



Future Water
Association

Leakage, metering and resilience: what the sector needs to do next

What Future Water members should take from the Leakage
& Metering Conference

Executive summary



**Resilience is now
the bigger frame**



**Demand volatility is
changing the challenge**



**Smart metering is becoming
strategic infrastructure**



**Better data only matters if it
changes decisions and behaviour**

The scale of the challenge



- 37–38% demand reduction target
- Southeast England must find 830 megalitres in the next 10 years
- Around half of the reduction depends on policy and behavioural change
- If demand reduction fails, fallback is major infrastructure

The sector is operating in a harsher environment

- Repeated heatwaves and dry periods
- Stronger and more sustained peak demand
- Less room for “business as usual”
- Resilience is becoming the central test



The Water Demand Observatory

- Multi-company initiative to evaluate demand interventions
- Aim: separate weather, behaviour and leakage effects
- Shared framework for process, impact and value assessment
- Tested on 12 case studies

Why it matters

- Regulatory Support: Helps water companies meet strict reporting and efficiency targets
- Climate Resilience: Improves planning accuracy as climate pressures mount



Smart metering has become strategic

- Thames: 34M reads per day
- Around 25,000 smart meters installed per month
- Metering now supports:
 - planning
 - leakage targeting
 - continuous flow detection
 - customer engagement
- Sector becoming much more data-driven



What the data is revealing



**25% of homes use over
500L per day**



**8% of homes show
continuous flow**



**24% of business water
registers as continuous flow**



**Removing continuous flow can
save 30L per property per day**



**A small group of very active
people drives most of the
value, cost, or impact.**

Metering quality matters

- Small errors can distort performance understanding
- Installation quality matters
- Verification and maintenance matter
- “Fit and forget” is not enough
- Stronger metering discipline is needed



Customer-side leakage and demand

- Smart data is exposing customer-side issues more clearly
- High use and continuous flow are often customer-side
- Some of the fastest gains may come from targeting these losses
- Implications for support, messaging and intervention design



Behaviour change is now central

information alone does not change behaviour;
knowledge does not automatically become action

- Best interventions are:
 - personal
 - timely
 - simple
 - comparative
- “One ^eclear message” beats a dashboard
- Smart meter value depends on behaviour change

Pressure management and operational control

- Pressure management still reduces leakage
- It also reduces bursts and stress on networks
- Networks need active, not passive, management
- Better data should improve system control, not just reporting

The last part of rollout is where complexity rises sharply

- Final 5–10% of meters are hardest and most expensive
- Rural and deep-pit connectivity remain difficult
- Internal installs and missed appointments remain barriers
- Trust is an operational constraint
- Installation strategy matters as much as technology

Regulation and coordination are still catching up

- PCD methodology still lacks full consistency
- Reporting approaches risk diverging
- Conflicting incentives remain
- Coordination across market actors is incomplete
- More common frameworks are needed

What Future Water members should take from this

- Think whole-system, not single-issue
- Push for better metering quality and data confidence
- Treat customer-side leakage and continuous flow as strategic
- Prioritise interventions that actually work
- Design customer engagement as carefully as infrastructure
- Support consistency, collaboration and practical innovation



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**The next step for the sector is not just lower leakage.
It is better understanding, better prioritisation and better
resilience.**

