Need More Information?

The following websites provide specific tips and information on how to reduce water use:

The Strategic Forum for Construction has produced a free Water Toolbox Talk to compliment this guide. It can be used to raise awareness throughout your workforce. See: www.strategicforum.org.uk

WRAP has developed a useful site with links to relevant documentation. In particular the site hosts a report on water audits on construction sites. See: www.wrap.org.uk/construction

CIRIA deliver a programme of business improvement services and research activities for those engaged with the delivery and operation of the built environment. See: www.ciria.org

The Environment Agency is a good source of information on water efficiency. See: www.environment-agency.gov.uk/business/topics/water/32070.aspx

These websites provide information on products available to help reduce water use:

The Bathroom Manufacturers Association has developed a water-efficiency labelling scheme which provides an easy means to identify water efficient products. See: www.water-efficiencylabel.org.uk/

The water efficient Enhanced Capital Allowance (ECA) scheme offers a 100% first-year allowance for investment in certain water efficient plant and machinery. See: http://wtl.defra.gov.uk

Waterwise offers some information on plumbing products that might assist with saving water on site. See: www.waterwise.org.uk/pages/products.html

These websites might also be of interest:

CEEQUAL is a Civil Engineering Environmental Quality Assessment and Award Scheme. See: www.ceequal.com

The Civil Engineering Contractors Association (CECA) represents the interests of civil engineering contractors registered in the UK. See: www.ceca.co.uk

BREEAM is an environmental assessment and rating scheme for buildings that includes best practice in sustainable building design, construction and operation. See: www.breeam.org

The UK Contractors Group is the trade association for large contractors operating in the UK. See: www.ukcg.org.uk

The Construction Alliance represents small and medium companies. See: www.theconstructionalliance.org

This guide has been produced by the Strategic Forum for Construction. It provides an arena where all parts of the sector can discuss strategic issues facing construction and seek to develop approaches for the benefit of all. For more information see: www.strategicforum.org.uk

Save Water on your Construction Site

The UK has less available water per person than many other European countries. Population growth and lifestyle changes, coupled with changes in rainfall patterns, have meant that water is becoming an increasingly scarce resource in many regions. In some areas the ongoing removal of water from rivers is damaging our natural environment and is not sustainable

Saving water is part of being a responsible contractor - it makes financial and environmental sense. Society and our clients now expect companies to avoid wasting water.

Currently you could pay up to £4.85 per cubic meter for your mains water and wastewater disposal and the cost of water is likely to rise significantly over the next decade reflecting our water resources situation, so take steps now to reduce your costs.

The 10 simple tips outlined in this guide can typically save in the region of 15 - 25% of your water consumption, or up to 85% where leaks are identified. Why not put this up as a poster to raise awareness on your site?

If you're interested in doing more then consider an audit of your site following this process:

- Appoint a champion 1.
- 2. Raise awareness with the SFfC water toolbox talk
- 3. Fit a water meter and take regular readings
- Implement the 'water hierarchy' 4.
- 5. Implement efficiency measures
- Monitor, record, and report the effectiveness of the measures 6.

If you want to know more, then a wealth of information is available to assist you. Please see the back cover for relevant links.

This guide has been produced by the Strategic Forum for Construction (SFfC) with support from WRAP.





Working together for a world without waste

As an industry a commitment has been made to reduce water usage by 20% from a start position of 148m³/£ million contractors output. How do you compare? How Can You Save Water?

Key

Indicative scale of implementation cost

Potential water

saving benefit



Don't ignore leaks! $\mathfrak{L} \odot \mathfrak{O} \mathfrak{O} \mathfrak{O} \mathfrak{O} \mathfrak{O} \mathfrak{O}$

An unfixed leak can be the most significant water use on site. Leaks can come from damaged washers in taps, worn valves and corroded or damaged pipework.

Fit trigger guns to hoses! $\mathbf{f} \odot \odot \odot \odot \odot \odot$

Hoses left running when not in use waste a lot of water in a short time. Fit robust trigger guns to hoses so that flow can be controlled at the point of use.



Dust suppression vehicles!

Most suppression techniques are very water inefficient. A hydraulic spinning system can be 90% more water efficient than a splash plate provided mains-quality water is available.

Chemical additives are an option to assist in reducing the volume of water needed.

Wheel washing!

Some drive through wheel washers don't recycle water. Use a closed loop wheel wash to reuse the water for the process. Waterless systems are another innovative option that use angled steel grids to clean debris from tyres.





Washing out concrete wagons! ££ 🙂 😳

Mains pressure hoses with basic spray patterns are water inefficient.

Use a high pressure low volume efficient spray pattern to reduce water use.

Using a specially designed sock to cover the chute can be an option to minimise water use, reduce spills and eliminate pollution.

Wash out water could be re-used at concrete batching plants.

Flushing toilets! $\mathfrak{L} \odot \odot \odot \odot \odot$

Toilets can use more water in a flush than is needed. If water is constantly running adjust or replace the inlet valve. Put a displacement device in larger cisterns over 6 litre volume. Modern low flush cisterns of 4.5 litres are another option.



Urinal flushing! £ 😳 😳 😳 😳

Consider the installation of a hydraulic valve or motion sensor to control flushing based on actual usage. Waterless urinals are another option.

Running taps! £ £ 😳 😳 😳

Flow from taps is often more than is needed. Consider adapting taps by either fitting a flow regulating or aerating tap insert. Changing the tap is another option. Turn taps off.



Commissioning water use!

High volumes of water are used during building envelope and services commissioning and testing.

Plan for these activities considering water recirculating and minimisation. The water used for flushing building services should be isolated as soon as possible after the flush water turns clear.

Consider the Water Hierarchy: Eliminate wasted water - - - > Improve efficiency and use alternative sources - - - > Reuse water - - > Recycle water



Urinals often flush at regular intervals regardless of use.

Demolition dust suppression!

High capacity rain guns used in demolition are water inefficient. A fan misting system is a mains fed electrically powered efficient alternative.







