

# Irrigated Public Open Space Principles

## Outdoor irrigation guidelines for Councils and Developers for season 2013/2014

Water Wise Measures continue to remain in place throughout South Australia. The Measures form a baseline level of water use in recognition that water will always be a valuable resource that should never be taken for granted or squandered.

### What does this mean for your organisation?

Cumulative turf areas greater than 5000m<sup>2</sup> using SA Water drinking water for irrigation purposes are required to apply to SA Water for an IPOS (Irrigated Public Open Space) permit under the IPOS Program.

Previous allocations imposed under higher level restrictions are no longer applicable.

Management of open spaces must be in accordance with best practice guidelines such as outlined in the IPOS Code of Practice. Councils and developers are responsible for determining the actual irrigation requirement that best suits each site, taking into account the amount and type of use on each site.

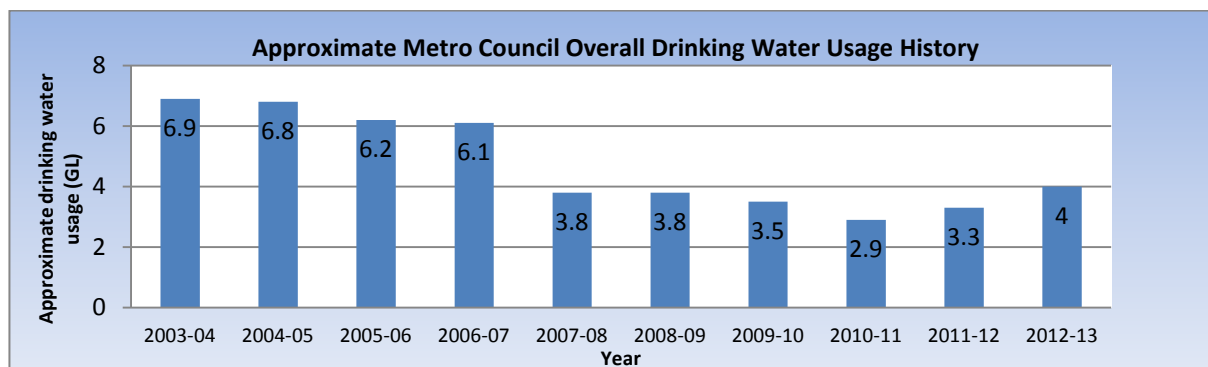
SA Water is committed to assisting open space staff to implement best practice irrigation management of open space areas to ensure valuable resources are managed efficiently and effectively. It is important to recognise the social, environmental and economic benefits of managing open spaces to industry best practice standards. Valuable information including information sheets, case studies, and toolkits can be sourced from [our website](#).

Many open space managers have increased irrigation efficiency by:

- Education and training of staff
- Turf and irrigation maintenance management policies
- Effective management of water efficient irrigation systems
- Effective irrigation scheduling regimes
  - No watering during the heat of the day or during effective rain events
  - Reducing irrigation during the shoulders of the season
  - Installing dedicated meters, central control systems, site specific weather stations, other tools and reporting models for monitoring, managing and recording water usage – knowing what is actually going on turf areas
- Effective horticultural maintenance programs
- Planting drought tolerant species
- Use of 'fit for purpose' water sources such as recycled water for irrigation
- Browning off low functional sites and implementing dry landscape treatments

## History of drinking water usage under Water Restrictions and Water Wise Measures

The following graph indicates approximate drinking water usage for 16 major South Australian metropolitan councils over the past ten years. This figure is an approximate overall figure and includes internal and external use.



### SA Water permit process for season 2013/2014

Permit letters will be issued to councils and developers who are already registered. Councils who have not registered their sites using SA Water drinking water for irrigation purposes will be required to submit an IPOS application form along with a list of the sites.

### Monitoring and recording irrigation water usage

Monitoring your water use by reading water meters and recording the usage is an essential part of best practice irrigation and the information is useful for:

- Policy and budget planning
- Calculating turf requirements
- Scheduling irrigation systems
- Identifying how much water is actually being used for irrigation purposes
- Identifying possible water leaks
- Identifying potential water efficiency opportunities

### Reporting water use to SA Water

It is a condition of the permit that actual water used for irrigation purposes is monitored and reported to SA Water. Individual reporting requirements will be detailed on the IPOS permit.

### Reporting Tools

Reports will be accepted in formats developed by councils as long as they demonstrate best practice irrigation management.

The SA Water Microsoft Excel based toolkit remains available and can be downloaded from our website.

## IPOS Guidelines

The table below outlines a framework for irrigation. Irrigation systems should be audited for their efficiency regularly and scheduling should be in line with irrigation requirements. Definitions are provided below the table.

Irrigation Guidelines	Principle
<p><b>Trees and/or community gardens</b></p>	<p>Existing trees and feature landscapes managed by local or state governments, or commercial organisations, which may also include trees, flower beds, ornamental gardens and other planted sites <b>may be irrigated via sprinkler irrigation which can take place on any day after 8pm of an evening and before 8am the following morning. Hand-held hoses fitted with a trigger nozzle and drip irrigation systems may be used at anytime.</b></p> <p>SA Water encourages landscapes requiring only establishment watering and then minimal supplementary irrigation during extended hot periods if required.</p> <p>Dedicated drip irrigation that supplies water directly to the plant rather than blanket drip is encouraged.</p>
<p><b>New trees and/or community gardens</b></p>	<p>New trees and/or feature landscapes managed by local or state government, or commercial organisations which may include trees, flower beds, ornamental gardens, and other planted sites <b>may be irrigated via sprinkler irrigation which can take place on any day after 8pm of an evening and before 8am the following morning. Hand-held hoses fitted with a trigger nozzle and drip irrigation systems may be used at anytime.</b></p> <p>When planning a new landscape, councils and developers are encouraged to:</p> <p>Design landscapes suited to the local environment requiring minimal supplementary irrigation and to practice efficient irrigation scheduling.</p> <p>Irrigation systems should be designed to provide plants with their individual water requirements.</p>
<p><b>Turf parks and sports grounds</b></p> <p><b>TQVS 1-4</b></p>	<p><b>Under an IPOS permit, sprinkler irrigation can take place on any day after 8pm of an evening and before 8am the following morning. Irrigation consumption should be in line with actual irrigation requirements. Hand-held hoses fitted with a trigger nozzle and drip irrigation systems may be used at anytime.</b></p>
<p><b>Fertilising, weed control and system testing</b></p>	<p><b>Under an IPOS permit, fertilisers or pesticides can be watered in during the daytime for 10 minutes per station and testing of irrigation systems is permitted during the day for 5 minutes per station. On the day of fertilising, treatment or system testing, you must contact the SA Water Water Wise Hotline on 1800 130 952 to advise us.</b></p>
<p><b>Permits for establishment of new or renovated turf</b></p>	<p>If planting or sowing new turf or if you are rejuvenating established areas and need to water outside of the 8pm to 8am time frames <b>a new turf application form will need to be submitted to SA Water for approval.</b></p>
<p><b>Permits for all other drinking water use</b></p>	<p><b>If outside of the current Water Wise Measures the relevant permit application form must be submitted to SA Water for approval.</b></p>

## Definitions

TQVS (Turf Quality Visual Standard): A visual indicator of turf quality based on the functional objective and fit for purpose requirement of the turf grass surface. There are four levels from TQVS 1 through to TQVS 4.

BIR (Base Irrigation Requirement): The base volume of water to be used as a guide in planning irrigation requirements for the forthcoming irrigation season. The BIR is calculated using long term average climate data.

AIR (Actual Irrigation Requirement): The amount of water to be applied by irrigation to a given area of turf to produce the desired quality outcome using the current 'actual' climate data.

## Useful contacts and links:

- Irrigation Australia Limited - [www.irrigation.org.au](http://www.irrigation.org.au)
- Turf Grass Association of South Australia Inc- [www.tgaa-sa.com](http://www.tgaa-sa.com)
- Local Government Association - [www.lga.sa.gov.au](http://www.lga.sa.gov.au)
- Nursery & Gardens Industry South Australia - [www.ngisa.com.au](http://www.ngisa.com.au)
- Bureau of Meteorology - <http://www.bom.gov.au/watl/eto/>
- Smart Approved WaterMark - <http://www.smartwatermark.info/home/default.asp>

## Are you receiving the IPOS e-Bulletin?

**Yes** - Provide us with your feedback or tips and tricks and we can include them in the bulletin.

**No** - To join our mailing list contact the Business Sustainability Group.

### Further information

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Website: [www.sawater.com.au](http://www.sawater.com.au)

- Irrigated Public Open Space - [http://www.sawater.com.au/SAWater/Environment/WWM/WWM\\_IPOS.htm](http://www.sawater.com.au/SAWater/Environment/WWM/WWM_IPOS.htm)
- Business Sustainability Group - <http://www.sawater.com.au/SAWater/YourBusiness/SaveWaterInYourBusiness>