



## **Glossary of Terms**

### **'Our leakage performance' report**

## 1.0 Introduction

This document is intended to be used in conjunction with Thames Water’s ‘Our leakage performance’ report published monthly on Thames Water’s website (<https://www.thameswater.co.uk/help-and-advice/leaks/our-leakage-performance>).

The purpose of our monthly leakage report is to keep our customers and stakeholders informed of our leakage performance in a way that is meaningful, understandable and informative. Our report is therefore written where possible using non-technical language. In order to aid the understanding of our report and to ensure transparency we have prepared this glossary of terms reference document. Following feedback from Victoria Borwick (Section 19 Independent Monitor) definitions used in this document have been written in terms our customers will understand. Definitions are therefore not meant to be a definitive technical or regulatory reporting definition.

This document has been prepared alongside our December 2018 report and will be updated periodically to ensure any new terminology is appropriately defined.

## 2.0 Glossary of Terms

| Term                                 | Units | Definition  | Supporting Detail   |
|--------------------------------------|-------|---|---|
| <b>Acoustic loggers</b>              | n/a   | As per definition in ‘Our leakage performance’ report.  |   |
| <b>Accounting for all water used</b> | n/a   | As per definition in ‘Our leakage performance’ report.  |   |
| <b>Actual</b>                        | n/a   | The term actual is used where we are reporting on past performance or a historic measurement.   |   |
| <b>Additional leakage activities</b> | n/a   | As well as fixing leakage on our pipes we carry out other work that delivers leakage reduction. This includes pressure management, mains replacement, water demand, metering. | Pressure management is where we control pressure within our pipes to reduce the likelihood of bursts and limit the water lost from exiting leaks.<br>Mains replacement is where we replace worn out pipes with new pipes. |

| <b>Term</b>  | <b>Units</b> | <b>Definition</b>  | <b>Supporting Detail</b>   |
|--|--------------|--|--|
| <b>Annual leakage targets</b>                            | MI/d         | Calculated for a 12 month period running from 1st April to 31st March and expressed as an annual average MI/d value. The levels of leakage reduction over 5 year investment periods are agreed and monitored by the regulator, Ofwat. Each year has its own specific reduction target. | Also see Water Balance.  |
| <b>Bursts</b>  | n/a          | A generic term applied to a leak that appears to be a sudden failure of a pipe or connection.  |  |
| <b>Customer leaks</b>                                    | n/a          | As per definition in 'Our leakage performance' report.   | May be referred to by the abbreviation CSL (Customer-Side Leakage).                                  |
| <b>Detected by our teams</b>                             | n/a          | We employ both internal and external staff to check our network to identify and confirm the location of leaks. We also use technology to automatically detect potential leaks; however each one of these is also manually verified by our detection teams.                             |  |
| <b>Estimated volume of water saved from fixing leaks</b> | MI/d         | The water saved from repairing hidden and leaks on customer supply pipes. This can only be estimated due to the wide range of factors that will affect the amount of water lost. We therefore apply a standard value based on the type of leak repaired.                               | The standard values are derived from historic leakage reductions and volume and type of leaks fixed. |
| <b>Finding and fixing</b>                                | n/a          | A generic term intended to describe the end to end process of detecting a leak and repairing it.   |  |
| <b>Hidden leaks</b>                                      | n/a          | As per definition in 'Our leakage performance' report.   | May be referred to by the abbreviation AL (Active Leakage).  |

| <b>Term</b>                         | <b>Units</b> | <b>Definition</b>  | <b>Supporting Detail</b>  |
|-------------------------------------|--------------|--|---|
| <b>Leakage</b>                      | MI/d         | This is intended to be a generic term we use to describe the amount of water that is estimated to be lost from our network or our customers' pipes that cannot be explained by customer consumption or other legitimate use. | Measured in MI/d. Also see MI/d.<br><br>Trunk mains leakage and service reservoir leakage is accounted for as part of the leakage estimate. |
| <b>Leakage level</b>                | ML/d         | See Leakage.   |   |
| <b>Leakage reduction activities</b> | n/a          | As per definition in 'Our leakage performance' report.   |   |
| <b>Leakage reduction plan</b>       | MI/d         | A plan of all our combined leakage reduction activities. Also see original plan.   |   |
| <b>Leakage Task Force</b>           | n/a          | A cross functional Leakage Team (the Task Force). The purpose of the Task Force is to maximise the certainty of delivery of Thames Water's leakage reduction targets on a sustainable basis.                                 |   |
| <b>Leak repair activities</b>       | n/a          | Physical work carried out on our water network whereby leakage is reduced by a repair being carried out.   | Typically, repairs to below ground assets such as pipes, valves, connections.   |
| <b>Leaks</b>                        | n/a          | Any individual point of leakage on our water network.  | Leaks can originate from any of our below ground assets such as pipes, valves, connections.   |
| <b>Mains replacement</b>            |              | As per definition in 'Our leakage performance' report.   |   |

| <b>Term</b>                          | <b>Units</b> | <b>Definition</b>   | <b>Supporting Detail</b>   |
|--------------------------------------|--------------|---|--|
| <b>Material risks</b>                | n/a          | Risks that take us, or have the potential to take us, outside of our planned leakage levels for more than 3 months.   | Examples of material risks include: <ul style="list-style-type: none"> <li>• Weather events including cold weather that causes water temperature to drop below 5°C.</li> <li>• Availability of skilled leakage reduction resources.</li> <li>• Long periods of high customer demand which requires us to increase water pressure.</li> </ul> |
| <b>MI/d</b>                          | MI/d         | Millions of litres of water per day.  | Standard water industry unit of measure.   |
| <b>Monthly</b>                       | n/a          | A calendar month unless otherwise stated.   | The number of working days within a given month will vary. This should always be checked before month-to-month comparisons are made.   |
| <b>Ofwat</b>                         | n/a          | The Water Services Regulation Authority, or Ofwat, is the body responsible for economic regulation of the water and sewerage industry in England and Wales.   |  |
| <b>Original plan</b>                 | n/a          | In order to hit our leakage reduction targets we estimate the number of leaks (by different types) that we will need to fix over a year. Actual work is then monitored against this plan in order to help us understand our performance. We also use this plan to inform our budgets and resource levels. | Plans may be updated quarterly as part of our budgetary control processes.   |
| <b>Planned number of leaks fixed</b> | n/a          | The number of hidden, visible and customer leaks that we have forecast to fix within the month, to deliver our leakage reduction target.  |  |
| <b>Pressure management</b>           | n/a          | As per definition in 'Our leakage performance' report.  |  |
| <b>Put into supply</b>               | MI/d         | Generic term for the volume of water that leaves our water treatment facilities.  | May also be referred to as distribution input or supply input.   |

| Term   | Units | Definition   | Supporting Detail   |
|--|-------|--|---|
| <b>Smart meters</b>                              | n/a   | Water meters that are capable of recording water consumed at 1 hour or better frequency. This data is then transmitted automatically back to Thames Water at least daily.  |   |
| <b>State of the art leak detection equipment</b> | n/a   | We are constantly seeking out innovative techniques and processes to improve the efficiency and effectiveness of our leakage reduction activities. This includes how we find leaks and how we carry out repairs.   | Thames Water has its own Innovation and Data Science teams. We work with world class suppliers in order to understand emerging technologies and their application to leakage control and reduction.   |
| <b>Storage levels in our reservoirs</b>          | n/a   | A generic term that represents the volume of treated water stored in our service reservoirs in order to meet customer demand. The higher the storage levels, the greater flexibility we have in keeping customers in supply without them experiencing a reduction in water pressure or loss of supply. | Specific to treated water reservoirs in the context of leakage reporting.   |
| <b>Stopped leaks</b>                             | n/a   | A generic term applied to repaired leaks where leakage is stopped.   |   |
| <b>Total number of leaks fixed</b>               | n/a   | The total number of hidden, visible and customer leaks that have been repaired as reported on our work management system in a given month.   | The number of working days within a given month will vary. This should always be checked before month-to-month comparisons are made. In addition, there may be a slight delay between work being completed and the information appearing in our work management systems. This may result in retrospective minor adjustment to reported numbers. |

| Term                 | Units | Definition   | Supporting Detail  |
|----------------------|-------|--|--|
| <b>Trunk mains</b>   | n/a   | Trunk water mains have been described as the 'motorways' of the water network. They are large pipes (18 inch diameter or larger) and carry significant volumes of water at high pressure.  |  |
| <b>Visible leaks</b> | n/a   | As per definition in 'Our leakage performance' report.   | May be referred to by the abbreviation VS (Visible).   |
| <b>Volume</b>        |       | An amount used over a given period of time.  |  |
| <b>Water balance</b> | n/a   | The Water Balance informs our year end reported leakage level. It is a set of calculations undertaken on at least an annual basis to ensure we can account for where the water goes that leaves our water treatment works. Our annual water balance is audited by an independent third party in order to provide assurance before publishing our annual leakage performance. | Examples of updates to data assumptions are: <ul style="list-style-type: none"> <li>• Population numbers</li> <li>• Usage per person in un-metred properties.</li> </ul> |
| <b>Water demand</b>  |       | Water demand is where we work with customers and help them reduce the amount of water they use.  |  |
| <b>Water network</b> | Km    | This is intended to be a generic term we use to describe the physical infrastructure (service reservoirs, pipes etc.) that we use to transport water from our water treatment facilities to customers' homes and business premises.  | Measured in Kilometres of length.  |
| <b>Water pipes</b>   | Km    | All pipes within our water network.  |  |
| <b>Weather risk</b>  | n/a   | As per definition in 'Our leakage performance' report.   |  |
| <b>Year</b>          | n/a   | A 12 month period running from 1st April to 31st March unless otherwise stated.  |  |