

IPOS e-Bulletin

Issue 49 – December 2017

November Irrigation Requirement Overview

Irrigation requirements for different regions in Greater Adelaide are presented below. If you would like specific irrigation requirements to you, please contact us and we may be able to provide this to you based on your location.

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	1639	1525	960	853	790	685	620	517
Kent Town - 023090	1282	1413	711	772	569	612	426	452
Mount Crawford - 023763	1230	1353	614	720	460	562	306	404
Noarlunga - 023885	1544	1465	913	821	755	660	597	500
Parafield - 023013	1697	1616	982	904	803	726	624	548

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

BIR is the 'Base Irrigation Requirement' which is based on the average of the previous 5 years climate data.

Station	Rainfall (mm)		Eto (mm)	
	Current	Long term	Current	Long term
Adelaide Airport - 023034	10	25	194	196
Kent Town - 023090	23	30	163	188
Mount Crawford - 023763	50	37	176	182
Noarlunga - 023885	6	24	181	187
Parafield - 023013	15	26	204	205

Tip of the Month

Managing open space over the break

Leading into the festive season there may be fewer fixtures scheduled on your sports field. This may provide an opportunity for you to carry out some maintenance. Fertilising, coring and/or scarifying may be worth considering.

Pressure and Flow Supplied to your Property

On occasion, the Business Relations Team will receive enquiries regarding the pressure and flow being supplied to a customer's property. In this article we aim to give you an introduction to the relationship between pressure, and flow and how it may impact your operations.

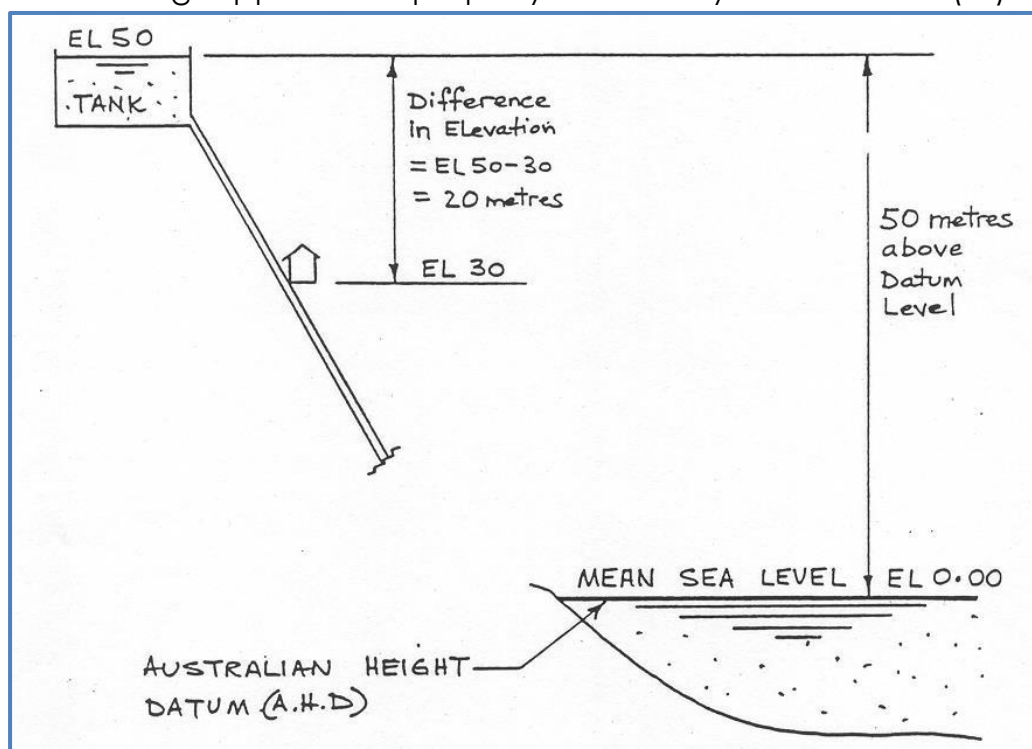
Flow:

The flow of water refers to the motion of a fluid, in this case water, and is commonly expressed in a volume over a defined time period such as minutes, e.g. litres per minute. The flow in closed pipes depends on the pipe diameter, length of pipe, roughness of the pipe wall (friction) and the upstream pressure.

Pressure:

Water pressure is the force acting on an area and is commonly expressed in kilopascals (kPa) or meters head (m). Within our water supply network the pressure at your connection will, in most cases, originate from an elevated tank upstream from your property. One meter of elevation (1 meters head) equates to approximately 10kPa of pressure. Figure 1 is a typical example illustrating the pressure head created by an elevated tank. In this example the pressure supplied to the house is 20 meters which is approximately 200kPa.

Figure 1 – Pressure being supplied to a property created by the elevation (EL) tank



Pressure and Flow Relationship:

The flow and pressure supplied to your property will depend on a number of factors. The size of your connection(s) and water main adjacent to your property, your location in the localised network from the elevation tank and whether there are pumping stations or pressure reducing valves near your property will all impact the supply to your property. The flow and pressure will also be impacted by the demand from other water users drawing from the same water main. If there is significant demand on the localised network you may notice a pressure reduction at your property during this time. Conversely, there will be greater supply conditions available during times where demand is lower. When we assess a new water connection application, we will consider the extent of demand already on the localised network and plan accordingly. In areas where the water demand is approaching the capacity of what the localised network can supply, we will propose augmentation solutions to allow for growth and potentially add these projects to our capital works plan.

SA Water's Obligations:

While we will use our best endeavours to provide you with a water flow rate to meet your reasonable needs we do not guarantee specific values for either flow or pressure. We acknowledge that the flow rate and pressure may not be sufficient for all purposes without provision of additional onsite infrastructure. The customer will assume the responsibility of providing such additional infrastructure. For more information on this please refer to the SA Water Standard Customer Contract.

How do you manage pressure at your property?

- Re-pressurise your supply by installing a tank. Water can then be pumped from the tank into your internal plumbing network. This allows you greater control over the pressure and flow of your water supply;
- Reduce the pressure by installing pressure reducing valves through your internal pipework;
- Maintain pressure by reducing pressure losses through better plumbing designs, reducing the number of bends and elbows and rising mains, reducing the distance water travels across your site as well as managing water consumption and efficiency across the your site; and
- Maintain appropriate pipe sizing and ensure pipes are clear of obstacles.

How do you manage flow requirements at your property?

- Installing a tank on your property and pumping from the tank;
- Increase the size of internal pipes at your property if your internal pipes are restricting flow; and
- Implement flow restrictors in the internals of your pipe to decrease flow.

It's important to remember to use a licensed plumber when making changes to your plumbing and ensure you are meeting all the appropriate regulations. Hydraulic Engineers are also useful to assist in the design and improvement of pressure and flow conditions at your property. If you'd like to know specific details regarding the pressure or flow at your property please contact us on the details in the banner below.

Happy Festive Season

Wishing you a safe and happy festive season from the Business Relations Team.

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 etc.) should be adhered to, and care should be taken to ensure water and wastewater minimisation programs do not negatively impact health or processing operations.