

Water Management Guide Pubs



Pubs

South East Water's water saving solutions for industry will help you make a positive contribution to the environment and save money in the process.

Being aware of how to save water in the workplace is just the first step. By putting the knowledge into practice you can make a real difference to long term water conservation.

DID YOU KNOW?

- ◆ *Patron amenities consume approximately 62% of all water so adjusting flow rates and flush rates to standard levels can reduce the overall annual water bill by as much as 34%.*
- ◆ *By reducing the water level in a trough to half, consumption can be reduced by up to 30%.*

The major water use areas in pubs are:

- Leaks and overflows
- Kitchen
- Patron Amenities
- Cleaning
- Garden watering
- Cooling Towers – if present

Leaks and Overflows

The water use facilities and amenities in pubs are subject to high usage on a daily basis and are prone to leakage if not regularly serviced. Leaks such as dripping taps and overflowing cisterns as well as taps not turned off after use can account for up to 25% of total water consumption.

Most leaks and overflows are readily visible and should be repaired immediately, however, water pipe leaks are more difficult to detect.

Detecting a leak

The simplest way to find a possible leak, is to read your water meter after the premises has been vacated and again before opening the next morning. To ensure the readings are meaningful, repeat the exercise over a number of nights. A significant difference between the two readings is sufficient evidence that there may be a pipe leak in your premises.

If this situation arises, South East Water can advise on means of identifying where the leak might be and steps you can take to have it repaired.



Kitchen

The kitchen is an area of significant activity and a potential high water use area - mainly for food preparation and manual dish/pot washing in sinks or troughs.

Food Preparation & Cleaning

Water Saving Tips

- When washing fruits and vegetables place a small amount of water in a sink or trough and replenish as required. Washing under running water is extremely wasteful.
- Avoid the wasteful practice of thawing frozen food under running water.
- When washing dishes and pots, fill the sink or trough only to the level required for the number of items to be washed.
- If a dishwasher is used, whenever possible, ensure that there is a full load before switching the machine on.
- Use a hose fitted with a trigger and spray nozzle when pre-rinsing dishes before washing.
- Use a hose fitted with a trigger and spray nozzle in conjunction with a cloth to clean surfaces rather than running the cloth under water.
- When cleaning kitchen floors use a hose fitted with a trigger and spray nozzle rather than an open ended hose – or even better use a bucket and mop.

Patron Amenities

Patron amenities include hand basins, toilets and urinals. Some premises may also provide showers.

All of these appliances now have a standard flow rate or – in the case of toilets and urinals – standard flush rate.

Appliance	Flow rate or Volume (hot & cold water)	Typical actual rate or volume	Water Saving by adjusting appliances to standard (%)
Shower	9-12 l/min	12-20 l/min	33 – 40%
Vanity Basin	4 l/min	9-12 l/min	55 – 67%
Toilet	Av. 4.5 l/flush	6-9 l/flush	25 – 50%
Urinal*	2-3 l/stall or .45M of slab width.	6-9 l/flush	50 – 67%

Note: * There are several new water saving urinal systems on the market place such as micro enzyme systems and waterless urinals. Customers are encouraged to explore the most suitable alternative for their business.

Measuring flow rate

To measure flow rate from taps and showers, use a 2 litre jug and stopwatch.

Time to Fill Jug (seconds)	Flow Rate
7	17 l/min
8	15 l/min
9	13 l/min
10	12 l/min
12	10 l/min
15	8 l/min
20	6 l/min
30	4 l/min

When replacing appliances that utilise water we recommend choosing star rated appliances in accordance with the Water Efficiency Labelling and Standards (WELS) Scheme.

Controlling Flow Rate

There are a range of low cost flow control devices that can be installed in these appliances to control flow rate to the standard for each appliance. Choosing and installing an appropriate flow control device can have a payback period of as little as 4 months but more usually up to 2.5 years.

Flush volumes for toilets and urinals

In the past there have been a number of changes to standards for toilets. These standards range from single button flushing at 9 l/flush or 6 l/flush to the current standard of 6/3 l/flush dual button. Replacing a 9l/flush toilet with a 6/3 dual flush toilet reduces water consumption in the toilet by 50%.

In the future, a 4/3 dual flush system may become the standard and reduce water consumption per toilet by a further 22%.

Currently, the standard for urinal flushing is 2-3 litre/flush per stall or per 0.45M of slab urinal length – for a correctly managed urinal. For this standard to be effective, an appropriate flush volume for each urinal needs to be determined depending on the construction, flush distribution, odour experience and cleaning regimen.

Cleaning

Hard surface internal areas are usually cleaned by bucket and mop which is the most efficient use of water.

For outside areas, gross materials should be cleaned up by sweeping and disposed into a bin.

The use of water to clean external surfaces – usually by hosing – is not permitted unless it is to remove a safety or health hazard. Even so, permission is required in this case and then only one clean per season will be allowed.

Watering Gardens

Water Saving Tips

The issues of garden design, construction, plant selection and irrigation requirements are outside the scope of this brochure, however, the following guidelines offer suggestions for water saving:

- Hand water, either in the early morning or late evening, instead of during the day, and save up to 25% of water.
- Use a soil probe to measure moisture content and water only when the probe reading falls below the control level.
- Use below surface water emitters instead of above surface sprays for irrigation systems. This eliminates wastage through evaporation and windage.
- Use control irrigation systems to prevent watering during rain periods and within 3 days of rain. A moisture probe can be connected to the irrigation control to override the automatic system when soil moisture is satisfactory.
- Change the surface profile of garden beds to prevent water run-off and provide at least 4cm of mulch for garden beds to prevent evaporation.
- Less frequent but heavier watering of plants and lawns will promote an increase in drought tolerance.

Please ensure you abide by changes to watering requirements under staged water restrictions.

DID YOU KNOW?

- ◆ Leaks and overflows account for up to 25% of total water consumption.
- ◆ Replacing a 9l/flush toilet with a 6/3 dual flush toilet reduces water consumption by 50%.
- ◆ A cooling tower can consume up to 18% of water consumption for a premises.

Cooling Towers

If used, cooling towers provide cooling for air conditioning by evaporating water through the associated chiller units. The lower the set temperature for the premises, the more water will be evaporated.

By evaporating water, the cooling tower will also concentrate the salt levels in the water and this requires up to 15% of the water to be continually 'bled' from the system to prevent scaling. If the 'bleed' rate is set too high, this will waste water.

Cooling towers generally require cleaning every three months which involves emptying the water system, re-filling and cleaning, emptying again then re-filling a second time.

Water Saving Tips

- Check that all drain valves are fully closed after the cleaning process and that the cooling tower boot is not overflowing.
- Water wastage commonly occurs when drain valves are faulty or not fully closed.
- Ensure you are fully conversant with cooling tower operation and management as covered by Health Regulations.

Incorrect management and/or control can lead to legionella growth which is a serious condition that can affect the broader community.

Consider alternate water sources such as water tanks and recycled water to assist further in water conservation.



Call us for more information

For more information please call South East Water on 131 694 or visit www.southeastwater.com.au