

**Submission
No 13**

INQUIRY INTO COAL SEAM GAS

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The National Water Commission acknowledges that groundwater resources are not well understood. 'It makes up about 17% of Australia's accessible water resources and accounts for over 30% of our total water consumption', they say.

Their web page states:

Although it is not always apparent, surface water in many rivers, dams, lakes and wetlands is connected to underground water resources in aquifers. There are several different examples of these connections:

- groundwater can contribute to base flows in streams when it is discharged from aquifers.
- surface water can recharge groundwater resources when it seeps down into aquifers.
- extraction bores can affect surface water stream flows, even if they are tens of kilometres away from the stream.

How on earth then can the government allow the coal seam gas industry to develop when Mr. Ross Dunn from the Australian Petroleum Production and Exploration Association has admitted 'that drilling will, to varying degrees, impact on the adjoining aquifers and the extent of impact and whether the impact can be managed is the question'. 'I'm wanting to ensure that we are not seen as saying there won't be any impacts during the process. It is a matter of monitoring and managing those impacts', he said. . (SMH 3 Aug 2011)

Following this article on Sunday 7 Aug in the Sun Herald a full page ad from the same Australian Petroleum Production and Exploration Association states that CSG – which is simply natural gas – represents an unparalleled economic and environmental

opportunity for Queensland and NSW. The ad says 'it is tried and tested technology' but makes no mention of any negative impacts.

On Tuesday the 9th August (SMH 10/8/2011) 'The deputy director of the NSW Liberals, Richard Shields, takes a job as a lobbyist with Metgasco a coal seam gas company to liaise with state government and community groups.

As a concerned community member I feel increasingly threatened by attempts to contain discussion, spin the media and stifle debate. I am also very concerned by the interconnectedness of the government and the industry as demonstrated by the employment of a politician as a lobbyist.

Investigations in USA have revealed serious effects from volatile organic compounds (VOCs), poly-aromatic hydrocarbons (PAHs), heavy metals (eg uranium, lead, mercury) and other compounds naturally present in coal seams. These may be brought to the surface via leaks or in the associated water. Of the compounds typically released, 25% are carcinogenic; 37% affect the endocrine system; 52% affect the nervous system; 40% affect the immune system; and 100% affect the respiratory system. Many compounds affect several systems whether drunk in contaminated water or inhaled.

CSG extraction poses serious risks to fresh water aquifers. The huge volumes extracted from coal seams can lead to major depletions in adjoining aquifers used for drinking water, agriculture, other industries and fire fighting. Aquifers may also be connected to surface water systems; fracturing and the chemical residues from fracking may cause potentially irreversible contamination to both ground and surface water sources.¹

¹ The Coal Seam Gas Fact Sheet. Lock the Gate Alliance. <http://lockthegate.org.au/csg-facts/csg-factsheet.cfm>. 10/8/2011

The bottom line is that our water system is our most valuable resource and if it is poisoned by this industry our food production, health and environment will suffer irreversible consequences.

I have lived in Kyogle for the past 26 years and have lived in country New South Wales all of my life.

My concern for our little patch specifically regarding the development of the Coal Seam Gas industry lies predominantly with the damage to the water system of this region and the leaching of toxic waste and excess water onto the land and into the water system. I also hold deep fears regarding the impact of the fracking process to the geological structure of the land and the ramifications of this to the Great Artesian Basin. This fear is made worse when I see the experts in the field unable to answer the simplest questions regarding future impacts to put my fears at rest.

I believe our food supply will be negatively impacted by the leaching of toxic chemicals into our waters and soils. This includes the absorption of chemicals into cattle and the tainting of meat from areas that are affected.

Financial reparation to individuals or governments can never replace the natural habitat, the clean waters and the natural beauty of the area in which we live for me, my children or my grandchildren.

I think the whole industry needs to be brought to a halt and careful and considered research done to establish where, when and IF this industry is a viable option for our region. Consideration needs to be given to the environmental, social and economic ramifications, not just for our generation but particularly for those coming in the future.

I am worried that this whole development is being driven by corporate greed and the state and federal government is at the beck and call of the multinationals in a desperate attempt to grab a bit of the action in financially difficult times for them.

Margaret Brace