

GARDEN FOR WILDLIFE

WHERE DOES OUR WATER COME FROM?

The Roe Creek Borefield supplies Alice Springs with 90% of its water. Like all groundwater it contains some natural dissolved salt, and being largely fossil water, is not renewable once used. The remaining 10% of our supply is groundwater from the Town Basin, which is replenished by occasional flow in the Todd River.

Water that fell thousands of years ago into the Roe Creek Borefield has collected in an underground basin by seeping through porous sediments and has remained ever since. Nevertheless, the water level of the Roe Creek Borefield is dropping a little over 1.5 metres a year. Currently, water is pumped to a depth of 160 metres.

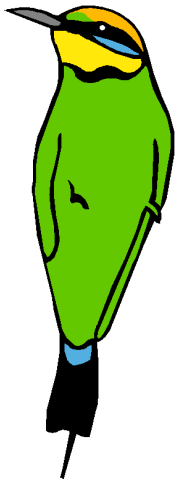


As the supplies in the Roe Creek Borefield become more inaccessible the cost of pumping will increase. Alternatively, distant borefields may be tapped, which are estimated to cost about \$30 million, meaning that our water bill almost certainly will rise to help meet this cost.

The Town Basin is an alluvial basin beneath the centre of Alice Springs. Impermeable ancient rock cradles younger sediments, which trap water from rain and the Todd River. Under natural conditions this basin is replenished by the natural flow of the river and runoff. Until quite recently this has kept the basin groundwater reasonably fresh and provided the natural environment with a constant supply of moisture.

Up until the 1960's, the Town Basin was the source for Alice Springs water supply. Roe Creek Borefield was established in 1964 due to the rapid growth in the town's population, leaving the Town Basin to be used for irrigating local parks, ovals and the golf course. The wet years of the 1970's, combined with the lack of pumping since the swap to the borefield water supply, has allowed the basin water table to rise several metres. This should sound good for a desert town but in fact it is the opposite. The rising water has mobilised the naturally occurring salts in the soil, leading to salt pollution in some parts of the basin. Because the Town Basin is overfull, it cannot be replenished by fresh rainwater.

Another problem exists where bad watering practices load the surface soil with salty borefield water. The water evaporates, leaving the salt behind as a white surface crust where few plants will grow and which is prone to erosion. This is particularly disturbing in areas where high salt levels already exist, such as Heavitree Gap and Sadadeen.



By using less water on your garden and planting local native vegetation, Alice Springs residents can decrease the excess water consumption habits. Establishing dripper irrigation systems and utilising rainwater, greywater re-use systems and mulch in your garden will enable the community to live within our environment, not beyond it.

Here a few points to help you conserve water in your garden:

- Reduce your lawn area
- Use local native plants that are suited to this environment
- Use drip irrigation systems and greywater re-use systems
- Have well-mulched soils
- Water in the evening, or very early morning to reduce evaporation (remember that deep soaking is a preferred method of watering, that encourages strong and deep root systems).
- Utilising water harvesting methods i.e. channel rainwater from roofs, pavers and air conditioner overflow into your garden.
- Use shade cloth over summer vegetables and shelter citrus trees from hot winds and excessive sun.
- Fix leaking tap, install low flow showerheads and use a swimming pool cover.

Reference: ARID ZONE WATERING – *A Guide to effective irrigation in Central Australia.* Power and Water Corporation 1993. www.nt.gov.au/waterwise and COOLmob - www.coolmob.org.

Garden for Wildlife has successfully secured another \$4000 from EnvironmeNT and \$5000 from Power and Water Corporation, which will go towards promotional activities, workshops, newsletters and registration of new members. **THANK YOU** to our sponsors for this valuable support.

For those of you who have returned the postcard application form and who have paid the fee, I thank you very much. I look forward to receiving your registration form so that I can complete your Garden for Wildlife membership and provide you with an information pack to help you get on your way to establishing a water wise and wildlife friendly garden.

Visit the Garden for Wildlife website at www.lowecol.com.au/lfw/gfw.htm to download the excel registration form. To view the vegetation list for your block visit www.lowecol.com.au/lfw/gfwveg.htm