Submission to Senate Inquiry into Impacts of Coal Seam Gas on the Murray Darling Basin.

To: Senate Standing Committee on Environment,Communications and the Arts.

From : Scott Cooper

Background.

I am farming a property north of Warra which has been in my Family for the past 105 years, which makes me a fourth generation farmer. I have been farming it for some 15 years,ever since Ileft school. These properties are affected by a Mineral Development Licence ,MDL 383 which is held by Tarong Energy. We are also affected by a Petroleum Tennament which is held by Arrow Energy over some of the same country as the Tarong MDL 383. I am also a member of Haystack Rd. Coal Committee (www.coal4breakfast.com.au) which was formed to protect prime agricultural farming land for future generations, so this farming land can keep producing food for many generations to come, after all that's what it does best!

Submission.

The Brigalow Jimbour Floodplain has surface grades of only 0.02%, so as I see it any mining activity even CSG will affect the surface , disturbing the flow of water across the flood plain to creeks and rivers. It has the potential to cause ponding and poor drainage making the production of food less viable.

The concerns I have of the CSG Industry are:

- Water extraction from The Great Artestion Basin (GAB) and the disposal of this water.
- Poaching of skilled workers which, service the ag sector.
- Increased traffic of personnel entering properties at all hours .
- Reduced farming enterprises productivity.

Water Extraction:

I believe the pumping out of massive amounts of ground water which is necessary to extract the gas from the coal seam is of great concern. The water in existing bores within this area is an extremely high salinity water (Electrical Conductivity , EC – 6.22, Class 5), with a hardness of 690 ppm ($CaCO_3$ equiv.) and a pH of 7.86- slightly alkaline. If this water is allowed to concentrate on an area of land, it turns the soil into a hard barren mess that won't grow anything and won't allow water to infiltrate, it just runs off! If water won't infiltrate it has to run off which will potentially cause erosion of the top soil which will in turn reduce productivity . So I have big concerns of this water getting in contact with highly fertile soils and /or the creeks and rivers, if this industry is allowed to expand.

The high rate of water extraction from the GAB must have a detrimental effect on ground water levels, which I believe will take hundreds of years to replenish if CSG expands to it's full potential.

Current extraction should be reinjected to maintain ground water. Though it is more costly than current methods of CSG extraction, it can be done. Is the fertile soils and waterways worth risking for 25 years of gas ! Irrigators have been regulated on the amount of ground water they can pump, yet the CSG industry seems to be able to pump out as much water as they like just to evaporate it into the atmosphere. I know there are moves to phase out evaporation ponds and some companies are using the water to irrigate with, but they appear to be doing on properties that were dryland farms, which means this water would not have been pumped out prior to CSG. Meaning the GAB would remain more sustainable. Another worry about this is as I pointed out before the CSG water is alot more saline than the water existing irrigators are using, as it comes from a deeper aquifer than most irrigators are tapped into. So the use of this water for irrigation without proper treatment can be very harmful to the environment. Interconnectivity of aquifers is believed to exist , so the lowering of the aquifers in The Walloon Coal Measures could lower aquifers which farmers and townships rely on. We could lose the use of this water if CSG extracts too much.

Desalination of CSG water is another option, but you still have to find a use or market for the large quantities of salt which evolve from this process. Storage of the salt could prove to be an environmental problem waiting to happen.

Skilled Labour :

Existing service providers are finding it hard to keep employees as they are enticed by big salaries from the gas companies. Which means skills are being lost that were once available to service agriculture. These providers therefore have to retrain people and end up with less very experienced personnel. Which means less high level of service to other industries. As a result costs seem to increase and lead times are extended.

Increased Traffic:

If numerous wells are on a property there is a network of roads connecting them, with staff coming and going to inspect wells. This increased volume of traffic is going to deteriorate main roads and cause increased levels of noise , dust etc. There is also the concern of strangers ,for the want of a better word,entering properties . Children could be riding their ponies down the paddock and encountering these so called strangers going about their work,there is a higher risk of these kids being harmed,for example someone comes in who hasn't any horse sense and spooks one these horses . After all the property is most farming childrens playground.

Decreased Farm Productivty:

The network of roads between gas wells will have an effect water on flows across the floodplain,therefore reducing productivity. These roads will also cause inefficiencies due to the shortening of runs within the paddock, not to mention the having to go around wells etc. The laying of pipe work underground will also cause subsidence and therefore changed water flows ,ponding etc.

There is also the matter of lowering the water table , reducing the amount of water available for stock water and of course water for the irrigators to grow crops. So another reduction in production.

Summary:

CSG needs to be looked into very closely, as it could leave a trail of destruction and greatly effect farmers bottom line / lifestyle etc. Not to mention the flow on effect to businesses that rely on ag, agronomists etc.

It also seems hypocritical of government to cap flowing bores to conserve the resourse of the GAB, yet they let CSG companies pump giga litres of water a year from the GAB.

We should not risk valuable farmland ,this land lends itself very well to crop production.

Professor Julian Cribb said demand for food would rise 110% by the middle of the century.By the year 2050 we will need 2 planet earths to sustain us, therefore we must grow our food on our most efficient land available.

The Murray Darling Basin directly supports 3 million people and feeds approx 20 million people off 14% of Australia.

Thank-you to the Senate for giving us the opportunity to be apart of this inquiry.

Scott Cooper.