



# WATER EFFICIENCY FOR STADIUMS AND ENTERTAINMENT VENUES

## Why improve water efficiency?

An increased focus on water efficiency is important for many reasons. With South East Queensland experiencing a climate of extremes, there is the important sustainability consideration of ensuring enough water to meet future demand. For stadiums and entertainment venues there are also the associated financial benefits. Water efficient stadiums and entertainment venues can save money through:

- Reduced water use charges
- Reduced trade waste charges
- Reduced energy costs associated with heating and pumping water around a site

## Where to start? – Create a benchmark

Establishing a water use benchmark is the best place to start for any business looking to improve its water efficiency. As the amount of water used by stadiums and entertainment venues has a direct correlation to their frequency of use, the most appropriate benchmark is litres per visitor (L/visitor). For stadiums that incorporate an irrigated active playing surface, a separate benchmark tracking irrigation use should also be considered. Kilolitres per square metre of active playing service per year would be the most appropriate measure (kL/m<sup>2</sup>APS/year). Rather than total water used, benchmarks are the figures recommended to be tracked over time as a measure of water use performance as they account for any changes in business activity.







## Water efficiency actions for stadiums and entertainment venues

The water management actions shown below are good areas of focus for stadiums and entertainment venues wanting to achieve best practice in water efficiency:

- **Constantly monitor your water use.** Establishing a regular monitoring program will provide you with a better understanding of overall water use patterns, therefore ongoing monitoring by reading your main meter and any internal sub-meters is vital. Any noticeable change in usage trends can be quickly investigated. Consider also installing data loggers on the sub-meters in the more water intensive areas to provide more immediate and granular data.
- **Sub-metering.** Knowing exactly how much water different areas of the stadium or entertainment venue use will allow you to focus your efficiency efforts on the areas with the most potential. Sub-metering is recommended all major water using areas like cooling towers, all bathroom areas and grounds irrigation systems. Sub-metering will allow you to have a clearer picture of your site's water balance.
- **Education and awareness.** Employees provided with suitable training, e.g. less water intensive cleaning practices and responsibility for reporting leaks in taps/toilets with clear processes for follow up actions, can save water. Spread the word and let your customers know about your water saving efforts to help communicate the water sustainability message to the broader community.
- **Rain or stormwater harvesting.** Many stadiums and entertainment venues have considerable roof spaces and/or large car park areas that can be suitable for capturing large amounts of rainwater or stormwater runoff. Rainwater or stormwater can make a suitable fit for purpose replacement for potable water for several potential end uses including sporting field irrigation, cooling tower water and toilet flushing.
- **Install efficient fixtures.** For all bathroom areas consider installing water efficient appliances including 6 star WELS rated basin tapware (push button or sensor activated if possible), waterless or low flow urinals, 5 star or better WELS rated dual flush toilets and 3 star or better WELS rated showerheads. For suitable products visit [www.waterrating.gov.au](http://www.waterrating.gov.au)
- **Conduct regular onsite audits.** As with most large sites, operations have a dynamic nature with processes and people constantly changing. Just because something is supposed to be done a particular way, it doesn't mean it is always done that way. Regular part or whole site audits are a great way of making sure stadiums and entertainment venues are following a best operating mode with regards to all water use. Specialist external auditors may look at things through a different lens and identify previously unforeseen opportunities.

For more information visit  
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