

Groundwater Awareness

EARTH FIRST

By Nick King, ECCO

National Groundwater Awareness Week

National Groundwater Awareness Week (7-13 March) is a time when we are encouraged to reflect upon the value of groundwater as a natural resource.

In Australia, groundwater provides more than 20 percent of water used each year, and is becoming increasingly important due to drought and over allocation of surface water. Groundwater can be present as underground lakes beneath the Earth's surface, but it is more commonly the water that lies in the tiny spaces between grains of sand or bits of fractured rock (Malkovic, 2007).

Groundwater uses

Across Australia, groundwater plays a critical role as a source of water for drinking, irrigation and industrial purposes. Bores utilise groundwater to water suburban gardens and to irrigate parks, golf courses and crops. It is also a vital part of the ecosystems that support wetlands and some unique plant and animal species. Groundwater also keeps many of our creeks and rivers flowing when there are long periods without rain (Malkovic, 2007).

A hidden resource

"Groundwater is a major resource, but has been taken for granted for decades. In the past groundwater supplies were treated as an infinite resource and subject to an "out of sight, out of mind" attitude. But that is changing. There's now an enormous interest in the way our groundwater resources are measured, managed and utilised. There are also concerns over issues such as over-extraction of water, pollution, wastage, allocation and licencing issues, water pricing and groundwater salinisation" (Malkovic, 2007).

Groundwater in Orange

A perusal of the Groundwater Bores and Groundwater Management Areas-Orange Local Government Area map indicates that Orange has close to four hundred registered groundwater bores, many of which are used for unregulated private use. Orange City Council is now in the process of extracting groundwater for public use through a bore at Orange Showground and a soon to be connected pipeline to a bore at Clifton Grove. Within the next month, bores will be providing fifteen percent of the city's daily water consumption (Redmond, 2009).

Increased demand will inevitably lead to questions being asked about regulation and monitoring of groundwater. Orange City Council has responded to community concerns through supporting the motion put forward in 2009 that:

- Council initiate moves to establish the number of bores in the Local Government Area of Orange, with a view to implementing some control or educational measures in the use of the water.

- That failing Council not having the authority to regulate or register bores that an approach be made to the appropriate State or Federal body to assist in that outcome.
- That this process provides a vehicle for assessing the impact of bores on the available aquifer supply for the town and a subsequent control and measurement regime be initiated.

Such measures are essential if Orange's source of groundwater is to remain sustainable. Hopefully our community will support measures which allow for the measuring, monitoring and regulation of our groundwater so that it remains a sustainable and reliable resource long into the future.

For more information about National Groundwater Awareness Week visit <http://www.ngwa.org/public/awarenessweek/index.aspx>

Sources:

1. Malcovic T. (2007), *The Water Down Under*, Australian Academy of Science, accessed 18th February 2010, <http://www.science.org.au/nova/100/100cred.htm>.
2. Redmond, N. (2010), *Media Release: Bore Bounty*, Orange City Council. Orange City Council, *Notice of Motion*, Item: 6.B, Page C8, 6 December 2009.

Sustainable tip for the week: Groundwater resources are often recharged during significant rainfall periods. In a similar way, to promote infiltration of water around your property, create small shallow depressions in your garden for water to pool and soak during rainfall events.

Green dates for the calendar:

Sunday March 7 is Clean up Australia Day. Volunteer at Lake Canobolas from 9am, Spring Hill recreation ground from 9am, Elephant Park from 10am, Somerset Park from 10am, Moulder Park from 10am, Gosling Creek Reserve from 1pm and Hill Park Bowen from 1pm. For more information, visit www.cleanupaustaliaday.org.au or contact ECCO

Earth Hour: March 27-stay tuned for details.