  
storing water during  
heavy rainfall.

- We have reduced our impact on rivers to be responsible for 14% of RNAGs in our region.
- Despite the wet weather challenges, we have had no serious pollutions in 2023.

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.

## River Ranger Team



We've carried out over 7,200 riverside inspections in the area, and held over 100 stakeholder meetings in Gloucestershire



You can get in touch with the team:  
[RiverRangers@severntrent.co.uk](mailto:RiverRangers@severntrent.co.uk)

# QUESTIONS?