south east water

Leaks – the facts

Every day South East Water supplies around 565 million litres of top quality drinking water to 2.1 million customers across parts of Kent, Sussex, Hampshire, Berkshire and Surrey.

We understand the focus on our leakage levels, particularly after the recent drought and while we are asking customers to still use water wisely.

Keeping water flowing

We spend millions of pounds every year to deliver water through 14,500km of water pipes straight to customers' taps.

Around 900,000 properties are individually connected to that network. There are around six million separate joints too.

All those connections and joints are susceptible to leaks, and more connections, new homes and businesses, are being added to it all the time.

And that's just the pipework we're responsible for. Leaks also occur on private customer pipes we don't own or maintain, but we're required to count that leakage in our overall figures.

Realistically, there will never be zero leakage. It is simply not feasible or practicable to find every single weep, seep or leak of water that happens, often out of sight and which disappears underground – whether that's on our own pipes, or yours.

So what is the level of leakage?

The industry regulator Ofwat sets a target level of leakage for each water company. It then monitors our performance against that annual target and can financially penalise those companies that miss it.

The leakage target for South East Water is set at 95 million litres a day. We have met or out-performed that target for 11 years running.

We know that is a lot of water, but to put it into perspective we supply up to 700 million litres a day at times of high demand to 900,000 homes through 14,500km of water mains. That's enough pipe to go 74 times round the M25.

That leakage number also includes water lost from customers' own pipes and appliances, which we have no control over, but are required to include in our target figure.

Studies suggest up to one third of that water – some 30 million litres – is lost through leaks from customers' own pipework.

Why do leaks occur?

Leaks occur for a variety of reasons, but the main ones are:

- **Ground movement, especially in weather extremes - hot dry weather and freezing cold, when the ground expands and contracts around pipes**
- **Natural wear and tear, especially in older pipes**
- **Soil corrosion that can literally eat away at some pipe materials**
- **Vibration damage from heavy traffic**

Why don't you replace more pipes?

We are already spending £75 million up until 2015 to renew the oldest, leakiest water mains.

However, even making that level of investment means we are only replacing around 0.2% of our network each year.

We would like to spend more, but our regulator, Ofwat, also wants to make sure that the cost of doing this – which has to be reflected in water bills – is not outweighed by the ever diminishing returns of "saved water" we find.

How do you detect leaks?

To help identify where water is being lost we measure water flows throughout our own pipe network.

Water flows are scrutinised to see if we can identify the tell-tale signs of a leak as soon as it occurs, whether it is visible on the surface or not.

Our leakage team look closely at water flows in the middle of the night, when little water is being used. If flows have increased in a particular area, compared to previous nights, it may indicate that a leak has occurred. They are then despatched to try and find it.

What if we can't see it? As well as using the traditional listening stick, we use state-of-the-art equipment that measures the transfer of sound between two points and can narrow down the location of a leak; and sophisticated ground microphones that pick up frequencies the human ear cannot hear.

Why does it take so long to repair leaks?

We cannot always repair a leak straight away. At any one time we can have hundreds of leak investigations and repairs on the go, and so have to prioritise which ones we find and fix first.

The ones we do fix first are those that are causing loss of water supplies to our customers, or are causing flooding and possible damage to homes and businesses.

For those smaller leaks that are less urgent, we have to comply with road works regulations which require us to get permission before we dig in the road or footpath.

This is why for these types of smaller leaks you may see blue paint sprayed on or near it. The paint indicates we are aware of the leak and plan to repair it as soon as we possibly can, and once we get all the right permissions in place.

Not all leaks are ours!

Not all the pipework in the ground is owned and operated by us, so some leakage is not our responsibility to find or fix.

Leaks occur on customers' own water supply pipes and even domestic appliances such as taps and toilet cistern overflows.

Studies suggest up to one third of all leakage is from customers' pipework. If you don't know it's there, how will we?

Some early signs to look out for are:

- **Damp patches, pools of water or lush vegetation in dry periods either in the road or pavement or on your property**
- **If your water pressure drops unexpectedly, you may have a leak**
- **If you hear continuous noise from your plumbing system when no one is using water, this could be the noise of water escaping under pressure**
- **If you have a meter, first turn off your internal stop tap and then check the reading on your meter, then check it again after an hour. If the dial has still moved and the reading's gone up, then you may have a leak on your supply pipe**

If you think you have a leak on your supply pipe, we will help you look for it. In some circumstances we can also offer financial help to get the leak repaired, or the damaged section of pipe replaced.

Visit **www.southeastwater.co.uk** to find out more.