A full-day meeting was convened on the black soil plains of the Darling Downs to discuss the dilemma of Coal Seam Gas (CSG) encroachment on prime agricultural Land - the Condamine Alluvium. There were 180 farmers attending. What became apparent throughout the day after listening to local people and experts were the authentic concerns for the continued future of sustainable farming because of the combining impacts of climate change, landscape degradation, ecological biodiversity threats, and the unravelling socio-economic fabric in the face of CSG development.

The primary questions the day intended to address were:

1. Does prime agricultural land need better protections from CSG? If so, how can this be best done?
2. Is this CSG encroachment an urgent and important problem? Why?
3. What actions are needed next?

To address these questions, we called on a range of experts in the field of law, soil and plant health, hydrogeology, economics, regional planning and ecology. Furthermore, we heard concerns from local farmers and their families. This was authentic public consultation. However, notwithstanding the broad advertising and an open public notice, there were still some notable absences and apologies were recorded primarily due to farming commitments and date clashes. Such absences are unavoidable.

The discussion centred around five main themes (see below, with lead speakers in brackets), with a summary of their main messages being:

**Law and legalities - a landholder’s perspective** (Revel Pointon, Madeline Taylor)

- the state laws are written to favour mining companies and make it difficult and expensive to navigate for farmers. “Sustainable” mining co-existence with farming in this particular area is a myth;
- the precautionary principle is not being applied in assessment, and alternative “make-good” arrangements are fundamentally and scientifically flawed. The regulatory framework and make-good arrangements are threatening the short-, medium- and long-term future of agriculture in this prime agriculture area.

**The importance of land and soil and groundwater** (Matthew Currell, Peter Dart, Snow Barlow, David George)

- the black soils of the Condamine Alluvium are unique insofar as they are fertile, deep and associated with an abundant good quality groundwater reservoir, enabling permanent farming and cropping. And even though it makes up only about 3-4% by area of Queensland, it is responsible for about 25% of the state’s agricultural production;
- climate change increases the frequency, severity and duration of extreme events. Adaptation and mitigation are critically important now;
- the groundwater system is inter-connected, whereby interventions in one part of the system have flow-on impacts to other parts of the system, including on surface
expressions of groundwater, such as artesian springs. Subsidence and drawdowns at certain tipping points are irreversible.

**The economic and social contexts of CSG** (Mark Ogge, Hanabeth Luke)

- CSG development employs few local people. Those it does employ tend to be already skilled workers from existing businesses. This forces local employers to compete with gas industry wages, driving up costs and crowding out local businesses and jobs;
- CSG is almost entirely exported with gas demand in Australia falling in all sectors;
- CSG companies pay little if any company income tax despite billions of dollars in income. Their royalties make up only 1-3% of Queensland Government revenue;
- CSIRO surveys show only 4-7% of local residents believe CSG development has changed their community for the better;
- social studies show that the expected benefits coming from CSG are grossly exaggerated and instead may fracture the community. In recent studies, the existing local business community who were most interested at the start of CSG developments were found to be the most disappointed and disillusioned following CSG commencement.

**The Condamine Earless Dragon and ecosystem function** (Laura Harms)

- The Condamine Earless Dragon is endangered and endemic to this specific ecosystem niche.

**Future sustainability and the next generation** (Liza Balmain and guests listed in the agenda)

- CSG impacts already include groundwater drawdowns, gas migration and subsidence;
- farmers are presenting with mental health distress;
- authentic consultation with CSG companies is tokenistic at best, or non-existent at worst;
- CSG contracts are perpetual and burdensome on titles;
- the impacts from CSG development are unmanageable in such a valuable prime agricultural landscape; rendering the co-existence of extractive industries and prime agriculture incompatible. No amount of planning can overcome legislatively deficient safeguards.

In broad terms, the answers to the questions from the day were:

1. *Does prime agricultural land need better protections from CSG? In short, yes because in our opinion and experience the impacts from CSG are irreversible on the land and groundwater systems of the Condamine Alluvium. In addition, the financial returns from CSG are insignificant compared to the value coming from protections now for continued farming in these areas.*
If so, how can this be best done? LEGISLATIVE AMENDMENTS ARE URGENTLY NEEDED TO BETTER PROTECT PRIME AGRICULTURAL LAND AND THE ASSOCIATED WATER RESOURCES.

2. Is this CSG encroachment an urgent and important problem? Why? IT IS BOTH URGENT AND IMPORTANT BECAUSE CSG IS ALREADY ENCRYPTED IN THIS AREA AND IMPACTS SUCH AS GROUNDWATER DRAWDOWNS AND SUBSIDENCE ARE ALREADY EVIDENT. THE SUBSIDENCE IS IRREVERSIBLE. THE CONVENTIONAL WISDOM TO ADDRESS THE GROUNDWATER DRAWDOWNS IS THAT IT SHOULD APPLY THE PRECAUTIONARY PRINCIPLE UNTIL IT IS PROVEN TO BE REVERSIBLE. IGNORING THIS PRACTICE MEANS LANDHOLDERS TAKE ALL THE RISK, NOW AND INTO THE FUTURE. THIS HAS SOCIAL, ENVIRONMENTAL AND FINANCIAL IMPACTS AND DISADVANTAGES.

3. What actions are needed next? FEDERAL AND STATE LEGISLATIVE AMENDMENTS ARE NEEDED TO OVERCOME THE DILEMMA CREATED BY THE CURRENT RECKLESS STATE LEASES AND CONDITIONS.

CONCLUSION

When one synthesises these findings, the only conclusion to be drawn was that without appropriate risk assessment, and by ignoring and/or dismissing current scientifically-based knowledge, certain land characteristics and land use types cannot feasibly coexist with the extractive resources industry. We considered it then essential, not optional, to turn reluctantly to our federal representatives for help. We consider recommending amending appropriate federal legislation since we see no other way to seek and achieve better protections of our land, soil, plants and water, not only for food production purposes, but also for the environmental and the ecological health of this region, now and into the future, because the state has failed in its custodianship responsibilities. More specifically, the attendees unanimously declared support for specific amendments to the Environmental Protection Biodiversity Conservation Act 1999 to enable better protections for prime agricultural land and water resources.

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FURTHER READING

https://scienceqld.org/2023/03/20/csg/.