

SEVERN TRENT WATER

REDUCING COMMUNICATION PIPE LEAKAGE ON SEVERN TRENT'S NETWORK

USING NO-DIG REPAIR TECHNOLOGY

Stuart Leach
September 2026



WONDERFUL ON TAP

INTRODUCTION

Stuart Leach, SMART Metering Lead, Water Networks, **Severn Trent Water**

Communication pipe leaks are often difficult to locate and costly to repair, resulting in water loss, operational inefficiencies, and customer disruption. Recognising this challenge, Severn Trent Water and Origin have collaborated to develop a smarter, targeted approach that combines advanced leak identification with innovative no-dig repair technology. This approach enables us to repair leaks more quickly, minimise disruption, reduce costs, and improve customer outcomes.

Today, I will take you through:

- Severn Trent's leakage reduction strategy
- How we are using no-dig technology to transform communication pipe repairs
- The benefits and opportunities this creates for the business and our customers over the last 12 months
- A case study showcasing the results in practice

SEVERN TRENT & HAFREN DYFRDWY

INTRODUCING

Severn Trent & Hafren Dyfrdwy

Delivering life's most essential service



>170

Surface and ground water sites



8+

Million customers



2

Billion litres of water supplied every day



~50,000km of main



4,000+ DMA's

Our Area

The region we serve

HAFREN
DYFRDWY
severn dee



Environmental Leadership

Only water company to have achieved EA's four star rating 6 years in a row



Trusted

Serving generations with care and integrity

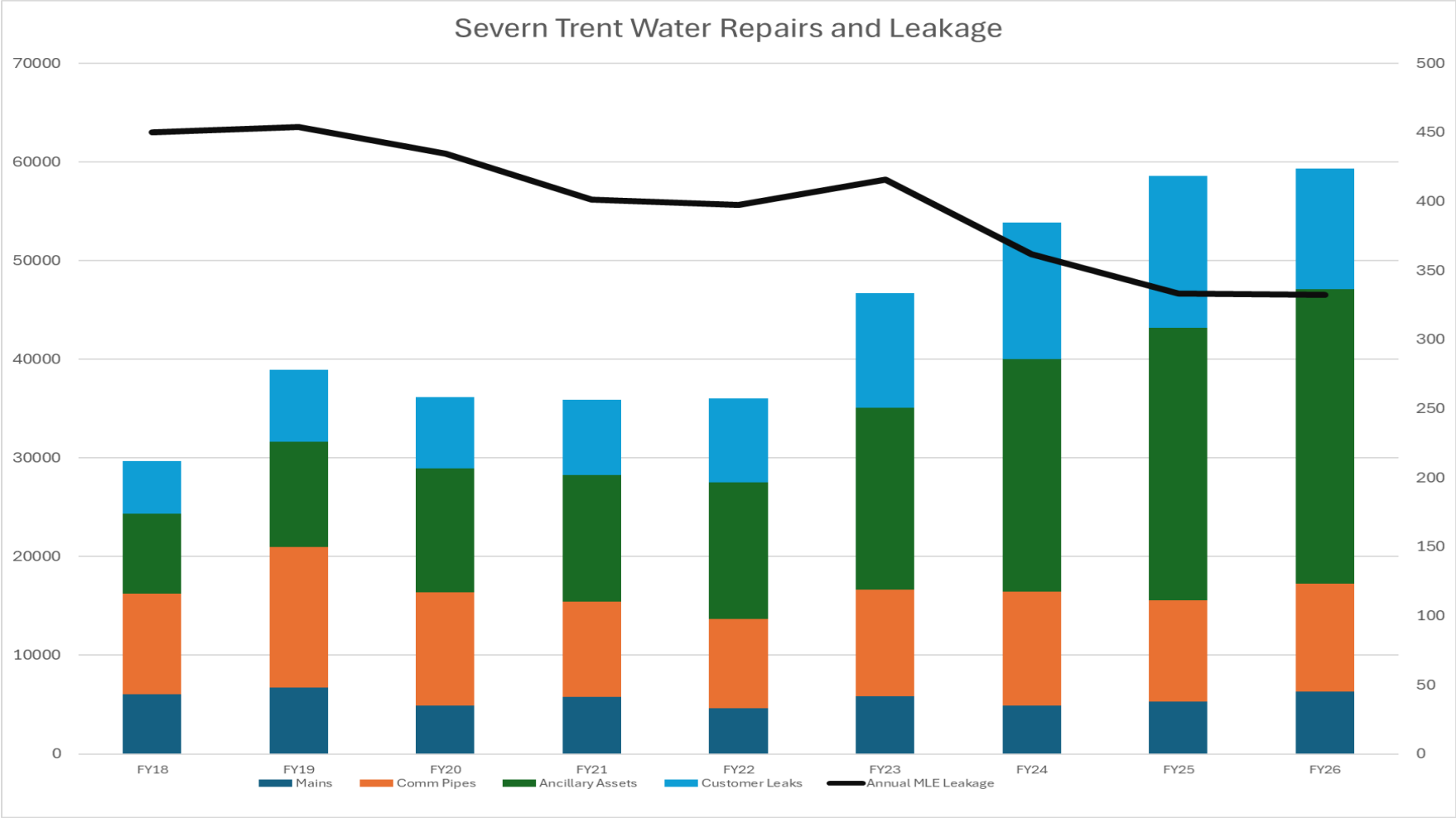


Sustainable

Investing in a resilient and better future

SEVERN
TRENT

SEVERN TRENT & LEAKAGE



REDUCING LEAKAGE BY FIXING LEAKS



Mains



Ancillary Assets



Comm Pipes



Customer



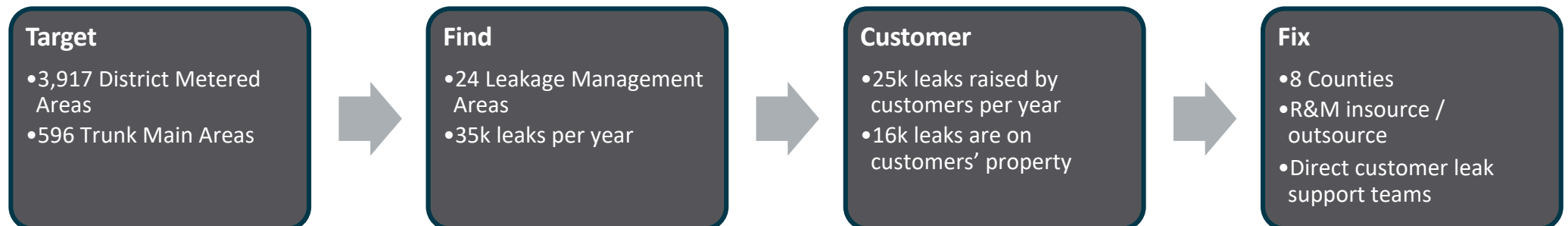
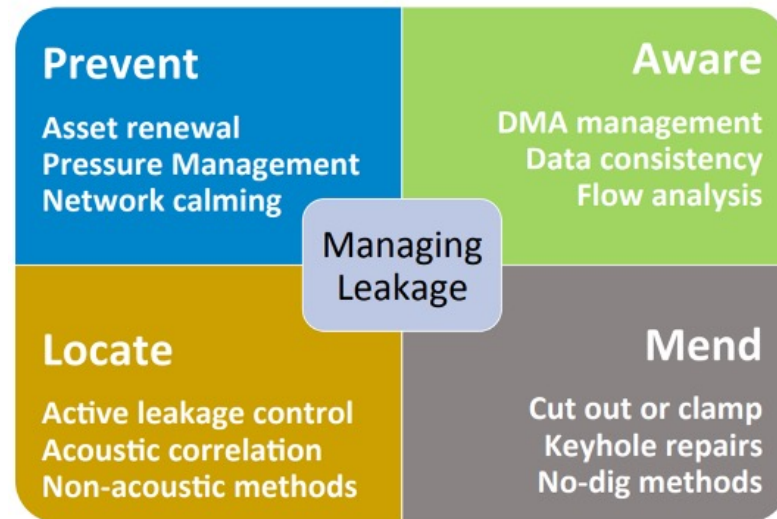
Trunks

The Basic principles are:

- We reduce leakage by fixing leaks.
- We therefore want to find as many leaks as we can.
- We then do what it takes to fix every leak.
- Customers must repair their own leaks: We Push & Support.

Key Challenges: Cost & Customer

THE CHAIN



WHO ARE WE

ORIGIN TECH LTD



- Founded in 2019 in the North-East of England
- Develops novel technologies for network integrity and water loss prevention
- Main products: Origin No Dig®, Origin Orbit® and Origin Find & Fix®
- Deployed across most UK water companies and several international territories

Collaboration



Sustainability



Innovation



Inclusivity



Trust



Media Features
11 Features in the Media

Global Water Awards 2026
Distinction – Breakthrough
Technology Company of the Year

BUSINESS iQ Winner 2026
Innovation Award

THE CHALLENGE

COSTLY TRADITIONAL PIPE REPAIRS

Traditional pipe repairs are costly, disruptive and can sometimes be considered dangerous

Traditional Methods:



Excavation

Generates waste, disturbs the public and pollutes the environment.



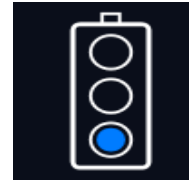
Increased Carbon Footprint

Waste removal and multiple operatives onsite every day add significant emissions.



Lengthy Repairs

Preparing for the repair, submitting permits, allocating resource – can take months and the repair itself can take up to 5 days.



Community Disturbance

Road closures, noise and restricted access disrupt the public, increasing traffic.

Faster

.

Less Expensive

.

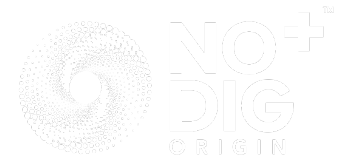
Sustainable

.

Reduced Disruption

THE SOLUTION

ORIGIN NO DIG+™



Engineered Calcium
Carbonate Particles



Cementing Compounds

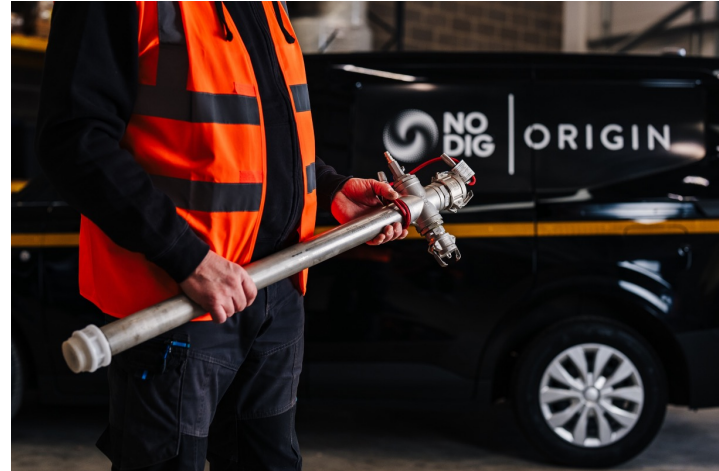


Water

Suitable for all pipe materials

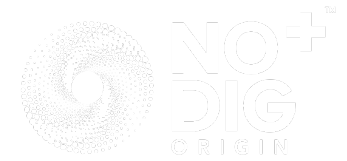
THE EQUIPMENT

COSTLY TRADITIONAL PIPE REPAIRS



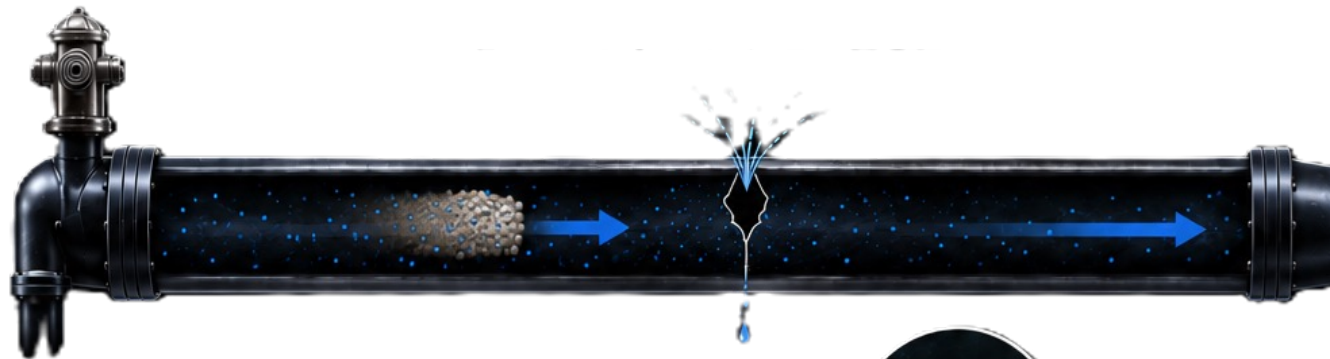
THE SOLUTION

HOW IT WORKS



1

Origin No Dig® is injected through an access point into the pipe above the recorded pressure

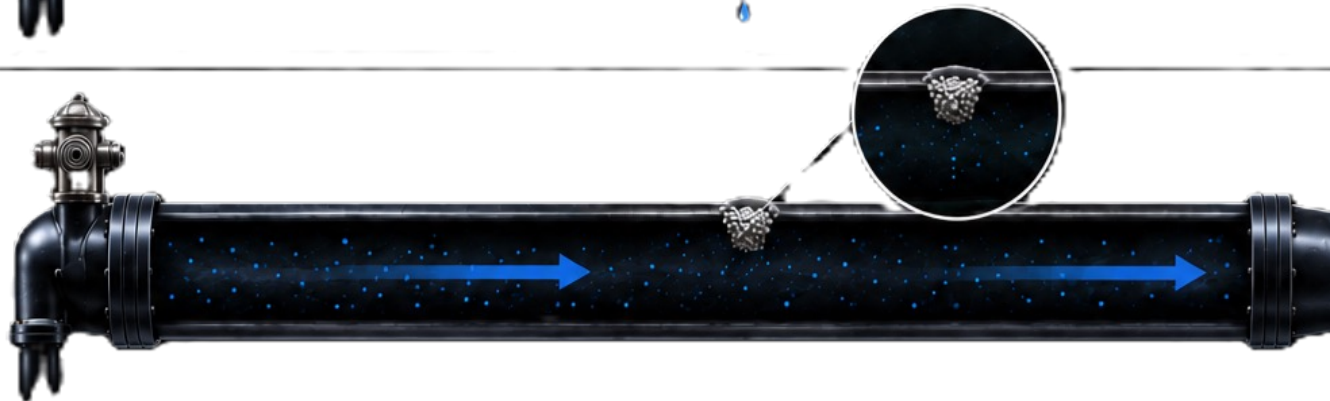


2

Calcium carbonate particles suspend and flowthrough the pipe, immediately identifying the pipe defect

3

The particles interlock, creating a seal under pressure.



4

Once the seal is formed, the remaining solution is flushed out from the access point and collected.



>16,000
LEAK REPAIRS



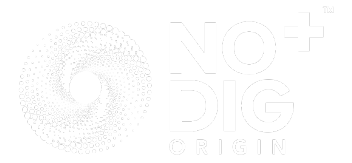
>150 ML/d
WATER SAVED



30 MINUTES
PER REPAIR

THE SOLUTION

VIDEO



[Demo rid vid.mp4](#)



MEASURABLE RESULTS FOR SEVERN TRENT

>5000

Origin repairs completed

£6m

Saved using Origin
(estimated)

30 ML/d

Total leakage
saved

88%

Success right first time

>1600

Hours saved

>80%

Emissions saved

35%

Overall comm pipes repaired
using No Dig

CI

Continuous Improvement &
development

CHALLENGES FOR SEVERN TRENT

Promotion

Incorrect job type being
raised

Behaviors

Fear of the unknown

Future

Belief in the methodology

Success

Mixed results in the
beginning

Gobowen Train Station, UK

CASE STUDY · UNITED KINGDOM

Trenchless Pipe Repair at train station

Duration: 30 Minutes | Repair Date: December 2025 | Status: Successful

Problem Statement

Increasing cost and previous attempts to repair a leak under a railway track had failed due

>£15000

Costs in failed repair attempts

5

Failed Repair Attempts

10
Months

Active Leak Duration

MEASURABLE RESULTS FOR GOBOWEN

- Repair held and validated for 12+ weeks
- Held through freeze and burst events
- Immediately stopped leakage
- Minimal customer impact



ANY QUESTIONS?

SEVERN TRENT WATER

REDUCING COMMUNICATION PIPE LEAKAGE ON SEVERN TRENT'S NETWORK

USING NO-DIG REPAIR TECHNOLOGY

Stuart Leach
September 2026



WONDERFUL ON TAP