

29th April 2021

Re: Submission into Non-potable Water Review in the ACT

This submission is written in relation to the review into Non-potable Water in the ACT, with particular reference to the management and presentation of turf playing surfaces at facilities used for sport and recreation.

As the peak industry body in Australia for professional Sports Turf Managers, those that manage and maintain turf playing surfaces, we unequivocally support the continuation of assistance programs to Golf Courses and Sportsfields, coupled with further investment into recycled water infrastructure, in order to allow the continued delivery of safe and sustainable playing surfaces in the ACT.

Background

Australia is a nation of sports lovers. Four in five (80%)¹ Australians agree that sport is a significant part of Australian culture. Participating in sport and physical activity helps Australians to enjoy healthier, happier and more productive lives, and brings communities together for the social and economic benefits to local communities.

There are countless research paper observing the benefits to communities derived from sports, through the development of strong social bonds, are safer places and the people who watch and participate are generally healthier and happier than communities where physical activity isn't a priority.

The continual maintenance of safe, healthy and environmentally sustainable playing surfaces is paramount to the ability to provide community and elite sport.

The Australian Sports Turf Managers Association is the peak industry body in Australia for professional Sports Turf Managers representing members of Sports Turf Management industry, the association supports members through education, facilitating Industry Awards, advocacy, and research & development into professional and environmentally sustainable Turf Management.

The Association works to improve the knowledge, welfare and professional standards of its members and other industry professionals as well as the production of quality turf facilities for Sport & Recreation in Australia, and strives to ensure that these constant improvements in professional Sports Turf Management standards are achieved in a safe, responsible and environmentally sustainable manner.

A continual challenge to sport in Australia, is that as a country, Australia is often subjected to severe drought, which places increasing pressure on the available water. We understand that it is necessary to carefully prioritise where water is to be used, whether in households, agriculture, irrigating turf sporting facilities.

The maintenance of a high-quality turf relies on having access to a constant water source that is of moderate to good quality. As a consequence of droughts impacting many parts of Australia, including the ACT, the prohibitive costs of potable water (and desire not to utilise this source) available for irrigating turf, Golf Courses and Sportsfields have implemented the use of alternative water sources such as reclaimed wastewater and saline bore water.

¹ <https://mccrindle.com.au/insights/blog/australia-the-sporting-nation/>

Alternatives for Consideration

Current costs associated to accessing and use of surface water and groundwater for Golf Courses and Sportsfields in the ACT, are prohibitive for Clubs to drive continued investment into this area. With construction (dams, storage) and irrigation costs borne by the clubs, the fees imposed by the ACT Government in the form of the non-potable WAC on water use and a licence administration fee are unlike any other jurisdiction in the country and prohibitive to Clubs investing further in this capital and servicing infrastructure.

As opposed to the current approach of metering and costs incurred by facilities for surface water and groundwater storage and use, in addition to the WAC payable to the EPA, we would like to see further consideration of the removal of charges associated to facilities accessing surface water and groundwater captured at their facilities that they have incurred costs for.

Further, investment from Clubs, the ACT and Federal Governments into expanding stormwater harvesting and managed aquifer recharge system, as has delivered significant benefits to golf courses in South Australia², would support the current approach for use of stormwater from the Inner North Reticulation Network providing significant environment, social and economic benefits through reducing flows into Lake Burley Griffin, reducing algae and reducing demands on potable water.

Further expansion of this infrastructure enabling access to high-end water users would provide significant long-term benefits and surety through providing end users with fit-for-purpose stormwater for irrigation.

In the balance between regular water management practices and the ability to present good-quality turf playing surfaces for sport and recreation, critical factors must be measured:

- The availability of a good-quality and regular water supply is essential in maintaining highquality turf surfaces.
- Possibly the single greatest threat to the management of turf surfaces on Sportsfields and golf courses is the lack of available water and the increasing salinity of water supplied.
- As the demand for water increases, facilities are being forced to utilise lower-grade water supplies which are high in salts, sodium, nutrients and other contaminants.
- With the increased use of lower-quality water supplies, more intensive management will be required using various water treatment and soil remediation techniques.
- Ground water, Stormwater run-off and reclaimed wastewater remain an underused resource that can provide a good-quality water source for Sportsfields and golf courses.

Reclaimed wastewater, which is primarily treated sewage effluent, is increasingly being used to irrigate turf. A number of detailed reports (e.g. NSW Task Force on Reclaimed Water) have investigated and described the feasibility of reusing treated sewage effluent.

A NSW Department of Resources and Energy review³ recently stated that in Australia the total amount of treated sewage was about 1300 gigalitres/annum, of which only 56 gigalitres/annum (4.4%) is reused in irrigation.

Treated wastewater is an important water resource for irrigation purposes and significant research and infrastructure investment has allowed this approach to be a contributing factor for supplemental water used for turf management.

As demands on our water supplies for domestic consumption increase, less water becomes available for irrigation purposes; however, the increase in urban development brings not only a greater demand for potable waters but also generation of more wastewater.

² <https://www.waterconnect.sa.gov.au/Content/Publications/DEW>

³ <https://www.industry.nsw.gov.au/water/plans-programs/strategy>

As evidenced in the North Canberra Water Reuse Scheme and Lower Molonglo Water Quality Control Centre, the treatment of wastewater and its disposal pose significant financial and environmental issues to ACT waterways.

However, the current approach for use of stormwater from the Inner North Reticulation Network provides significant environment, social and economic benefits through reducing flows into Lake Burley Griffin, reducing algae and reducing demands on potable water. Further expansion of this infrastructure enabling access to high-end water users would provide significant long-term benefits and surety through providing end users with fit-for-purpose stormwater for irrigation

The Southwell Park Watermining Project delivered promising signs for the supply of effluent water for irrigation of sporting fields, however the project has been de-funded and no longer in use. This technology and investment is widely utilised in other States, and is proving to be a sustainable, lowcost approach to irrigation of sports facilities.

Environmental Considerations

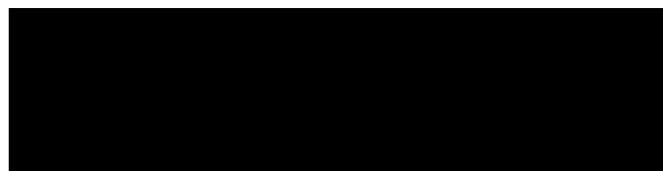
The disposal or reuse of wastewater must be done in an ecologically sustainable manner. Wastewater can contain a range of contaminants including salts, nutrients, heavy metals, viruses and bacteria that can limit the reuse options. The use of wastewater that has a heavy contaminant load can have implications for human health, cause soil degradation and result in uncontrolled discharge of pollutants to surface and groundwaters. The other important component of the sustainability equation is maintaining the playing quality of the turf area.

The reuse of wastewater in all States and Territories is an integral part of ecologically sustainable development and integrated catchment management philosophies concerning water quality. There is now strong encouragement to reuse treated wastewater for irrigation purposes in order to protect the quality of surface waters.

Many environment protection policies demand that wastewater no longer be discharged to surface waters and that it be reused, with the general philosophy demanding there be no discharge of wastewater to waterways. Resultingly, numerous neighbourhood recharge and reuse schemes are being established around Australia to use wastewater for turf irrigation, and reuse of wastewater has a strong community appeal.

Position Summary

In closing, we unequivocally support the continuation of assistance programs to Golf Courses and Sportsfields. We further submit that additional investment into recycled water infrastructure should be prioritised, particularly in relation to water storage dams of meaningful capacity for irrigation purposes and access to recycled water – all of which are considered opportunities to help secure the long-term effective management of water resources and maintaining economic viability of Golf Clubs and Sportsfields in the ACT.



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