

Irrigating with recycled water

Wollongong Golf Club

In Sydney and the Illawarra, about 4.6 billion litres of recycled water a year is used for irrigating parks, sports fields, golf courses and farms.

By 2015, recycling will provide 12% of greater Sydney's water needs.

Wollongong Golf Club, in the Illawarra, is one of a number of customers using recycled water to save drinking water. The golf club has been using recycled water for irrigation since 2009. The club's 18-hole golf course covers about 45 hectares.

Recycled water

Wollongong Golf Club's recycled water comes from the Wollongong Water Recycling Plant.

Recycled water is water that has been used before, and then cleaned to remove impurities. It is a valuable resource, which can be used in many ways, including irrigation.

Sydney Water treats recycled to meet its Operating Licence requirements and NSW Health standards, so it's safe to use. There are many steps involved in treating recycled water for use on golf courses. These may include biological treatment, filtration, chlorination and ultraviolet disinfection.

The recycled water from the Wollongong plant is suitable for irrigating public areas, but not for drinking or bathing. For more information, see the *National Water Quality Management Strategy (NWQMS) 2006, Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1), NWQMS*.



Wollongong Golf Club saves about 50 million litres of drinking water each year by using recycled water for irrigation

Benefits of recycled water

- Saves drinking water
- Reduces the amount of treated wastewater entering waterways
- Is a reliable alternative water supply for irrigation
- Reduces long term costs – appropriate use of recycled water can reduce the cost of maintaining playing surfaces

How recycled water is produced

Wastewater going to water recycling plants is more than 99% water.

At the Wollongong Water Recycling Plant, a series of processes is used to clean the wastewater, before it can be used to irrigate the golf course:

1. The wastewater is screened and settled to remove large solids and grit.
2. Biological treatment uses micro-organisms to reduce nutrients such as nitrogen and phosphorous.
3. The treated wastewater is clarified to further improve quality.
4. A filtration process is used to remove some fine particles, bacteria and viruses.
5. The recycled water is then disinfected before it is pumped to Wollongong Golf Club.

How recycled water is used at Wollongong Golf Club

Wollongong Golf Club is next to the Wollongong Water Recycling Plant.

Sydney Water pumps recycled water to the club's 2.8 million-litre storage dam, which is used to irrigate 25 hectares of the 45 hectare site.

The golf club uses about 50 million litres of recycled water each year. The amount of recycled water used varies, depending on the weather and other factors.

The club generally irrigates the course at night to help reduce water loss from evaporation.

Safe recycled water

Recycled water is safe to use when relevant health and technical guidelines have been followed. It is treated to a high standard, but is not for drinking.

Sydney Water and Wollongong Golf Club have signed an agreement that ensures the safe use of recycled water and achieves the best results for the community, staff and the environment.

Signs around the golf course advise that recycled water is being used for irrigation.



Golfers enjoy the green tees and fairways, which are kept in good condition with the use of recycled water

To know more

To know more about recycled water and its availability:

Phone: 13 20 92

Email: recycledwater@sydneywater.com.au

Visit: sydneywater.com.au under 'Water 4 Life / Recycling'