

WATER EFFICIENCY

A self-audit guide for
small businesses



Why be waterwise in the workplace?



- Save resources.
- Protect natural habitats.
- Save energy and money.

As a business customer, you pay for all the water that passes through your meter. It therefore makes good financial sense to ensure you are not letting any of it go to waste.

If you are new to water efficiency, taking simple inexpensive measures can typically reduce your water consumption by up to 30% (which will result in a saving on your water bills) and if you're heating the water prior to use, then any efficiencies you can make will also have a positive effect on your energy bills too.

It's worth pointing out that using less water will reduce your wastewater bill too. This is because your wastewater charges are also calculated based on the amount of water that goes through your meter.

Saving water is also good for the environment. When you consider that we supply the equivalent of 93,000 glasses of water every second, you can begin to appreciate the vast amounts of energy that is required to supply water and the impact this can have on the environment.

Wildlife in wetland habitats may also suffer when reservoir levels fall due to increased demand for water.

How to use this guide

This simple guide is to help small businesses understand how they are currently using water and look at ways to reduce wastage. Undertaking regular water audits will also help you to discover leaks on your internal pipework which you may normally not be aware of.

We've also enclosed a self-audit sheet for you to complete. This will allow you to record how you currently use water in the workplace and identify ways to reduce wastage. You can find this audit sheet at the back of this booklet.

For lots of hints and tips on how to become water efficient in the workplace, visit our website unitedutilities.com/waterwise

This guide is suitable for small businesses who are not using water as part of their manufacturing processes. For larger businesses, we recommend you obtain a more detailed audit from Envirowise. Visit their website envirowise.gov.uk and search for document GG152R.

SECTION 1

Completing your audit

We've enclosed a water audit sheet with this pack to make it easy for you to monitor your water consumption.

Where does wastage occur?

- It can be simple things like your employees leaving taps running, faulty taps dripping and faulty ball valves causing cisterns to overflow.
- It can be unnecessary activity, such as urinals flushing throughout the night even though there is no one in the premises.
- It can be through leaks which are not readily visible, e.g. in pipes that are buried underground or which leak under floors without showing any visible signs.

This audit will help you analyse whether any of the above apply to you.

Step 1 – Identify all water outlets

If you have not already done so, take the enclosed audit form and complete Table 2 – Water using equipment. Check each outlet to ensure it is working properly and whether there are any water saving devices fitted.

Typical example

In a shop, assume that your premises open at 8.00am and the first hour is spent cleaning the floor prior to opening to the public. The only other significant use of water is between 3.00pm and 4.00pm when a large tank is filled. The premises close at 6.00pm.

The times for reading the meter on a daily basis should be 8.00am, 9.00am, 3.00pm, 4.00pm and 6.00pm.

Step 2 – Take meter readings over a week at specific times

How to read your water meter

Meters measure water in cubic metres whereby 1 cubic metre equals 1,000 litres. The figures in black are cubic metres, the figures in red are litres. In smaller premises it is unlikely that the daily consumption will exceed 1 cubic metre per day, so it is important to record the figures in red as well as those in black.

Use the enclosed 'Meter Readings' sheet to establish your water usage pattern. It is important to read the meter at the same times each day. There needs to be a reading at the start of the day and again at the end. If there are times when an activity uses a large amount of water, readings should be taken before and after the activity takes place. A typical example is shown below.

Make a note of your normal occupancy hours, and any periods when you regularly use water for cleaning, or some other specific high usage activity.

If you use hosepipes regularly note when they are used.

When taking the final reading at closing time, check whether the meter is going round. If so, try to find what is causing it.



Step 3 – Analyse the results

Plot the results on the water consumption graph.

First, look at the times the premises are not occupied. Is there any water use? If so, this could be a sign of wastage, caused by continually flushing cisterns or leaks. To help identify leaks, choose a time of day when it is convenient to turn off all outlets, (but not the stop tap) and then look at the meter. If it is still recording you are likely to have a leak. It is important to be sure that everything has been turned off. Automatic filling of cisterns, heating systems, vending machines etc. can give a false impression. Remember to turn everything back on after the checks. If you have a leak on your premises you will need to call a plumber.

Look at the amounts of water used for cleaning or for other usage during your specified time periods. Is it a reasonable amount or could savings be made? As a guide a typical hosepipe could use 500 litres per hour and a typical household bucket holds 8 litres.

Look at the daily trends. Are there any differences in usage during the same periods on different days? If so, why? Try to identify what the usage is and if it is necessary.

If you have more than one premise compare the amounts of water used for each activity. Are there some 'best practice tips' that can be identified in those premises with the lowest consumption and shared amongst the group?

Step 4 – Develop an action plan

Having completed the audit you are now in a position to determine whether or not you need to develop an action plan of improvements. If so, consider the following:

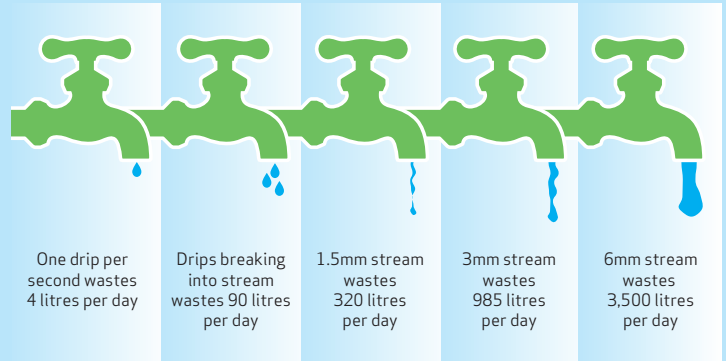
- raising staff awareness;
- more efficient maintenance programmes; and
- installing water efficiency devices.

The following three sections will help identify ways of doing this.

Step 5 –

Implement your plan!

Water lost due to leaking taps



Remember! If it is a hot water tap leaking, you are also using electricity or gas to heat the water. Stopping the leak will have a double benefit as it will have a positive effect on both your water and energy bills.

SECTION 2

No budget? No problem!

Adopting water efficiency initiatives in your business may be cheaper than you think - here are a number of practical tips that will bring instant results and won't cost you a penny!

Fit 'save-a-flush' devices in your existing toilet cisterns

Businesses use a lot of water in washrooms and toilet areas. 'Save-a-flush' bags can be ordered free of charge from United Utilities, saving around **1 litre of water** every flush. It makes spending a penny less expensive! To order, visit our website unitedutilities.com/commercial-orderform, or call us on 0845 746 2200.

Turn off taps and check for leaks

It probably sounds like we're stating the obvious, but encourage your employees to turn off taps fully after use or report dripping taps or leaking pipes. Believe it or not, just one tap left running on a regular basis could be costing your business up to **£1,500 a year** in wasted water. Pass the spanner!

Raise awareness amongst your employees or guests

Ensure your workforce knows that you are committed to reducing water wastage by organising team meetings and ask for their support and involvement. Encourage employees to report leaks or identify how water could be used more efficiently in current processes - their suggestions could save you thousands of pounds a year. Display information around the workplace reinforcing the value of water being used in specific areas of your business. If possible, appoint an employee to the role of 'water champion' and ask them to perform regular water audits to review water usage and look for ways to identify savings.

Posters for businesses and information cards suitable for hotels and guest houses are available free of charge from United Utilities. Please email waterwise@uuplc.co.uk to request them.

Check your water consumption regularly

Undertaking regular audits will help you identify leaks and spot unnecessary wastage. Section 1 of this leaflet explains how to complete our enclosed audit.



SECTION 3

Small budget, big savings

For businesses willing to make a financial investment in water efficiency, there are major cost savings to be made. As well as implementing the non-cost options in Section 2, there are a number of other simple steps you can take to become water-wise in the workplace.

Tackle overflows

An overflowing cistern is sending water right down the drain. Fit new washers and ball-valves to stop wastage. Check overflows regularly.

Prevent burst pipes in winter

Ensure your business is prepared for any cold spells by insulating tanks, cisterns and external pipework. Not only is a burst pipe inconvenient, it could also cost your business a lot of money in wasted water.

FIT A WATER BUTT

The size of your roof and ground space, and the amount of rain water you will use, will dictate the size of water butt you need. They are available from giant tanks all the way down to wall mounted ones. Visit unitedutilities.com/waterwise for further information.



Install water efficient devices

You can make major cost savings by installing water efficient devices such as self-closing taps, auto shut-off hoses and urinal controls in washrooms. The cost of this equipment will pay for itself in the amount of water saved in the long-term.

Don't forget that water efficient devices on the Water Technology List, part of the government's Enhanced Capital Allowance (ECA) Scheme, are cheaper than you think. The ECA enables businesses to claim 100% first year capital allowances on investments in technologies and products that encourage sustainable water use. Businesses are now able to write off the whole cost of their investment against their taxable profits of the period in which they make the investment. Further details and the whole Water Technology List can be viewed at www.eca-water.gov.uk.

SECTION 4

Serious savings for the water-wise business

For those businesses serious about putting water efficiency at the top of the agenda, there are a number of steps that can achieve major water cost savings. As well as implementing the initiatives outlined in Sections 2 and 3, here are further steps that will bring you closer to becoming a water-wise business.

Recycling

Depending on how you use water within your business, you may be able to recycle it. For example, think of ways you can store and use rainwater – you'll be surprised by how much this can reduce your water bill.



Target leakage

Leakage from underground pipes can often go unnoticed for many months, costing your business hundreds of pounds in the long term. As a business customer, you are responsible for the maintenance of all the water pipes and drains on your premises. You may need to employ a contractor to carry out a leakage check to discover if you have any leaks. They can also advise you on the condition of your pipework and whether you should replace parts of your network.

Process improvement

For manufacturing businesses, there are serious savings to be made by considering all areas of water use. Boilers, cooling systems, cleaning equipment, hose sizes, water pressure, overflows, recycling – these are just some of the areas to consider as part of your audit. Concentrate on those areas of your business that use a lot of water and consider ways to reduce consumption.

SECTION 5

Your responsibilities

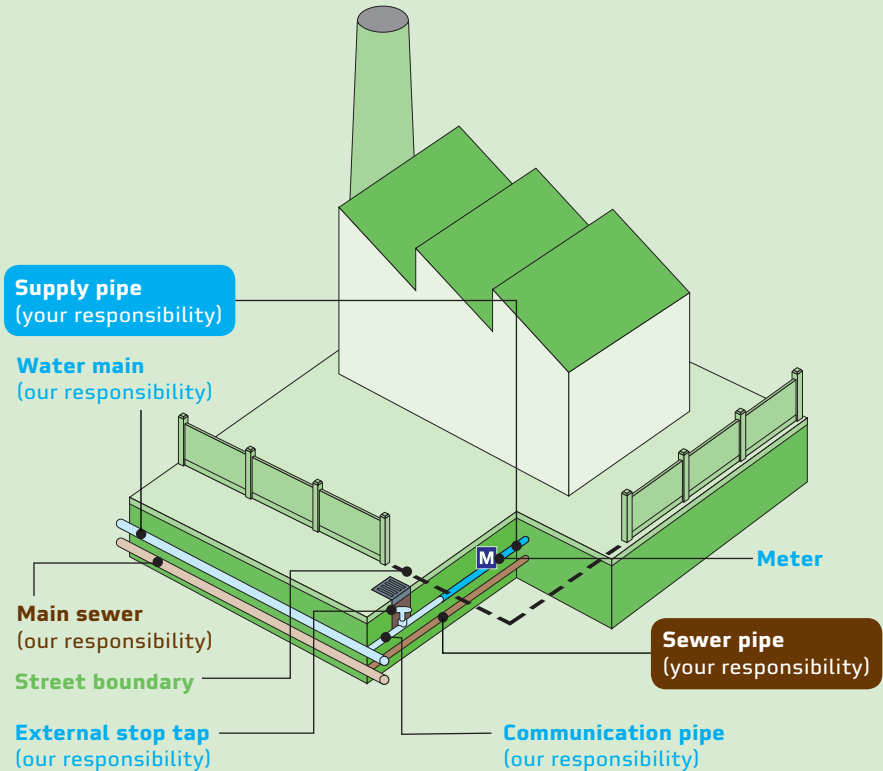
You've probably not given your water or wastewater pipes a thought unless you've experienced a problem in the past. However, if things do go wrong it's important that you have a good understanding of where your pipes are located and what to do if you have a leak or burst.

As a business customer, you are responsible for all the water pipework located within the boundary of your site. This includes the pipe that supplies water into your premises. You are also responsible for the maintenance of all the internal pipework and will need to arrange for a plumber to fix any leaks that you may discover.

Your sewer pipe is also your responsibility, from your business premises up to where it joins our main sewer.

The diagram shows this responsibility in more detail.

If you need to repair a leaking pipe or blocked sewer, we recommend you use a member of the Water Industry Approved Plumber Scheme. Visit the website www.wras.co.uk/wiaps for further details.

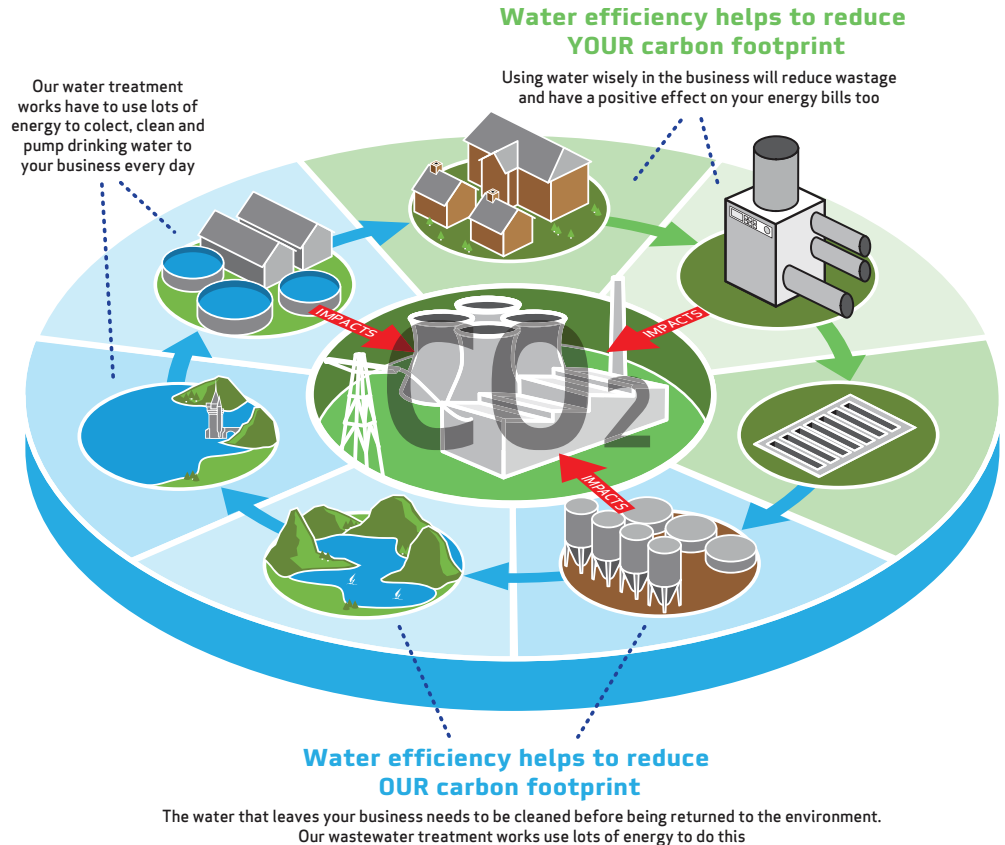


SECTION 6

Water and your carbon footprint

Your daily demand for water, how you use it in your business, and the amount of dirty water that goes into our sewer system all have a big impact on CO₂ emissions.

To ensure your business receives a constant supply of clean water, United Utilities has to use enormous amounts of energy to collect, treat and transport it to your business. We then have to take away your wastewater and clean it before returning it safely to the rivers and seas - all of which increases the amount of carbon dioxide (CO₂) emissions from power stations. Therefore any reduction in the amount of water we supply to customers will in turn reduce the amount of CO₂ emissions - which is great news for the environment.



Your water self-audit is enclosed

Please refer to Section 1 for full details on how to complete your audit.

unitedutilities.com

United Utilities Water PLC
Haweswater House
Lingley Mere Business Park
Lingley Green Avenue
Warrington
WA5 3LP

Registered in England and Wales
Registered Number 2366678



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