

# Drainage Misconnection Investigation & Pollution Prevention Programme

**A demonstrator of how Glanville Environmental identifies, resolves and prevents pollution at source**

**Delivered with:** South West Water

**Sector:** Wastewater | Environmental Protection

**Delivery Period:** 2025–26

## The Problem We Help Solve

Drainage misconnections are among the most common and difficult-to-detect causes of pollution across wastewater networks. Incorrectly connected foul and surface water systems can result in untreated sewage discharging to rivers and streams, or place unnecessary load on sewerage infrastructure, increasing the risk of storm overflow operation.

For water companies, regulators and local authorities alike, the challenge is not only finding misconnections but proving them, engaging customers sensitively, and fixing the problem effectively, often on private drainage systems that are poorly mapped, altered over time, or completely undocumented.

This requires a contractor that can:

- Accurately identify drainage issues using robust investigative techniques
- Work professionally and discreetly in live, occupied environments
- Produce clear, defensible evidence
- Move seamlessly from investigation to solution
- Demonstrate measurable environmental outcomes

### **Our Approach: From Identification to Resolution**

Working in partnership with South West Water, Glanville Environmental delivered a proactive pollution prevention programme focused on finding and confirming drainage misconnections and enabling permanent solutions.

Our integrated approach combines CCTV surveying, geospatial intelligence, customer engagement, and practical remediation, ensuring issues are resolved at source rather than managed reactively.

This methodology is fully transferable and can be applied to any water company, local authority or asset owner seeking to reduce pollution risk and improve network performance.

### **How We Do It**

#### **1. Investigation, Tracing & Identification**

We deploy specialist CCTV survey teams supported by geospatial mapping to understand how drainage systems truly operate, not how drawings suggest they should.

Our investigations include:

- High-resolution CCTV drainage surveys
- Dye testing and flow tracing
- Verification of foul, surface water and combined connections
- Identification of cross connections, misrouting and structural anomalies

This allows us to pinpoint the exact cause of pollution risk and eliminate guesswork.



## 2. Evidence Capture & Confidence in Decision Making

We focus on producing clear, auditable evidence that stands up to regulatory scrutiny and supports confident decision-making.

Outputs include:

- Accurate survey footage and written reports
- Clear confirmation of misconnected and compliant properties
- Reduction of false positives, saving time and cost downstream

Importantly, confirming where no issue exists is just as valuable, allowing clients to focus resources where intervention is genuinely required.



### 3. Customer Engagement & Stakeholder Support

Misconnection resolution relies heavily on effective communication. Our teams are trained to engage professionally with property owners, residents and stakeholders.

We support our clients by:

- Coordinating appointments and access arrangements
- Clearly explaining findings and next steps
- Acting as a trusted technical interface between asset owners and customers
- Reducing friction, complaints and repeat visits

This protects the client's reputation while accelerating resolution.

### 4. Remediation & Pollution Prevention Solutions

Where issues are confirmed, Glanville moves beyond investigation to practical resolution.

Depending on site conditions, solutions can include:

- Trenchless drainage repairs and realignment
- Targeted connection corrections
- Rehabilitation of defective pipework
- Engineering input to reduce flow misdirection

By using trenchless and low-disruption techniques where possible, we minimise disturbance while delivering lasting outcomes.

### 5. Results: Before and After

Our work provides clear before and after visibility:

- Misconnections removed at source
- Polluting flows stopped from entering watercourses
- Reduced loading on foul sewer networks
- Improved understanding of private drainage systems

This delivers tangible environmental protection while supporting long-term network resilience.

### Environmental & Operational Value

Through this programme, Glanville Environmental helped deliver:

- Early intervention before environmental harm escalated
- Reduced risk of pollution incidents and enforcement action
- Improved regulatory compliance
- Better data and intelligence for future investment planning

The outcome is a shift from reactive response to proactive pollution prevention.

### Health, Safety & Environmental Assurance

All works were delivered in full compliance with client safety and environmental requirements, including:

- Safe working practices around live drainage systems
- Pollution control measures during investigations and repairs
- Considerate working within occupied properties
- Professional conduct that reflects positively on the client organisation

### A Demonstrated Capability – Transferable to You

This programme demonstrates Glanville Environmental's end-to-end capability in misconnection management and pollution prevention.

By integrating investigation, evidence, customer engagement, and engineering solutions, we help clients move from identifying problems to fixing them efficiently, safely and sustainably.

We work collaboratively with water companies, regulators and asset owners to reduce pollution risk, protect the environment, and deliver measurable outcomes. Whether supporting a targeted misconnection campaign or a broader "solution to pollution" strategy, Glanville Environmental provides a proven, scalable approach for your network.