Public Meeting

East Harptree Parish Council

Sewage Discharges and Sewage Treatment - What's going on?

Phil Strange MCGI Head of Water Recycling Treatment

Julian Okoye MBA CEng MIET Infrastructure and Environmental Engagement Lead

East Harptree Parish Council

Serving our community - Caring about our future

Wessex Water

YTL GROUP

East Harptree Parish Council
Email to Wessex Water – July 2026

Wessex Water
YTL GROUP

Serious concern about the operation of the recycling works located in East Harptree at Townsend

Specifically:

1) The frequency and extensive duration of discharges, regardless of weather

2) The effect on the ecological status of the river and Chew Valley lake,

3) The very frequent use of tankers to and from site, at all hours

4) Timescales for improvements

5) The nuisance to the residents of Townsend and community concerns.

Additional questions and concerns

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Is the plant at capacity - is it fit for purpose?

What is the frequency and duration of Sewage discharge figures?
Why do they happen?

What are our plans to tackle discharges and nutrients?

What about public health and Real Time Water Quality Alerts?

What about Investment Bills Profits?

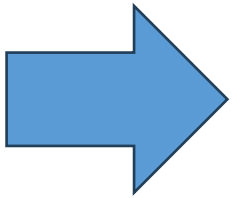
What is going on?

What action are we taking?

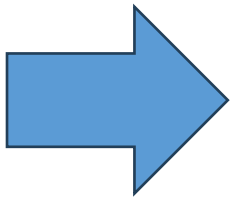
Presentation overview

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What is going on?



What's the problem?



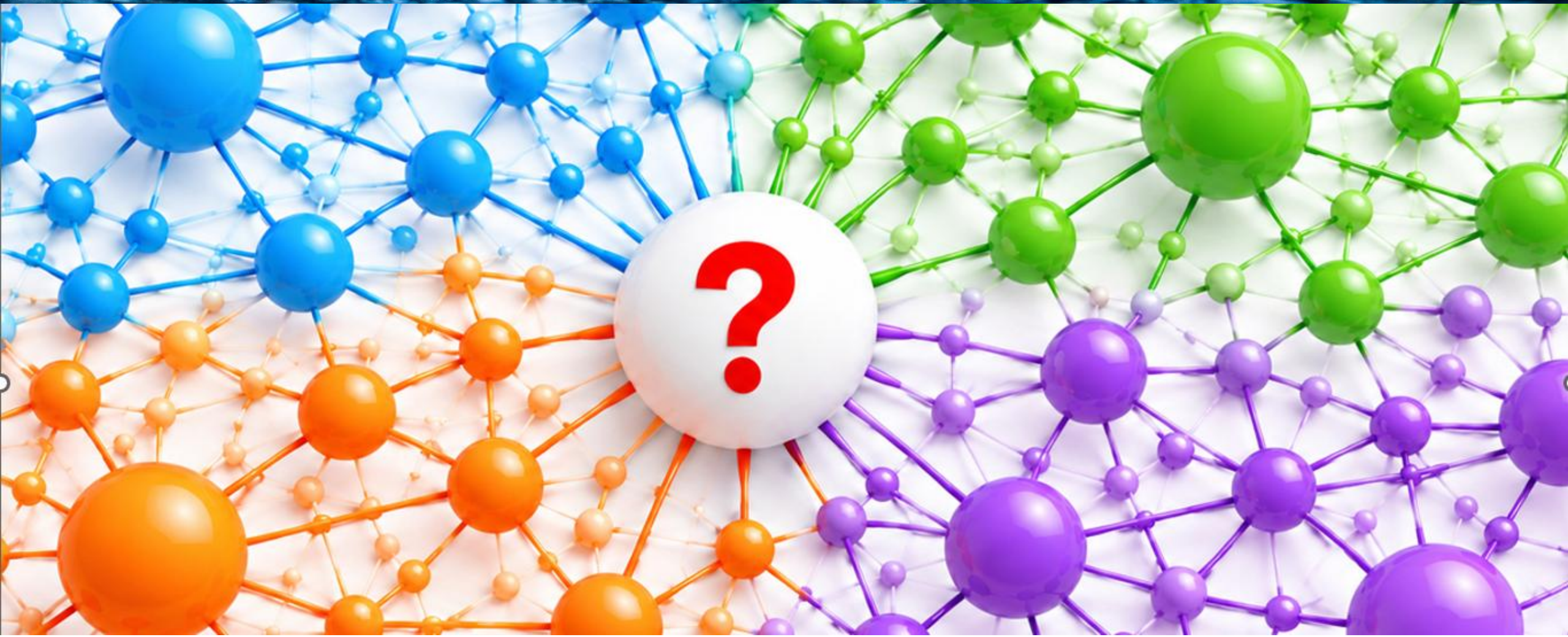
What we are doing about it

How you can help

What is going on?

It’s complicated

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Not a single problem with a single solution!

Legacy infrastructure issues.
Increasing regulatory requirements

New environmental obligations.
Major Investment plans.

Unidentified pollution

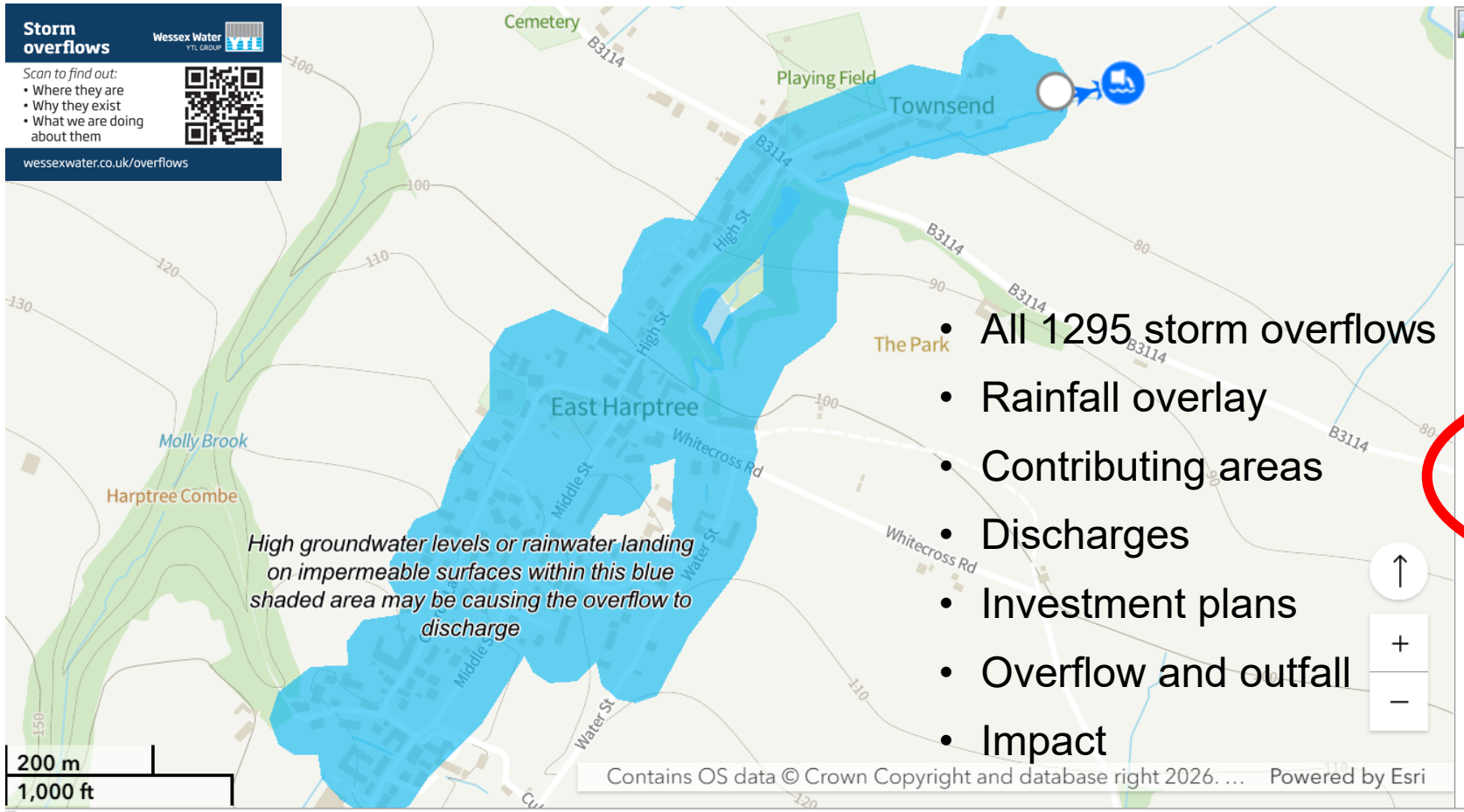
Sewage discharges

East Harptree Storm Overflow Discharges

Wessex Water YTL GROUP

Wessex Water YTL GROUP Coast and Rivers Watch

Storm Overflow Location Details



- All 1295 storm overflows
- Rainfall overlay
- Contributing areas
- Discharges
- Investment plans
- Overflow and outfall
- Impact

EAST HARPTREE STORM TANK

No recent discharges

< Return to Regional Overview

Discharges	Site Summary	Rainfall
Impact	Investment Plans	Any Questions?

Discharge History (number of discharges per year, which approximately equates to how many days saw discharging activity, regardless of duration)

Discharges in 2023: 174
Discharges in 2024: 141
Discharges in 2025: 99
Discharges in 2026 (to end of August): 81

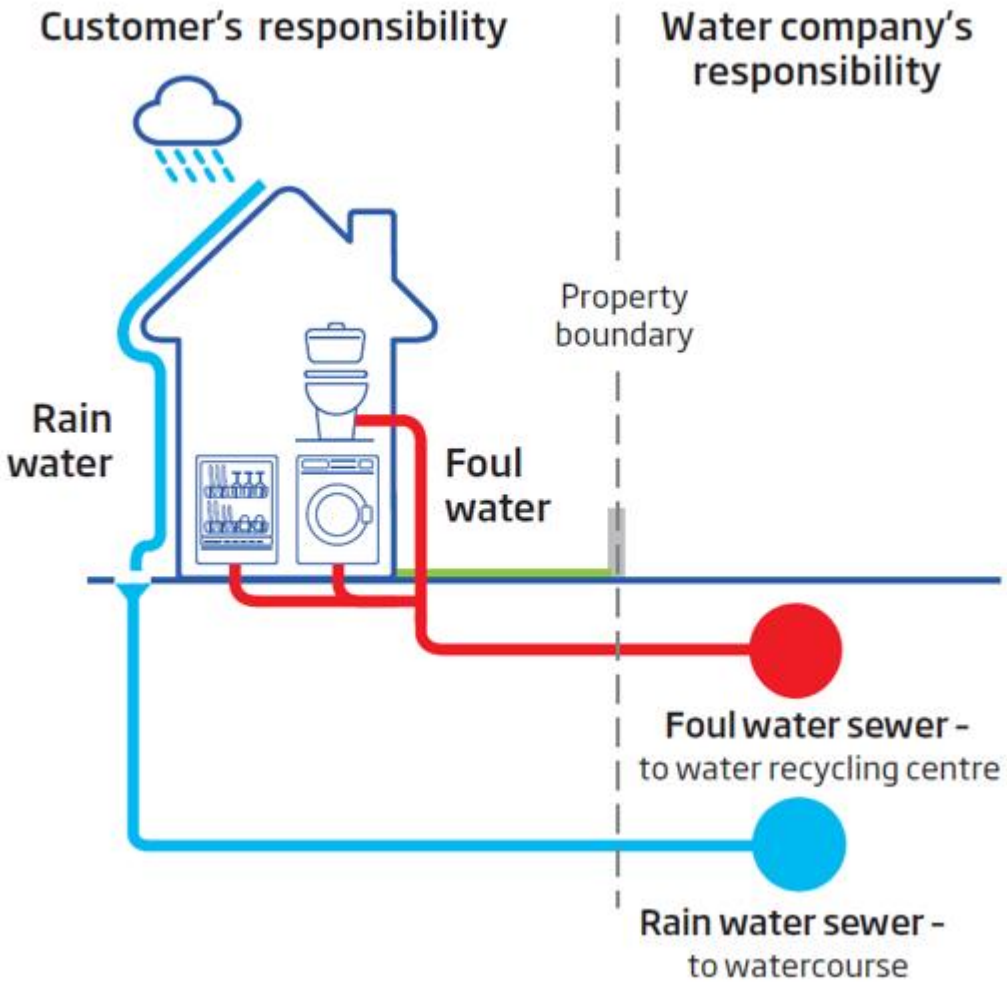
What's getting in the sewer causing it to discharge?

When the surrounding water table is high, this overflow is known to be affected by groundwater. At other times, the overflow discharges due to rainwater entering the sewer

What's the problem?

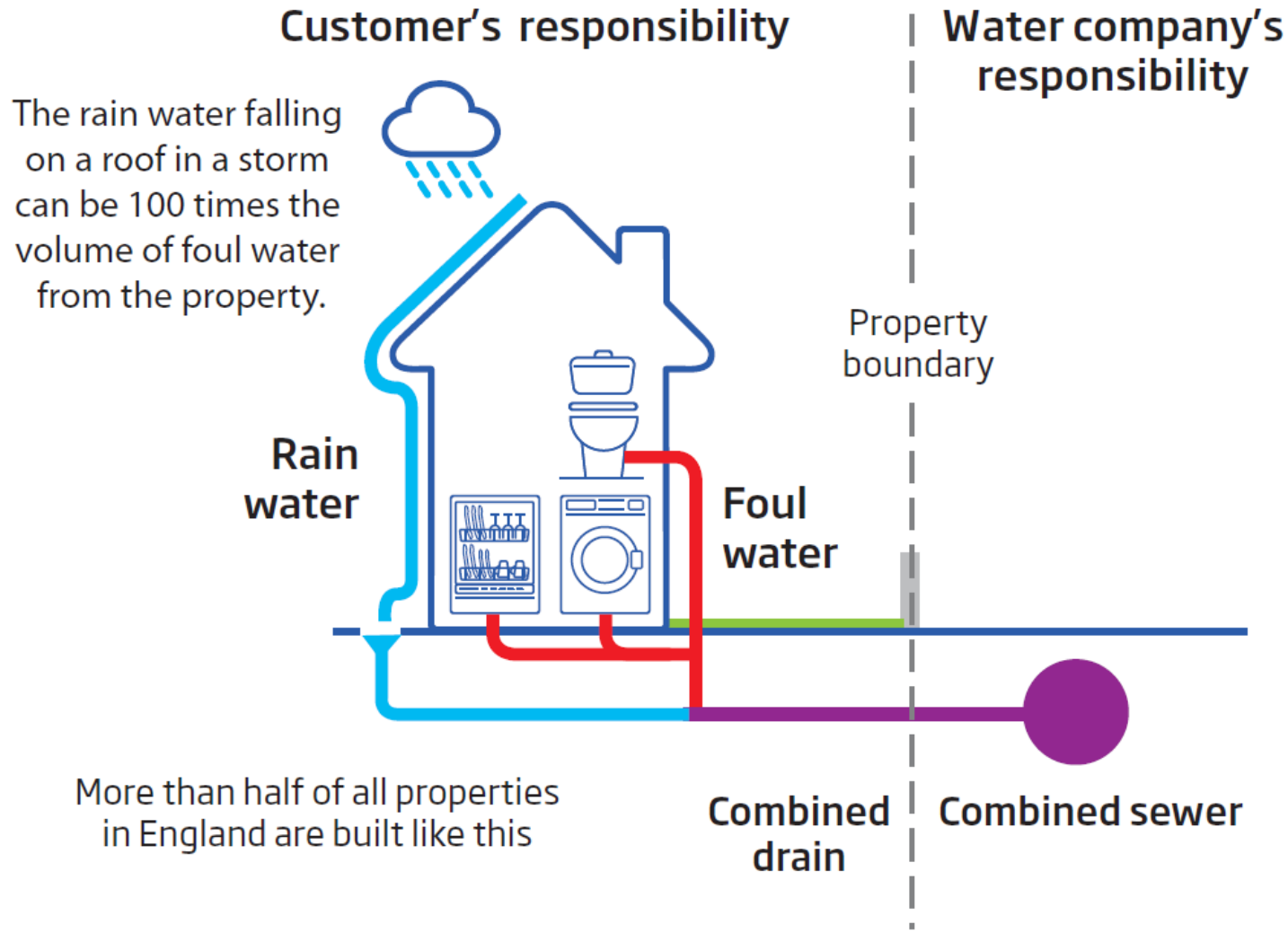
Understanding

How we build houses now



How most houses are built

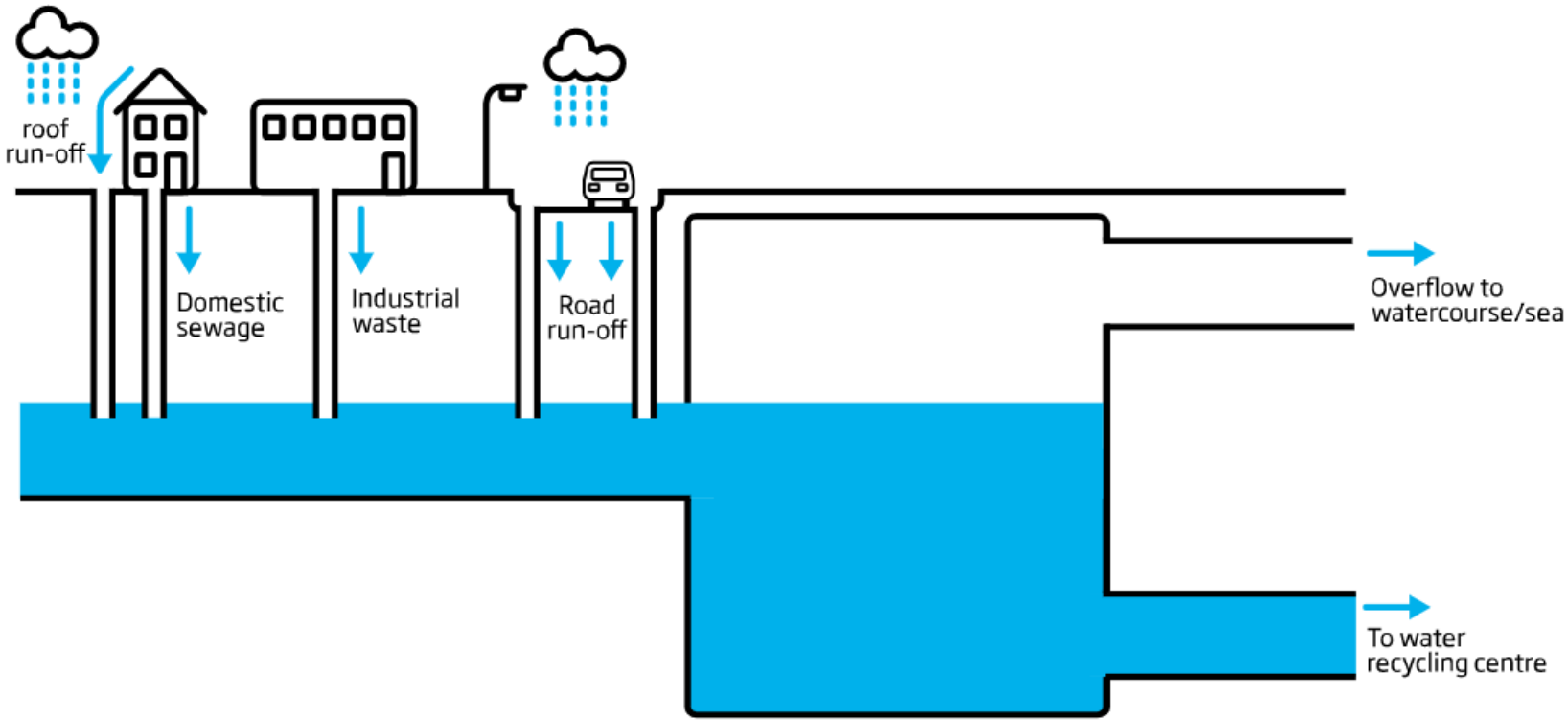
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Understanding the problem

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First principles

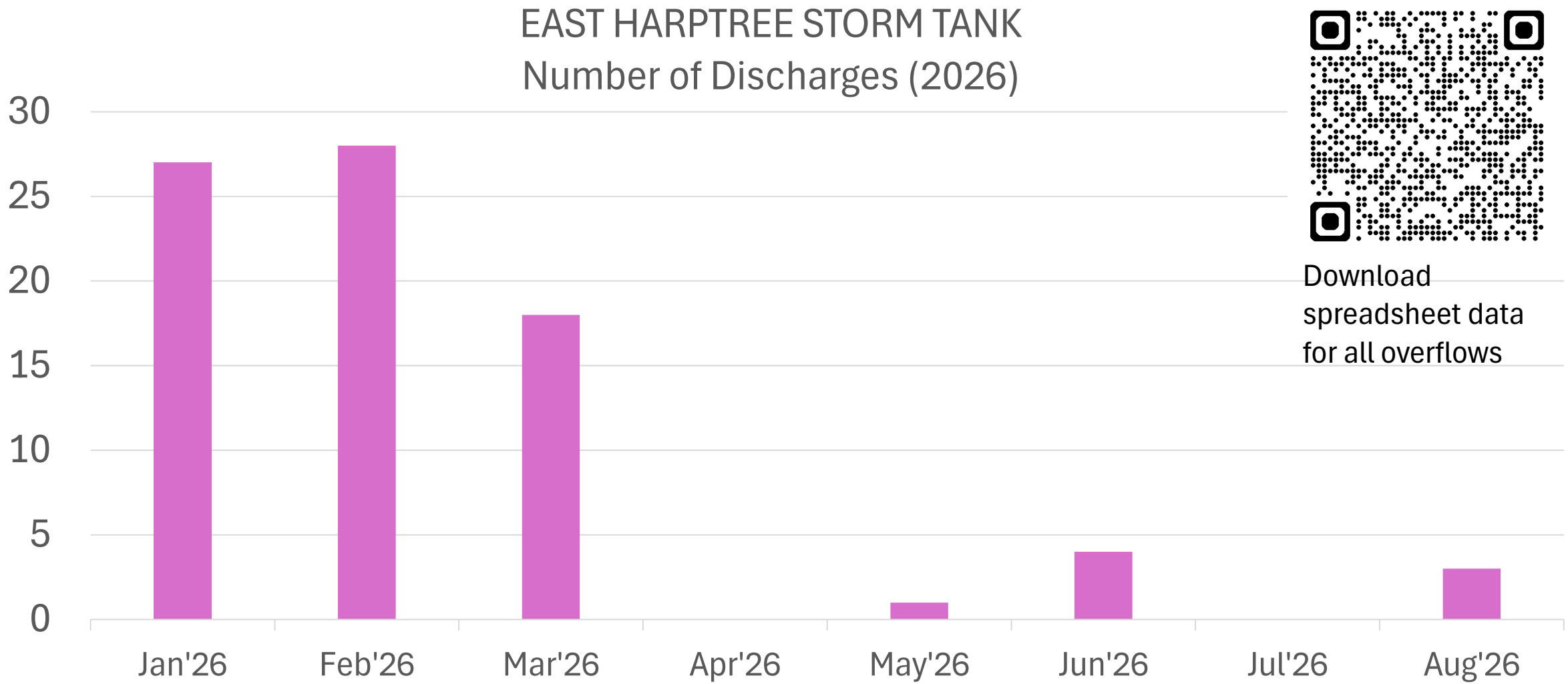


Increasing challenges:

- More intense rain fall
- Increasing population
- Increasing urbanisation
- Increasing impermeable surfaces

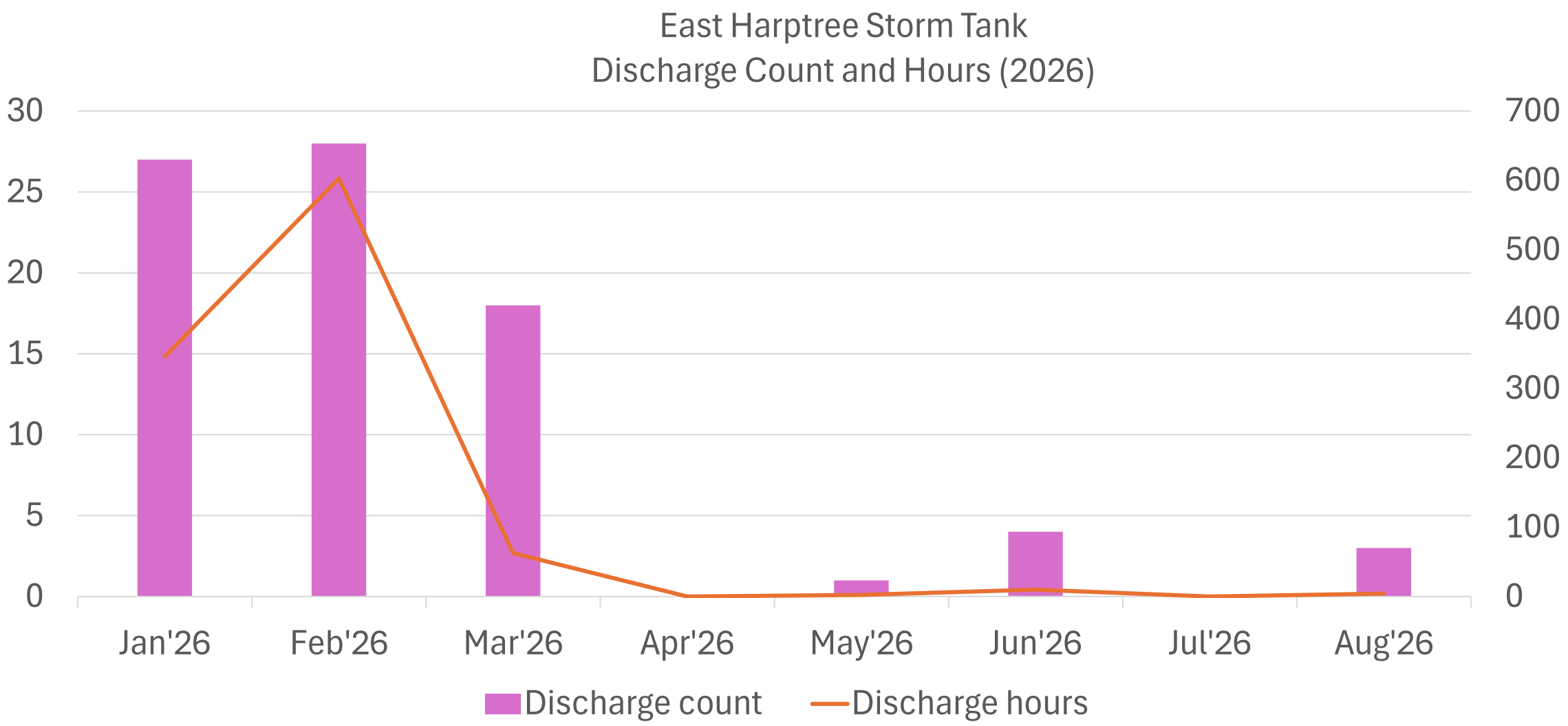
ABC of storm overflows

East Harptree
Storm overflow discharge frequency



Download spreadsheet data for all overflows

East Haprtree
Storm overflow discharge frequency and duration (hours)



Discharge data

EAST HARPTREE STORM TANK	JAN'26	FEB'26	MAR'26	APR'26	MAY'26	JUN'26	JUL'26	AUG'26
Discharge frequency count (No)	27	28	18	0	1	4	0	3
Discharge (hours)	346	603	63	0	2	10	0	4

East Harptree Rainfall Profile 2026

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Rainfall Over Time

Data covers 1km square centred on Easting 357500 Northing 156500

About This Page

Filter Pane: Off

4 Selections made

AREA_VALUE	EAST HARPTREE STW CATCHMENT
AREA_TYPE	STW Catchment

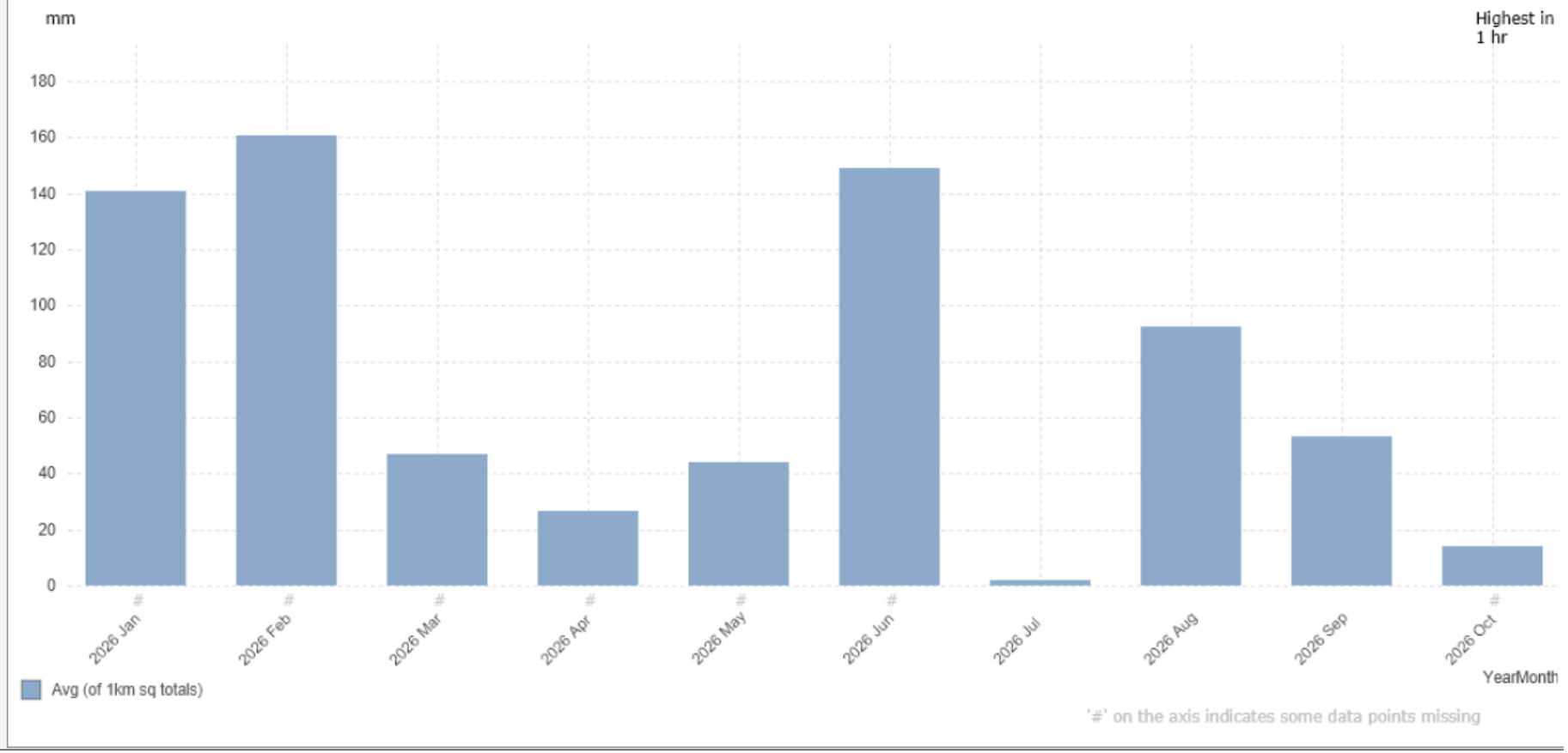
Monthly | Weekly | Daily | Hourly | Daily Avg & Total | Daily Depth by Catchment | Dry Periods | Wet Periods | Tipping Bucket Gauges | Data Completeness

Year
2026
2025
2024

YearMonth
2026 Oct
2026 Sep
2026 Aug
2026 Jul
2026 Jun
2026 May
2026 Apr
2026 Mar
2026 Feb
2026 Jan
2025 Dec
2025 Nov
2025 Oct

YearWeek	Date
2026/42	07/08/2026
2026/41	06/08/2026
2026/40	05/08/2026
2026/39	04/08/2026
2026/38	03/08/2026
2026/37	02/08/2026
2026/36	01/08/2026
2026/35	31/07/2026
2026/34	30/07/2026
2026/33	29/07/2026
2026/32	28/07/2026
2026/31	27/07/2026
2026/30	26/07/2026
2026/29	25/07/2026
2026/28	24/07/2026

Rainfall



East Harptree overflows – rain response

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Storm responsive but there is more ……

Sewer investigations

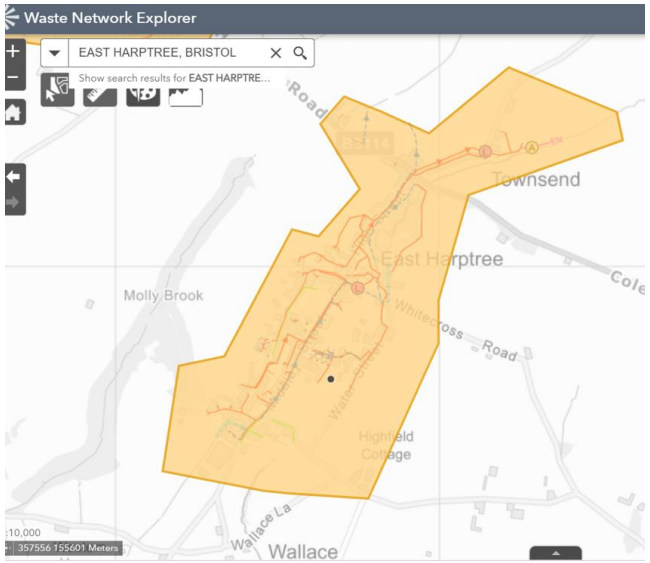
Waste Network Explorer

EAST HARPTREE, BRISTOL

Show search results for EAST HARPTRE...

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East Harptree
Water Recycling Catchment



Sewer investigation - CCTV

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Groundwater Infiltration

2.5km surveyed

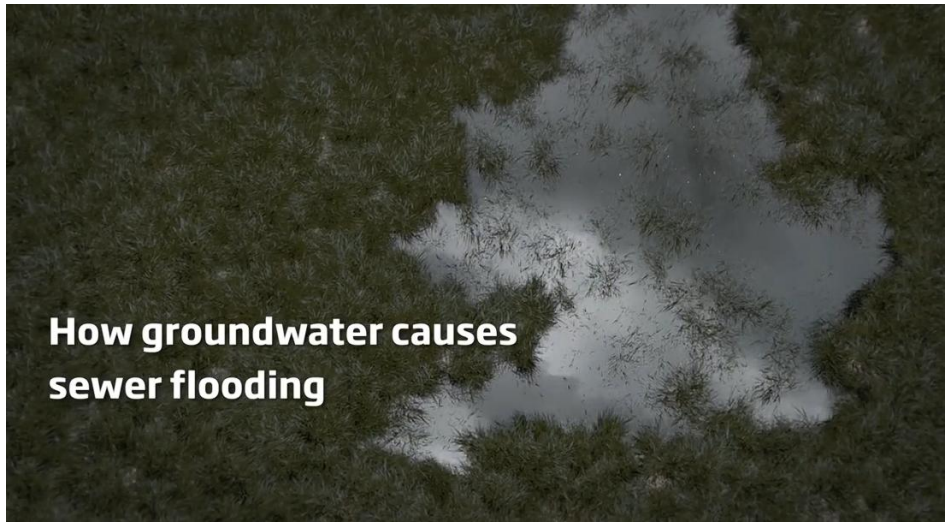
Catchment Activity Overview - Storm Overflows

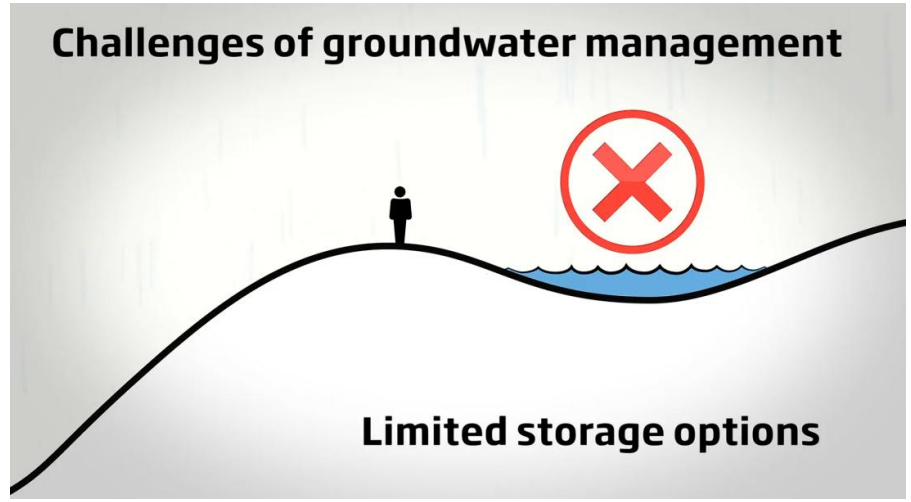
Key: Sealing (S), Investigation (I)

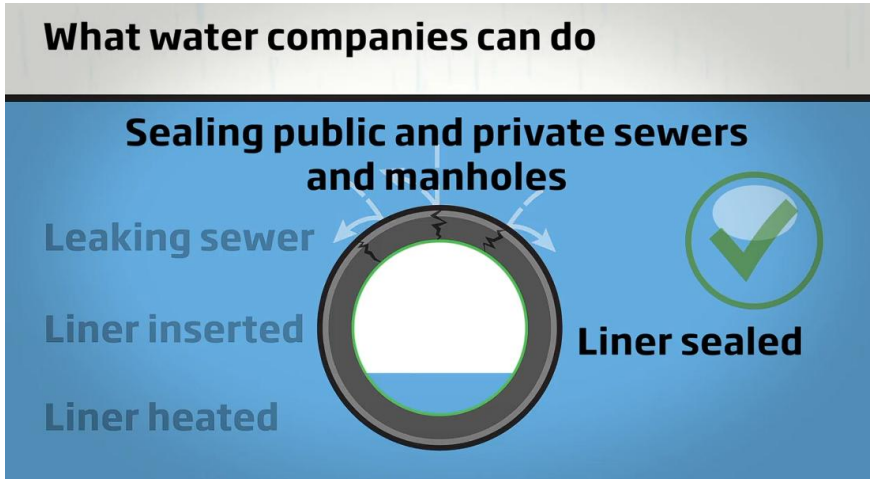
Water Recycling Centre	Overflow ID	Overflow Name	2023/24	2024/25	2025/26	2026/27
EAST HARPTREE	13106S	EAST HARPTREE WRC		I		I

Explainer video

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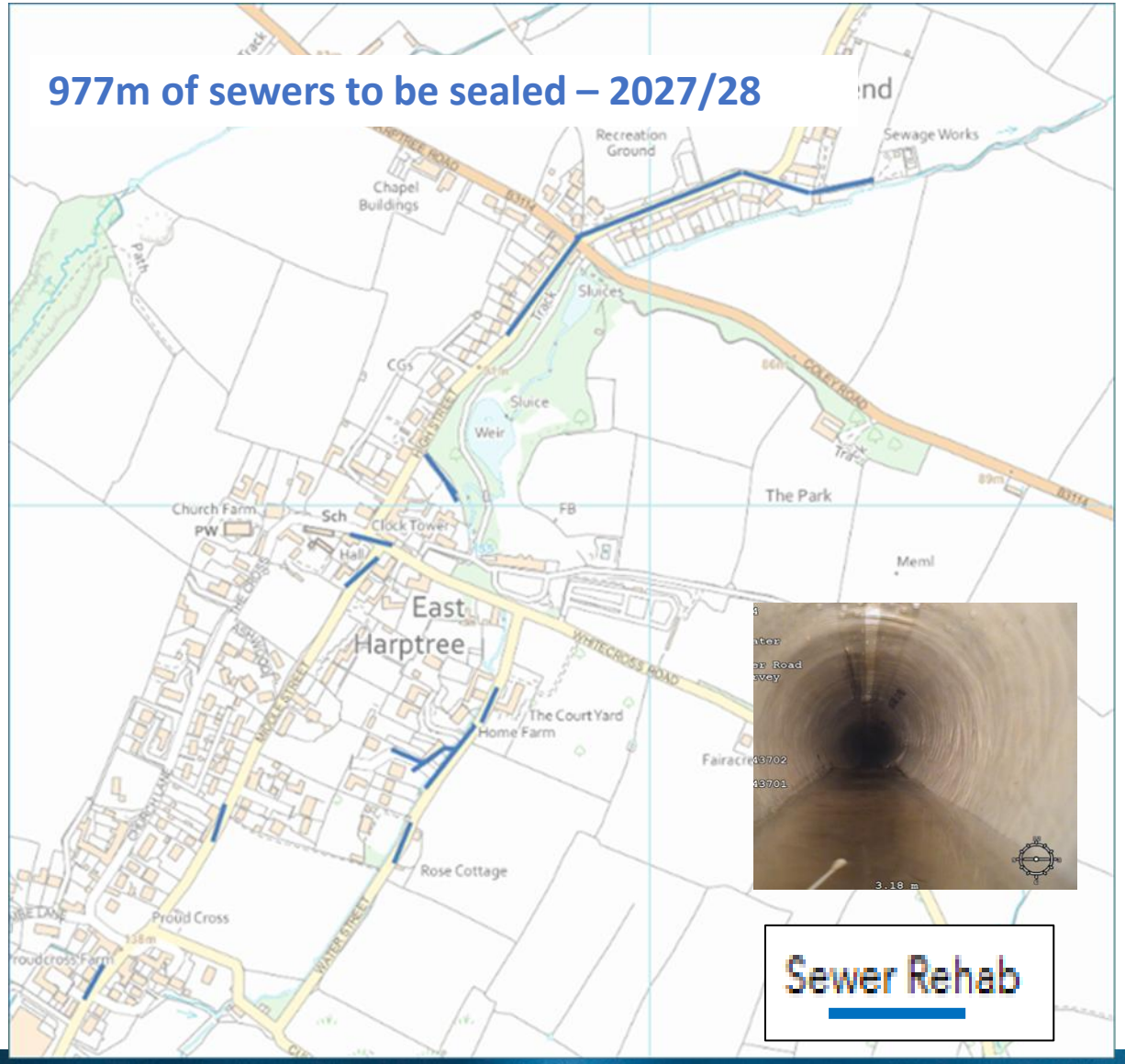




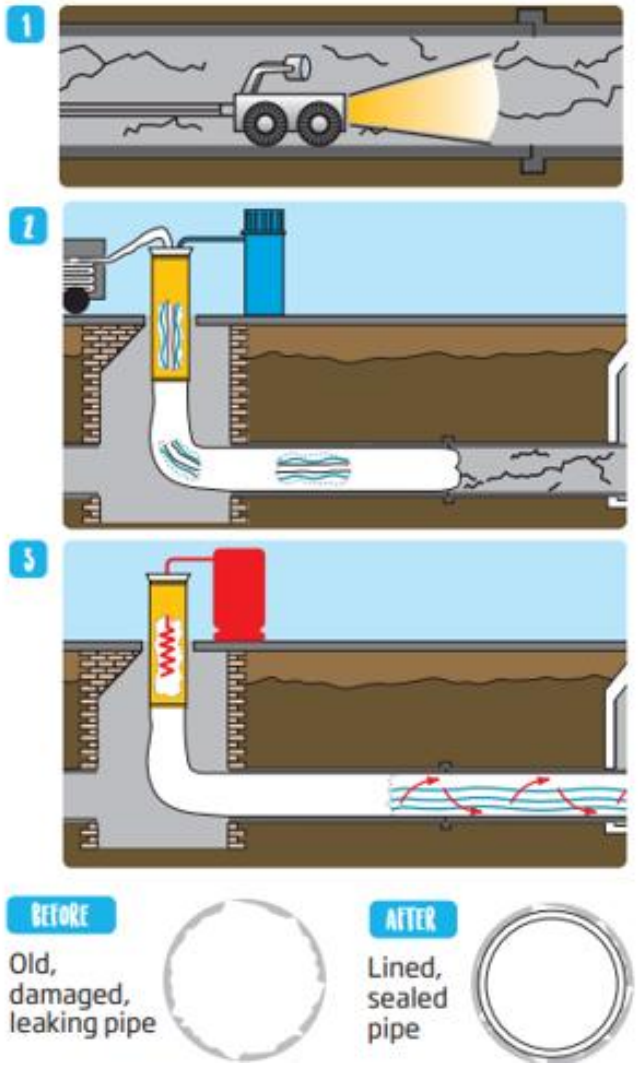
East Harptree Sewer Sealing Project

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977m of sewers to be sealed – 2027/28



Sewer Rehab



Cured In Place Pipeline (CIPP) Lining Technique

- Quicker and less intrusive than excavation and replacement
- Liner impregnated resin
- Pushed through existing pipe using water or air pressure
- Cured in place with hot water or steam.

Ecological Impact

Ecological Impact

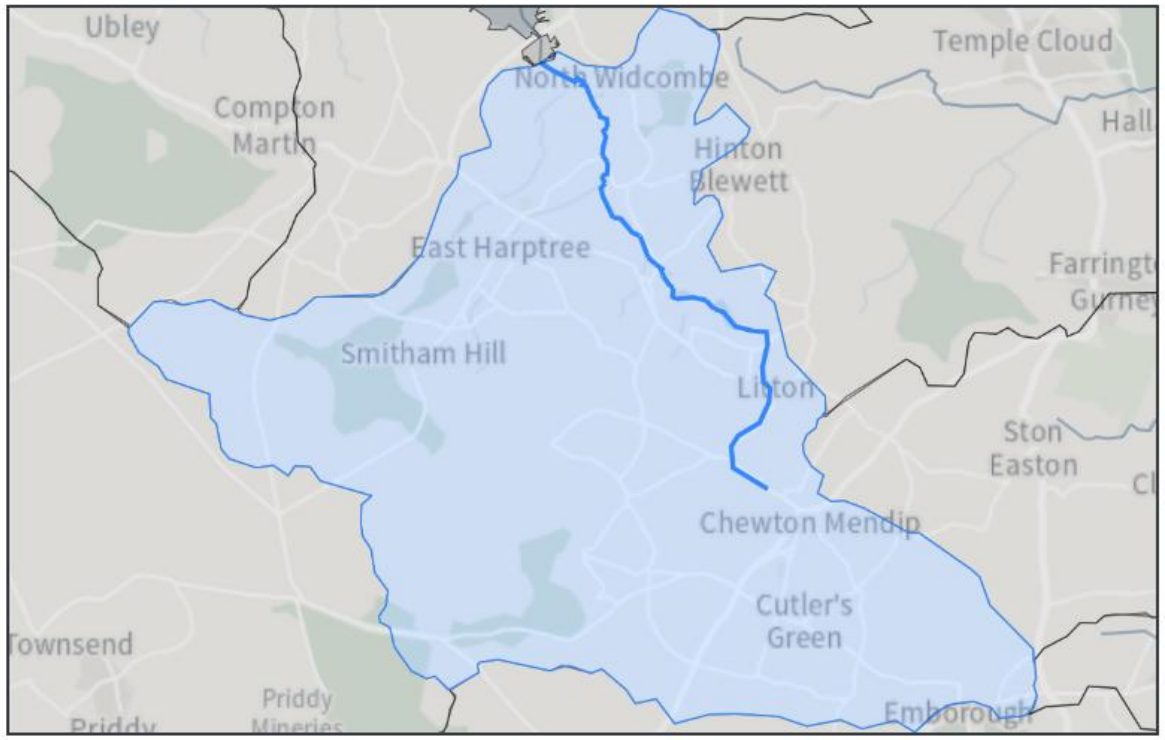
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Environment Agency | Catchment Data Explorer | Home | Search | Help | API

Home / Severn / Avon Bristol and Somerset North Streams / Avon Bristol Rural / Chew - source to Chew Valley Lake

Chew - source to Chew Valley Lake Water Body

Poor ecological status



Get Chew - source to Chew Valley Lake data

Download water body (Shapefile)
Download water body (GeoJSON)
Download classifications (CSV)
Download site classifications (CSV)
Download investigations (CSV)
Download challenges (CSV)
Download objectives (CSV)
Download protected areas (CSV)

Related links

Plan maps on ArcGIS online
Flood risk management plans

EA Catchment Data Explorer

RNAGS and RFDS.

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Reasons for not achieving good (RNAG) and reasons for deterioration (RFD)

All reasons (RFDs and RNAGs) attributed to the classification elements in this water body.

Reason Type	SWMI	Activity	Category	Classification Element	More information
RNAG	Diffuse source	Poor nutrient management	Agriculture and rural land management	Fish	Details
RNAG	Diffuse source	Poor soil management	Agriculture and rural land management	Fish	Details
RNAG	Physical modification	Barriers - ecological discontinuity	Water Industry	Fish	Details
RFD	Invasive non-native species	Other fish	No sector responsible	Fish	Details
RNAG	Suspect data	Not applicable	No sector responsible	Fish	Details
RNAG	Unknown (pending investigation)	Unknown (pending investigation)	Sector under investigation	Perfluorooctane sulphonate (PFOS)	Details
RNAG	measures delivered to address reason, awaiting recovery	Not applicable	No sector responsible	Mercury and Its Compounds	Details
RNAG	measures delivered to address reason, awaiting recovery	Not applicable	No sector responsible	Polybrominated diphenyl ethers (PBDE)	Details
RNAG	Point source	Abandoned mine	Mining and quarrying	Cadmium and Its Compounds	Details
RNAG	Point source	Abandoned mine	Mining and quarrying	Zinc	Details
RNAG	Flow	Surface water abstraction	Water Industry	Hydrological Regime	Details

Storm overflows

Intermittent discharges **not** identified as RNAG

Reason for not achieving Good

However……

Major Investment

Major Investment planned at East Harptree WRC

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Nature based solutions to tackle:

1) Phosphorous removal - **treated** discharges.
   Delivery by **2030.** **In Design**. New target 3 mg/l

2) Groundwater influenced storm overflow activity
   Delivery by **2035.**

Nature based solution

Examples - wetlands or reedbeds.

- Behaves as filtration systems,
- Slows the water's journey back to the environment.
- Allows suspended silt to settle on the wetland bed
- Traps environmental contaminants. in the roots of the plants,
- Slowing the water allows the water chemistry to rebalance,
- Naturally occurring bacteria have time to convert toxic nutrients from the sewerage system,



Reference picture of Cromhall wetland

Unidentified source of pollution

Reason for the frequent use of tankers at East Harptree.

Persistent and recurring unidentified source of pollution from the catchment.

Over £250,000 spent investigating



EVIDENCE AT THE INLET

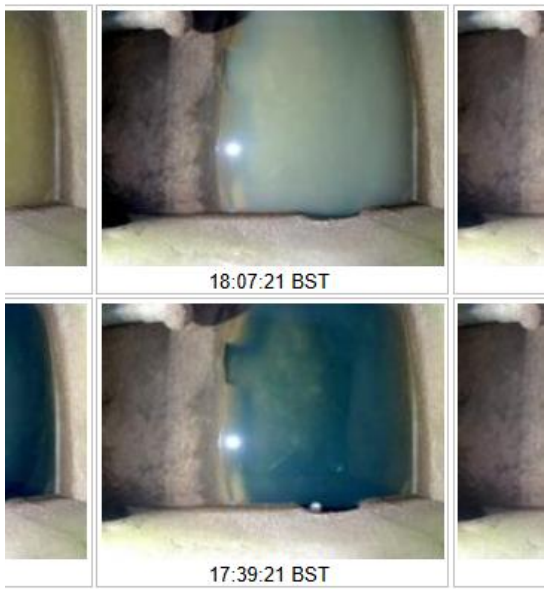
What the inlet camera is showing



NORMAL CRUDE



WHITE



BLUE / TEAL



BROWN

The other photos show abnormal incoming flow, captured at three-minute intervals. Colour alone does not identify a substance. Repeated or strong discolouration triggers assessment and operational action.

The range of unusual appearances recorded



GREEN



BLUE / TEAL



RED



CREAM / YELLOW

The records include blue, red/pink, strong white, green and brown observations. Some entries prompt immediate attendance, sampling, primary settlement actions and close monitoring.

Why “high-strength” incoming flow matters



The treatment process is biological

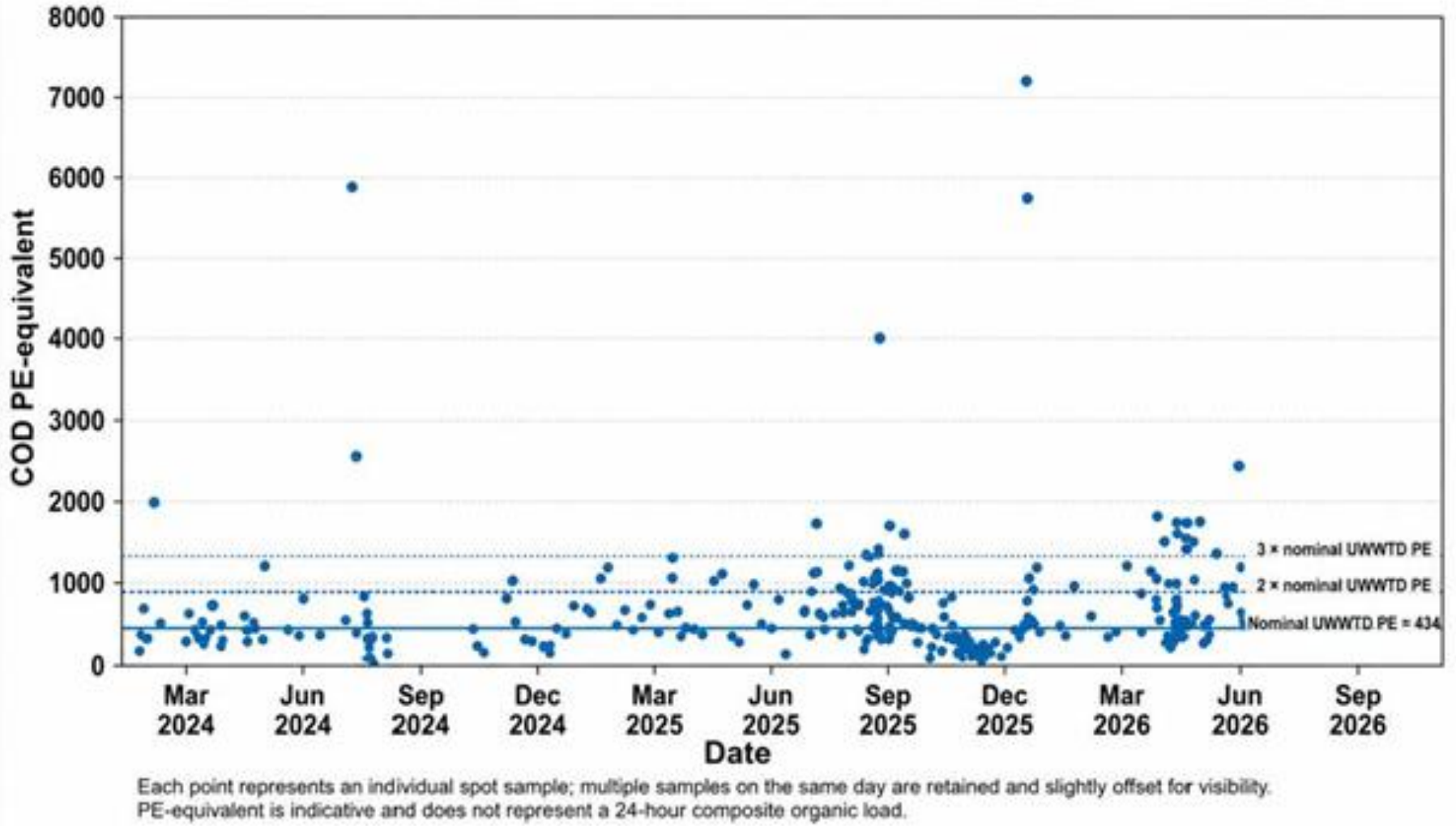
Healthy biomass removes organic matter and ammonia as wastewater moves through the site.

A sudden strong or unusual load can overwhelm, kill or strip biomass from the biological filters.

Recovery takes time because the bacterial population must regrow before treatment is fully resilient again.

Biology needs stability

Crude strength expressed as population equivalent



Source: East Harptree Process email

Tankering is a protective response, not the cause of the underlying issue.

1 Unusual material arrives

Incoming flow can be visibly different from normal sewage and may have unusually high strength.

2 Biology is affected

The site relies on living bacteria. Strong or unusual inputs can damage or strip that biomass.

3 We intervene

If final effluent may not be suitable for safe discharge, it is removed by tanker to protect the environment.

The tanker movements are a visible sign of environmental protection in action.

What are we doing about it?

Continuing to:

- Act swiftly to protect the environment
- Monitor and investigate.
- Refine alarms and response arrangements.
- Investigate ways to reduce false alarms.
- Keep disruption under review
- Use tanker movements only where operationally required.

What do we need from you?

Your help to spread the word to avoid environmental pollution

What you can do to help

Small everyday actions can help protect the sewer network, treatment process and local environment.

1 Only flush the 3 Ps

- Pee, poo and toilet paper are the only things that should be flushed.
- Put wet wipes, even those labelled “flushable”, sanitary products, nappies, cotton buds and other items in the bin.

2 Keep fats and food out

- Allow fats, oils and grease to cool, collect them in a container and place them with household rubbish.
- Use a sink strainer and scrape food waste into the bin rather than washing it down the sink.

3 Think before you pour

- Do not put paint, chemicals, oils, solvents or other unusual liquids into sinks, drains or road gullies.
- Businesses should check that any trade effluent is correctly authorised and contact Wessex Water if unsure.

Ask Wessex Water about blockage-prevention advice and free products such as sink strainers and grease pots.

Please be on the lookout. If you notice activity around any sewer covers and are unsure or concerned, please do not hesitate to contact us.

Next steps
Programme of continuous improvement

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2026

Ongoing monitoring and investigation tackling unidentified source of pollution

2027/2028

Sewer Sealing
Tackling Ground Water Infiltration

2028 - 2030

Nature Based Solution
Phosphorus Removal

2030 - 2035

Nature Based Solution
Ground Water Infiltration

(Proposed subject to regulatory approval.)

Questions

Appendix – References

Investment 2025 - 2030

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£3.65 billion

Protecting and improving rivers and coastal water quality

~£1.4 billion

Storm overflow improvements

£515m ~£8.5m/month

143 improvements

36 NBS

Nutrient removal

£820 million

122 WRCs

Smart Rivers

£63 million

470 locations

Key investment areas

Nutrients - £820million

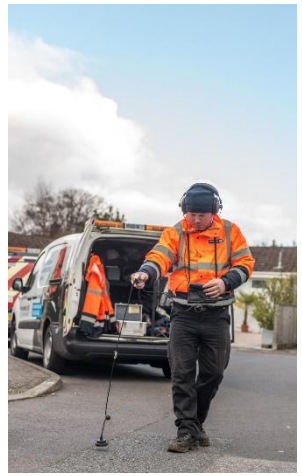




Storm overflows - £515 million

Water resilience - £130 million

- Leakage reduction
- Smart metering / water efficiency
- New supply options





£53m to improve drinking water quality
(including PFAS reduction measures)



Capital maintenance - £800 million

Bills (2026/27)

Average combined bill

- £669 per year
- £56 per month
- 3% increase

Water supply measured charge

- 0.03p/litre (Wessex Water)

Waste water

- 0.027p/litre

