

Groundwater 'supports industry worth \$34 billion' in Australia

October 21 2013

Australia's reserves of groundwater help earn the nation a steady \$34 billion a year from mining, food production and manufacturing, according to a new study.

A report by Deloitte Access Economics, commissioned by the National Centre for Groundwater Research and Training (NCGRT) has highlighted for the first time the key role which this valuable and potentially renewable resource plays in the nation's economy.

The Deloitte Access Economics study is the first attempt ever made to quantify the value of Australia's [groundwater](#). It found:

- Groundwater directly contributes an estimated at \$6.8bn/year to the Australian economy
- Industries with production worth \$34bn a year depend on groundwater
- Current average annual groundwater use is approximately 3,500 GL
- 60 per cent of this is used to grow food, 12 per cent is used in mining and 17 per cent in manufacturing
- 11 per cent is used for drinking water
- It also supports landscapes, the forestry industry and acts as 'water insurance' to the nation in the event of drought
- There is currently 6,544 gegalitres (GL or billion litres) under

license for possible extraction from groundwater out of a total estimated sustainable reserve of 29,173 GL.

"To many people, groundwater is all-but invisible, or there as a last resort when surface water runs short. In reality, it drives many of our most productive industries – and if carefully managed can be maintained as a sustainable resource," says NCGRT Director Professor Craig Simmons.

"Ours is a hot, dry continent and more than 90 per cent of our [fresh water](#) is in fact underground. This is a resource with vast potential, however we do not as yet have a clear idea of its size or how long it takes to recharge. But in a world that is increasingly short of fresh water, it is a major strategic asset."

According to the report groundwater represents an important input into the Australian economy, larger in direct value terms than individual sectors such as forestry, fishing, poultry, motion pictures, gambling, heritage, creative and performing arts.

"Increasing [surface water](#) scarcity in Australia in recent years has seen a growing reliance on groundwater use. This is a trend that is likely to continue into the future as competition for water resources grows further," the report said.

"Despite the growing importance of groundwater use, there is a lack of understanding of its economic value and how dependent our nation is on groundwater."

Professor Simmons said the Deloitte Access Economics study is an invaluable insight into a resource that will carry Australia into the future.

"The availability of fresh water defines all sorts of national aspirations –

how large our population can be, what industries we have in this country and where and how large they can be, and how well we look after our unique landscapes, rivers and ecosystems.

"Groundwater is often the missing element in all these questions. Because there is still much to learn about its rate of renewal, it is hard to have a realistic discussion of our long term prospects, for population, the economy or Australian landscapes," he says.

Prof. Simmons says that, around the world, countries have overestimated their groundwater reserves and are mining them unsustainably. Major economies including China, India, the US and Middle Eastern countries face critical groundwater scarcities which may imperil their future growth.

"Australia is in the fortunate position of being able to plan our increasing reliance by using groundwater sustainably.

"But to do that we need the world's best science and technology for measuring and understanding the scale of our resource, how it behaves over time, and how to manage it sustainably.

Prof. Simmons said the Deloitte Access Economics report represented an important milestone in attempting to define the value of Australia's groundwater, as a major input to developing a national strategic plan for managing it.

"We know that iron and coal mines, oil and gas wells all eventually run out. Groundwater is a major national economic resource which in most cases renews itself – and when managed appropriately and used within sustainable limits will often be a [renewable resource](#).

"I have no doubt groundwater will play a far larger role in the economy

of 2050 than it does today, especially as our climate changes. It is currently directly valued at about \$7bn a year, however it could easily contribute significantly more to the Australian economy in the future. The Deloitte Access Economics report is a key step in realising this important future source of wealth and national wellbeing."

More information: www.groundwater.com.au/economicvalue

Provided by National Centre for Groundwater Research and Training

Citation: Groundwater 'supports industry worth \$34 billion' in Australia (2013, October 21) retrieved 1 July 2024 from <https://phys.org/news/2013-10-groundwater-industry-worth-billion-australia.html>

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