

IPOS e-Bulletin

Issue 47 – May 2017

Time to Talk Dirty

Many recipients of this eagerly awaited communique will be aware of the extensive network of Recycled Water supplies that now stretch their way under the streets of many parts of this city. As the customer list for this network keeps lengthening and many more are interested in connecting to this brilliant alternative supply we thought it would be valuable to provide a short synopsis of what it can be used for and some contact details.

Non Residential schemes are now managed by Business Relations where the primary contact is **Wendy Smallwood**. She can be contacted by email wendy.smallwood@sawater.com.au or by phone on 08 7424 1145.

What is it Suitable for?

All users will require an approval from the Department of Health as the different schemes all have slightly differing levels of quality. Dependent upon the schemes and the appropriate approvals it can be used for:

- Unrestricted residential garden watering
- Unrestricted irrigation of Ovals, Playing Fields and Golf Courses (*subject to contract agreements*).
- Irrigation of turf, pasture, trees, vineyards and most commercial crops
- Dust Suppression (*subject to applications methods*)
- Compaction on construction & road network sites
- Toilet flushing.

There are some specific requirements as stipulated by the OTR around recycled water so if you are looking to install or alter a recycled water supply in any way you will need to be aware of the requirements so call us or drop us an [e-mail](#) and we'll help you cross the T's and dot the I's.

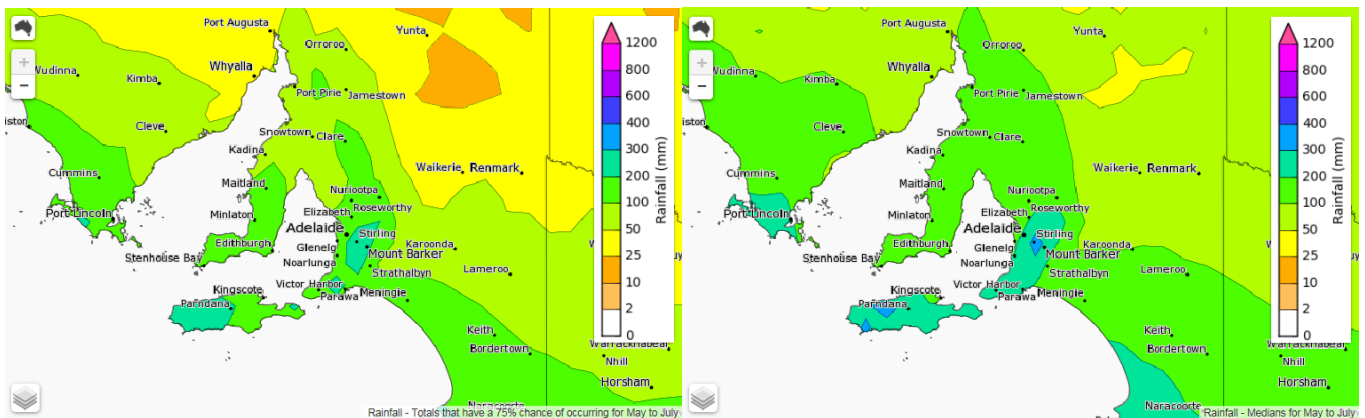
If you want to know more about the Recycled water network or you're not yet connected and are curious about what recycled water could offer you then please check out these links [here](#), call us on 08 7424 1145 or [e-mail](#) us for information. We'll be happy to help.

Winter Irrigation?

Warm & Dry

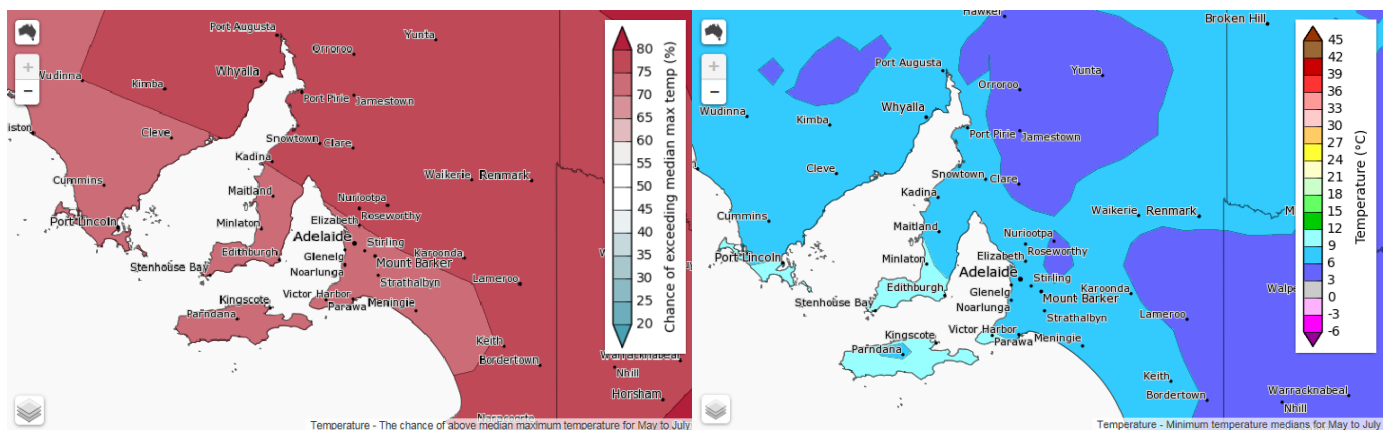
There's nothing "standard" about South Australian weather at the moment it seems. Quite apart from the huge regional variations throughout the state (sometimes over just a few km') the Summer and Winter appear considerably more similar than when I first alighted upon these sparkling shores a mere 11 years ago. According to the good chaps at BOM it appears there's more is store. May to July is 75% more likely to have below average rainfall for the southern two-thirds of Australia and the same period is likely to be warmer day and night than the norm.

The first map (below left) shows the likely rainfall over Adelaide and its surrounds for May to July at a 75% likelihood. The map on the right shows median rainfall from between 1981 to 2010 with the same colour graduated key. There is a striking reduction in the area of blue depicting high rainfall between the maps and a marked increase in the areas of yellow and orange on the left map suggesting lower rainfall over much of the state.



BOM 2017 - <http://www.bom.gov.au/>

The maps below tell a similar story. The map on the left shows the likelihood of temperature above the minimum median temperature (1981-2010) as depicted by the map on the right. Through the Adelaide region there is an approximately 65% chance the average temperatures will exceed the median and 70% chance in the Riverland and Port Augusta.



BOM 2017 - <http://www.bom.gov.au/>

So what does all this mean for you as a turf professional right here in South Australia. Well depending on your turf type and uses it seems likely you could be irrigating for longer into winter and starting earlier in spring. Using the maps above we can see that for most of the Adelaide region the rainfall might reduce by as much as 50% over the next 2 months to barely 100mm from a long term average of nearer 200mm. Despite a lower ETO index the lack of rain may require supplemental irrigation unless of course you want to compensate for the likely warmer average air temperatures by using lack of moisture to encourage the grasses into dormancy. The warm season grasses below show the air temperatures (usually night) or soil temperatures to push them into dormancy. From the maps above it can be seen that there is a 60% likelihood the median minimum air temperature will be higher than the average (6°C) over the Adelaide region which of course will translate into higher than average soil temperatures.

Turf Grass Species	Water Use	Average Night Dormancy Temperatures	Average Soil Temperature for Dormancy
Couch	Low	3 - 6°C	16
Kikuyu	Medium	0 - 3°C	14
Buffalo	Medium	0 - 3°C	14

These conditions may also impact by requiring increased fertiliser use, extended mowing and less downtime to conduct repairs to equipment and irrigation systems. Of course the best person to judge your turfs requirements is you and we'd be interested to know how things pan out for you. Let us know by firing us an [e-mail](#) with a few pointers as to the changes you notice over the coming winter and we'll publish a few in coming IPOS bulletins.

Tip of the Months

Winter Maintenance

Whilst it's undoubtedly the right time of year to sit and roast marshmallows in front of the fire pit and reflect on a year's turf management well done, it's not all quite peaches & cream yet. The next few months have their own challenges. Here's a few pointers;

May

Broadleaf weeds may start to be a problem, therefore assess the scale of the problem, identify the types of weed and use the correct herbicide – not just glyphosate. Spraying of any pesticide on sports turf areas should be done outside of normal school hours, having first advised the Principal of the need and method and checking any standard school operating procedures. If in doubt there are qualified horticultural (turf) spraying contractors who can provide advice and carry out the work.

June

Your main task at this time of year will most likely be line marking for various sports. Most turf grasses are going into dormancy. This is also a great time to implement major repairs to your irrigation system. That patch of dead grass or the constant puddles by the path are both signs of a sickly system. Take the opportunity to repair when water demand is at its lowest and save yourself the mad rush in a few months' time.

April Irrigation Requirement Overview

Station	TQVS 1 (kL/Ha)		TQVS 2 (kL/Ha)		TQVS 3 (kL/Ha)		TQVS 4 (kL/Ha)	
	AIR	BIR	AIR	BIR	AIR	BIR	AIR	BIR
Adelaide Airport - 023034	476	731	203	350	134	255	0	160
Kent Town - 023090	747	569	385	241	295	159	204	0
Mount Crawford - 023763	430	513	88	174	0	90	0	0
Noarlunga - 023885	535	712	196	343	111	250	0	158
Parafield - 023013	727	723	380	355	293	238	206	141

AIR is the 'Actual Irrigation Requirement' which is based on the current climate data.

BIR is the 'Base Irrigation Requirement' which is based on historical climate averages.

Station	Rainfall (mm)		Eto (mm)	
	Current	Long term	Current	Long term
Adelaide Airport - 023034	33	36	78	109
Kent Town - 023090	25	40	103	95
Mount Crawford - 023763	68	53	98	95
Noarlunga - 023885	50	34	97	106
Parafield - 023013	23	40	99	111

Disclaimer:

SA Water's Business Relations Group provides recommendations and suggestions only. It is advised that further investigations are detailed studies are completed before any projects are implemented. All applicable standards & guidelines (Australian, EU, AQUIS, HACCP, Australian Drinking Water Quality Guidelines et.c) should be adhered to, and care should be taken to ensure water and wastewater minimisation programs do not negatively impact health or processing operations.