Submission No 459

INQUIRY INTO COAL SEAM GAS

Name: Mr Rod Young

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COAL SEAM GAS INQUIRY

To Whom It May Concern

I am a mixed farmer in the Purlewaugh area approximately 20 kilometers east of Coonabarabran. My grandfather purchased the property in 1910.

My major concerns are –

1. The lack of research as to how our acquifers operate in our individual areas.
2. The amount of consideration given to our shallow stock and domestic acquifers as compared to major acquifers capable of supporting irrigation.
3. The importance of our underground water in our farming systems.

The Lack of Research

My property has frontage to the Baby Creek which is an intermittent creek joining the Castlereagh River near the village of Ulamambri.
I have 3 wells and 1 bore right adjacent to the creek and a further 3 bores all within a kilometer or 2 of the creek, but on drainage lines leading to the creek. The deepest any pump goes to in these supplies is 80 feet. The water is very suitable for livestock and is used most satisfactorily for gardens. When we run out of rain water it is also used for the household. My grandfather sunk all these bores and wells, the last occurring prior to the Second World War.
I have no substantial scientific information based on research as to where the recharge area is for this substantial underground water supply. There are at least 9 mixed farming properties in the creek catchment upstream from me who all depend on water supplies from this same source.
I have no idea what would be a safe distance from this invaluable resource that a C S G bore could be established and not affect my stock and domestic water supply in decades to come.

Consideration for Stock and Domestic Water Supplies

I am well aware of the emphasis being placed on the value of the major acquifers under the Liverpool Plains and wholly support the protection of such a valuable resource. However the application of the Strategic Regional Landuse policy may bring more scrutiny for C S G exploitation into mixed farming areas like the Purlewaugh district which while not an intensive grain producing area like the Liverpool Plains still produces a substantial quantity of grain beef sheepmeat and wool.
The question is where does consideration end as far as underground water supplies are concerned?
Is the desktop water study on the Liverpool Plains going to be capable of identifying recharge areas for the acquifers in that area and if so is it going to give us information and reliable guidelines for identifying recharge areas in other districts?
I personally doubt if it will and if that is the case is the Strategic Regional Landuse Policy going to conduct water studies in other areas to identify recharge areas buffer zones and no go zones to protect essential underground water.

Underground Water in Farming Systems

The essential base of my mixed farming enterprise is my self replacing flock of merino sheep and my self replacing herd of beef cattle.

I manage the property by a long term sustainable crop / pasture rotation with the emphasis on the production of animal protein i.e. prime lamb mutton wool and beef and a small amount of grain.

The ongoing preservation of the self replacing flock and herd is essential to the long term viability of the farm enterprise. The property consists of a broad range of soil types with 4,000 acres of arable land and 900 acres of timbered land.

The property regularly grosses $500,000 to $600,000 income with all livestock bred on farm. Livestock numbers average around 3,500 to 4,000 sheep and a 1,000 head of cattle including calves.

To carry such numbers of livestock a permanent water supply is absolutely essential. In a heatwave during summer the livestock can consume a significant amount of water.

There are 10 dams on the property an average size of 2,000 cu yards. It would be possible at considerable cost to sink more dams. However it needs to be recognised that there are restrictions on the amount of surface water that can be stored on farm. It is commonly referred to as the "10% of runoff rule".

However the long term use of surface water is always limited by the seasonal rainfall. As a general rule 3 months of fine weather with little if any runoff means the dams are getting low and the quality of the water retained in them deteriorates. It can become muddy and putrid and the dams often require desilting in an extended dry period.

I attempt to support my dam water by having a trough working in the paddock at the same time so that the dam water available lasts longer in a dry spell.

Over the last thirty years I have carried out extensive reticulation of underground water to the extent that there is only one paddock on the entire property that has only dam water with no reticulated water.

The loss of the underground water would seriously undermine the viability of the property. It would mean that the self replacing herd and flock would have to be dispersed i.e. sold everytime we experienced a period of a few months of non-runoff rainfall. This would mean that breeding stock would often have to be sold into a falling market due to a dry season and be bought back in after a good season when rainfall had been sufficient to fill dams. This would generally mean buying back in on a more expensive market.

Such an enforced system of livestock production would mean the quality features of long term self replacing herds and flocks would be lost to a great extent. Livestock producers do not part readily with their core breeders.

Over the years I have culled out any hard to handle cows so employees and family members can quietly handle our cattle through the yards without any great OH&S issue.

Longterm livestock become familiar with watering points gateways and farm roads etc which make livestock mustering and shifting and general management much easier than having to deal with bought in livestock where everything would be new and strange to them.

The soil types in the Purlewaugh district while being versatile in their productivity do not lend themselves to intensive continuous cropping as the deep alluvial soils of the Liverpool Plains do.

Therefore producers in this area and similar mixed farming areas must depend in the long term on a mixed livestock / cropping regime which is essentially dependent on reliable underground water supplies.

To Summarise

I therefore stress the reliance we place on our essential and precious underground water supplies and the lack of research available to ascertain where and where not C S G extraction can occur without rendering our current enterprises unviable in the long term.