



Good practice identified during action A1

Number/code: OM/SM16

Title: WATER SAVINGS SYSTEMS

Guidelines section:

Governance

Operational management

Context of the event

Event

Stadium management

Procurement

Mobility and logistics

Description

Stadiums have started to track water consumption more consistently and to put in place a series of water reduction strategies in order to address water conservation. Among these:

- Some stadiums are installing off-the-shelf products such aerators, to reduce the amount of water released by faucets
- Traditional toilets are being replaced with high-efficiency toilets that use about 1.25 gallons of water per flush
- Sensor-controlled faucets and restroom fixtures are helping to reduce consumption
- Underground sensors are being installed that transmit the field’s moisture level so it can be determined more precisely when fields need irrigation
- Greywater and recycled water systems are being installed and used for plant irrigation, helping to reduce consumption significantly; at the Levi’s Stadium, more than 85 percent of the water used in the stadium is now grey or recycled. The stadium is “dual-plumbed,” with grey and recyclable water flowing into storage tanks and non-recyclable water delivered to sewers
- At stadiums used for hockey, dehumidifiers are being installed. These help reduce ice melt and some arenas are also installing reverse-osmosis filtration systems to remove minerals from water which create harder ice for the rinks, reducing the amount of water needed to make the ice (which is about 12,500 gallons).
- Another strategy is the installation of waterless urinals (see OM/SM2)
- The Yankee Stadium is the stadium of the New York Yankees, club of Major League Baseball. It has a water conservation monitoring system through plumbing fixtures

- The Fédération Française de Rugby set up a closed watering system for the turf. Water recovery set up in 2014: recovery via drainage of land and the water of the ditches, sources returning to the pond then serving as a reserve for watering at new lands

Environmental benefits

Irrigation is not the only water use at stadiums. Sinks, toilets, urinals, as well as running water for cleaning and cooking are examples of opportunities where water can be conserved. Depending on the technology adopted, stadiums can significantly improve their water conservation. Data that quantify these improvements are not always available, but for example, through careful monitoring and high efficiency plumbing fixtures, the Yankee Stadium saves more than 3 million gallons of water each year, a reduction of 22% from water use prior to 2009.

Economic benefits

Unlike electricity, water use has not been consistently tracked in arenas and stadiums, partly because it has been heavily subsidized for decades. As a result, building operators have had less incentive to invest in water conservation. But with the reduced cost of water-saving technology in recent years, sports venue operators have started to embrace this environmental issue.

The water conservation allows clubs to reduce the costs related to water consumption. These costs are not easily quantifiable and depend on many factors and on the strategy/strategies adopted.

Applicability and replicability potential

The practice applied by New York Yankees refers to a stadium that from its construction met some sustainable requirements. The replicability potential is only partial, especially regarding those stadiums in which all these practices have to be implemented in an already established building.

Source

[Yankee Stadium](#)

[Fédération Française de Rugby](#)

[GRI Events](#) (p. 24)

[UEFA](#) (p. 96)

[The New York Times](#)