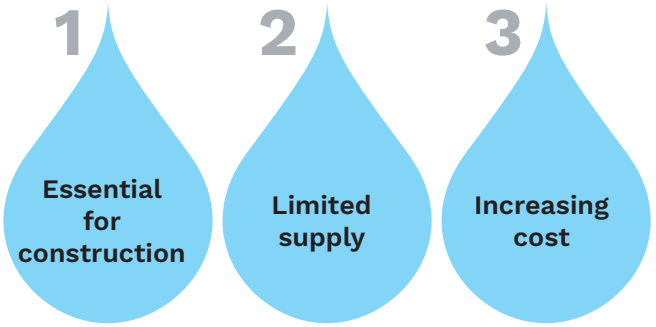
The Green Construction Board

Construction Leadership Council

Water use in construction



Water is integral to the economy, we need it for energy production, industrial processes, to grow food and, of course, for construction. In the coming years, the combined effects of climate change and a growing population are likely to put increasing pressure on our rivers, lakes and aquifers.

If we do not act now to manage our demand for water, the security of our water supplies could be compromised.

What is the situation in the UK?

It is a misconception that the UK has plenty of water.

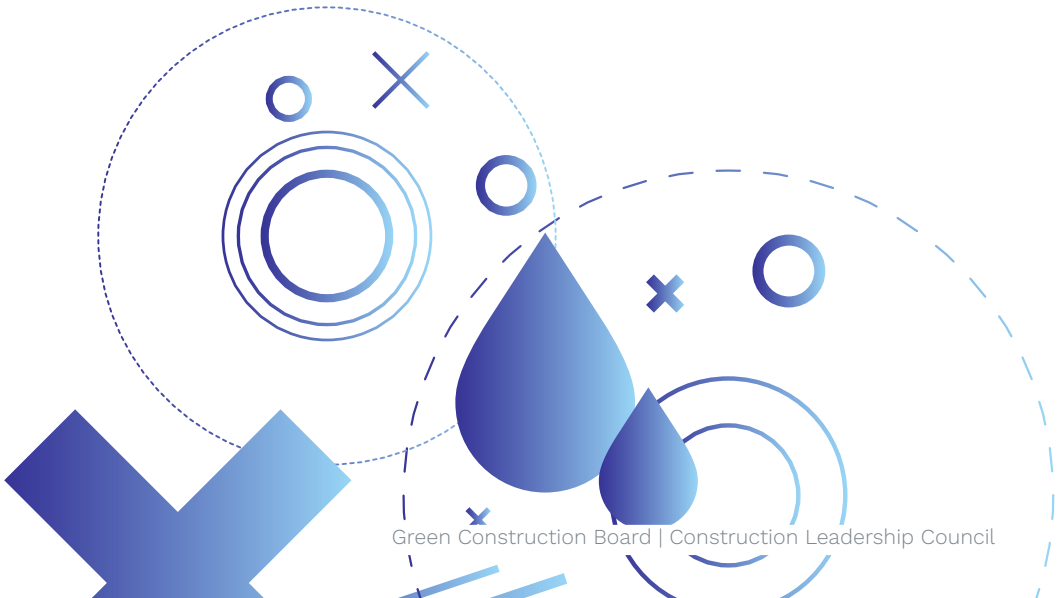
FACT - already, parts of England have less rainfall per person than many Mediterranean countries.

FACT - increasing demand will result in increasing cost both at home and on site as we fund new sources of supply.

FACT - water resources are under pressure and current levels of water abstraction are unsustainable in places.

What does this mean for construction?

- We can ensure no water is wasted.
- By reducing water usage, projects will benefit from cost savings and deliver environmental benefits.
- We all have a responsibility to measure, report and set targets for water use.
- We should identify if water from other sources might be an appropriate alternative using water of drinking quality standard for some uses on site.



Water hierarchy

Eliminate use	Is the process or activity really necessary? Is there a cost effective alternative to water?
Alternative 'non-potable' source	Eliminate inappropriate use of drinking (potable) water. Can you use rainwater or grey water for the activity/process?
Reduce	Explore options to improve efficiency. Can fittings or processes be updated?
Reuse	Can water be treated/filtered for reuse in a process or activity?
Recycle	Can water be recycled for use elsewhere?
Disposal	Dispose of excess water legally and responsibly to ensure there is no flooding, pollution or inconvenience to others.

What can you do?

Hold a discussion with your team to identify where you use water on site at the earliest opportunity to identify where you use water on site and plan for water reduction efficiencies. You will need to consider when in construction you would need to access and use water of drinking quality standard? Refer to the CLC 'How to save water on construction site' guide for the top ten quick reducing water tips. Three of the most commonly applicable water saving measures are listed below.

1. Fix leaks, stop running taps and sort leaky loos

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An unfixed leak or running tap can be the most significant waste of water use on site. Leaks can come from damaged washers in taps, worn valves and corroded or damaged pipework. Toilets may also leak through internal valves and incorrectly set cisterns. Avoid lengthy hosepipes as these are vulnerable to becoming easily damaged and can often result in multiple leaks. Install water points where they will be easily accessible and needed (at point of use) where practicable.

2. Fit trigger guns to hoses

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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 and spray can be controlled at point of use. Trigger guns and spray nozzles both reduce water use and can be more effective. This will also include hoseguns located at your bootwash stations.

3. Harvest and reuse water

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Water of drinking quality standard (potable water) doesn't need to be used for all purposes. Look at using reclaimed water for activities such as boot cleaning, wheel washing or wash out on site.

Take away message

Apply the water hierarchy.

Water is our most precious resource and every one of us has a responsibility to conserve and only use it if essential.