

Submission  
No 19

## INQUIRY INTO COAL SEAM GAS

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**Date received:** 18/08/2011

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# **Submission to the Coal Seam Gas Enquiry 16 August 2011**

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## **Introduction**

I am a beef cattle farmer on the mid north coast of NSW. We farm on the Manning River just west of Taree. I am writing to your Enquiry as I have great concerns about the change in land use due to Coal Seam Gas mining that is rapidly occurring in our valley. My submission is in three parts:

1. Change of Land Use and the lack of planning of Land Use.
2. The Manning Valley as a prime Agricultural Area
3. The effects of Coal Seam Gas Mining on water quality for Domestic use, tourism, fisheries and agriculture.

## **Change of Land Use**

In the Gloucester Valley we are witnessing the greatest land use change since the arrival of Europeans to Australia.

In the last twenty years we have seen the rapid expansion of the Coal industry with Gloucester Coal's Duralie (and soon to be Duralie extension) and the three mines at Stratford. All of these mines are large open cut mines with annual Run of Mine production of 2.9Mtpa.

More recently we have seen the approval of AGL's Gloucester Gas project. Stage One of this project is for 400 gas wells of which 110 have been approved by the State Government. The project will extend from South of the township of Gloucester to Barrington. As I have stated this is the first stage of what will be a much larger development.

The 110 wells that have been approved are located on the Avon River flats adjacent to and South of Gloucester.

The river flats will have all weather raised gravel roads covering them. There will be 24 hour floodlighting of all 110 wells. Combining the existing coal mines and planned expansions with the planned Coal Seam Gas Mining, the landscape will be transformed from Agricultural to Industrial within 5 years.

More recently we have witnessed a number of different companies exploring for Coal Seam Gas from Buladelah to the Queensland border. The rush for gas is on. From geological maps we know that almost all of the north coast has coal under the surface.

There is huge demand for gas both domestically and from the rapidly developing economies of India and China.

With current legislation favouring mining companies and there being no Land use planning guidelines it would appear that much of the North Coast of NSW will be turned into a gas field. What is happening to the (currently) beautiful Gloucester Valley looks set to be repeated right up the coast.

Is there going to be any land left North of Sydney and East of the Great Dividing Range that will be preserved as rural and for tourism? What will happen to the Agricultural and Tourism industries in these areas? Some long term planning needs to be done to accommodate existing industries and residents with mining. Currently, this does not exist.

### **The Manning Valley as a prime Agricultural region.**

The debate about what constitutes a prime agricultural region seems to have been dominated by the large and powerful grain farmers. I would like to point out a number of reasons why the Manning Valley is a prime Agricultural region.

In considering what constitutes prime agricultural land I consider that there are 3 main factors.

1. Rainfall/Climate
2. Proximity to Markets
3. Soils

Agriculture still relies on Nature to provide the conditions necessary for its production. Any land use planning has to map out those areas that have the natural advantages that Rainfall, Climate and Soils provide.

#### **1. Rainfall/Climate**

The Manning Valley is blessed with plentiful rainfall. Our annual average is 1.17m. This rainfall is reasonably uniform throughout the year. Our Driest month is September in which we receive a respectable 60mm. It rains reasonably regularly with an average of 88 days of rain a year. (Source: Bureau of Meteorology web site)

Our climate is right on the border of Temperate and Sub tropical climate regions allowing a broad range of produce to be grown. The climate is very mild with a mean maximum temperature of 29 in January and a mean minimum of 5.9 in July.

We live on the driest continent on earth and areas with rainfall in excess of 1m that is not extremely seasonal, are very rare. The climate is ideal for agriculture of many descriptions.

While the focus of the prime agricultural land debate has been the grain growing areas some high rainfall land with a mild climate needs to be preserved. There simply is not much of it in Australia.

## **2. Proximity to Markets**

In all likelihood the cost of oil will continue to rise at a rate faster than inflation. This is what has been occurring for the last few decades and with oil becoming scarcer and demand growing rapidly from the developing world this trend could accelerate.

The Manning Valley is close to major markets and is located in the fastest growth area for population in NSW. It is located on good Transport routes with the Pacific Highway and the main North Coast railway link between Sydney and Brisbane.

## **3. Soils**

The quality varies dramatically within short distances in the Manning Valley. The Valley does have more than its fair share of rich alluvial river and creek flats. The Manning River has over 350 tributaries producing many hectares of alluvial flats. Much of the ridge country also contains quality soil.

## **Conclusion**

The Manning valley is well watered, has a mild climate, is close to markets and has good soil. This is a very rare combination in Australia. There simply is not much land of this quality available. With the demise of the dairy industry on the coast, at present I consider that this area is underutilized agriculturally. Policy makers have to be aware however that they do not form long term land use policy with their eyes on the recent past. With increasing transport costs and demand for agricultural commodities increasing the Manning Valley is naturally ideally placed to take advantage of these conditions into the future.

## **The Effects of Coal Seam Gas Mining on Water Quality.**

The Manning Valley is a high rainfall area with many rivers and streams both surface and underground. Many of the tributaries of the Manning rise at quite high altitude (1500m) in the Barrington tops.

AGL's Gloucester Coal Seam Gas project poses a grave risk to the water quality of the Manning River. The 110 approved wells are on the Avon River flats adjacent to the river.

The Avon river is a tributary of the Manning River. The water intake for the towns of Wingham, Taree, Harrington, Old Bar and Foster is located just west of Wingham, well downstream of the Avon river. Mid Coast Water supplies a total of 37,000 households principally from the Manning River.

It is disturbing to note that Mid Coast Water, the authority trusted with ensuring our drinking water quality, was not consulted in the approval process for AGL's gas project.

In a recent community newsletter Mid Coast Water's Chairwoman, Mave Richardson, stated that the fracking chemicals that will be used by AGL are not publicly available. Just how are Mid Coast water and private landholders going to be able to test for contamination if they don't know what they are testing for? Surely in the interests of open and honest governance this information should be made publicly available.

AGL is proposing to use the fracking process to extract their coal seam gas.

The Sydney Morning Herald reported on 3 August 2011 that a spokesman for the Australian Petroleum Production and Exploration Association, Mr Ross Dunn, stated "Drilling will, to varying degrees, impact on adjoining aquifers. The extent of impact and whether the impact can be managed is the question."

It is pretty much broadly accepted that drilling combined with fracking will impact adjoining aquifers. When the industry itself is saying it will I assume that the enquiry will conclude that it will.

Coal seams typically contain salty water that may also contain heavy metals such as mercury and lead, and dissolved hydrocarbons amongst other pollutants. In addition the fracking process relies on sand, water and chemicals being pumped at high pressure into the Gas wells. This is not the type of water that anyone would like to see in a water supply.

In addition to the dangers of contamination posed by the fracking there is the significant issue of disposal of the water that comes out of the wells prior to the gas (This is called the "produced water"). In the initial stages of the project AGL has stated that the initial gas wells will produce around 700 megalitres of this polluted produced water in the first year. Disposal of this water is highly problematic in an area where farm dams generally do not hold water due to the dispersive nature of the soil. In addition being a high rainfall area large flooding events have to be catered for.

At present Mid Coast water and the State government have no plan B to provide the citizens of the Manning valley with a clean water supply. Already Mid Coast water is having troubles with the quality of the water coming into its intakes with the river running at increasing levels of turbidity (mud in the water). Surely, as we have been told by the industry itself of the dangers of its practices, the government must ensure that an alternative water supply such as desalination exists for the citizens of this area.

## **Conclusion**

The enquiry needs to consider that there is no land use planning and the mining/coal seam gas industry currently is consuming our best agricultural land east of the dividing range. Some high quality, high rainfall farming land needs to be preserved. The time has come for some long-term vision of how we want the landscape to look in 5-50 years. At the moment all we have is ad hoc decisions.

The Manning Valley is a prime agricultural region with a unique combination of rainfall, climate and soils. The Manning Valley's value as an agricultural region has been utilized in the past. With rising oil prices the Manning Valley is likely to be critical to supply the region, Sydney and Brisbane in the future.

The Manning River is the water supply for our region. Industrial processes such as Coal Seam Gas are inappropriate industries for a catchment. An alternative water supply such as desalination needs to be implemented if the Gloucester Gas project is to proceed to ensure the safety of all households on town water in the Valley.

All chemicals involved in the Coal Seam Gas mining and fracking should be fully and publicly disclosed to enable Mid Coast Water and local landholders to test for contamination of our water supplies.

The local Agricultural, Fishing and Tourism industries all rely, to varying degrees, on the river water quality.

We must ensure that the Rivers of the North Coast of NSW are not treated like industrial drains.

In concluding your enquiry into the Coal Seam Gas industry I would urge you to consider the medium term vision that you have for the North Coast: Land use change has occurred rapidly in the Gloucester valley and this, under current legislative settings, is likely to occur right the way up to Brisbane.