

Submission  
No 9

**INQUIRY INTO THE IMPLEMENTATION OF THE  
RECOMMENDATIONS CONTAINED IN THE NSW CHIEF  
SCIENTIST'S INDEPENDENT REVIEW OF COAL SEAM  
GAS ACTIVITIES IN NEW SOUTH WALES**

**Organisation:** People for the Plains Inc

**Date Received:** 27 October 2019

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## Submission to Chief Scientists Report

As a Narrabri Shire community group, People for the Plains have long held concerns for the impacts of the proposed Narrabri CSG project on the wider community, the Great Artesian Basin and other aquifers, the State Forest, surrounding farm lands, local aboriginal heritage, and the climate.

The Chief Scientist's Recommendations seek to provide some security to community and we are grateful for many of the Recommendations in this report. However, we feel that the implementation of the Recommendations are far from thorough, many have not been implemented and many are susceptible to being lost in the implementation of them on the ground in the CSG industry.

Narrabri Shire Council has continued to demand similar actions from the proponents, to the Recommendations. In their submission in response to the proponent's EIS they asked Santos:

- *To monitor the gas wells indefinitely to guard against Narrabri being left with pollution after the company packs up and leaves.*
- *To provide a rehabilitation fund, legal liability insurance, a cash bond and total financial assurance, so our ratepayers don't have to foot the clean-up bill.*

These demands and recommendations are consistent with the Chief Scientist's Recommendation 9 and have become even more important in the light of the current drought and serious and widespread water shortages, arguably the worst situation on record. And yet, the Council continues to have these demands ignored or rejected by the proponent.

Santos has admitted the proposed Narrabri CSG project will have an effect on the underground aquifers of the Great Artesian Basin, the Gunnedah Oxley Basin and the Namoi Alluvium. In particular the impact to the Gunnedah Oxley Basin is one of the reasons that the Federal Government deemed the project to be a "controlled action".

The Santos brochures tell us they will take all care to minimise the effect on the aquifers, but when pushed to guarantee that they will not adversely impact these aquifers, and therefore the people who rely on them, their reply is that they cannot or will not give a guarantee. This was evidenced in Mr David Banks (Santos' Executive Vice President On Shore) answer to this question on SBS Insight Programme - Power Divide, when Coal Seam Gas comes Knocking. He could/would/did not guarantee aquifers would not be impacted.

Government (Local and State Departments) recommendations and demands for Santos to monitor the gas wells indefinitely, and to provide the money for a rehabilitation fund, legal liability insurance, a cash bond and total financial assurance have been rejected by Santos.

For more background on our concerns about the impact to the Great Artesian Basin and the impact of Sulphate Reducing Bacteria, Please see the **Attachment One** document "Home Truths" Chapter 8. NGP Will Impact the Great Artesian Basin, and Chapter 9. Sulphate Reducing Bacteria – the driller's nemesis.

Santos and well drillers have long known the damage caused by sulphate reducing bacteria (SRB) to underground infrastructure such as such as gas wells and the ability to cause failure of infrastructure resulting in possible cross contamination of aquifers, depressurisation and drawdown. The last paragraph of Chapter 9 in Attachment One Refers to a recent incident in Queensland where external corrosion in well casings has been patched "*it is suspected that this is caused by bacteria growth....And that it is systemic in the region*"

Repeated requests for more information about Sulphate Reducing Bacteria, by the community, have been stonewalled by Santos. These concerns have been repeatedly raised by the People for the Plains representative/s in the Narrabri Community Consultation Committee (NCCC) meetings since 2013 in the hope of receiving a satisfactory response.

A written question to Santos about the likely impact to the outer concrete casings of gas wells by SRB was presented. The verbal answer given by Mr Peter Mitchley (the then Santos General Manager Energy NSW) was *“there was no SRB on the outside of the wells either”*. The inference being that the concrete casings of wells in the proposed Narrabri Gas Project will not come under attack from SRB. However People for the Plains holds evidence from 2013 showing the existence of SRB in monitoring bores in the project area (*see Attachment 3*).

At the next meeting of the NCCC on 13/2/2018 the People for the Plains delegate presented our evidence, in the form of the documents attached that were provided by Santos on 22/7/2013. Three pages of this document are in **Attachment 2-4**. These documents demonstrate the 17 monitoring bore results that show a positive result to testing for SRB in the area of the proposed Santos Narrabri Gas Project.

Mr Mitchley was asked: Is there an explanation for this anomaly?

Mr Mitchley's response was: *“that SRB will not have any impact on Santos wells”*

Mr Mitchley was asked if he would put his answer in writing? There was no response to this question which the People for the Plains delegate took as a refusal.

A GISERA survey published in October 2017, 'Community wellbeing and Local Attitudes to coal seam gas development. Social Baseline Assessment: Narrabri project, Phase 3 survey report', showed people in the Narrabri Shire and town on average do not trust CSG companies. The incident described above is one example of why there is a lack of trust in Santos.

It is critically important that this industry is given clear, stringent and unmovable regulations in which to operate in order to increase community trust in the company and in order to improve the environmental outcomes from the project.

In 2013, the Government directed the Chief Scientist to conduct a comprehensive review of CSG-related activities, focusing on the human health and environment impacts.

In 2014 the Government accepted all the recommendations of the review, but it has failed to implement them. A number of recommendations have still not been implemented, including:

1. A standing expert advisory body on CSG (**Recommendation 12**) has **NOT** been established
2. A process to carefully restrict where CSG is allowed based on environmental and social considerations (**Recommendation 5**) has **NOT** been undertaken for existing petroleum titles, which cover more than 6 million hectares of land
3. A robust and comprehensive policy of insurance and environmental risk coverage (**Recommendation 9**) has **NOT** been implemented

We also raise concerns below about the way **Recommendation 1, 4 and 11** are currently being implemented.

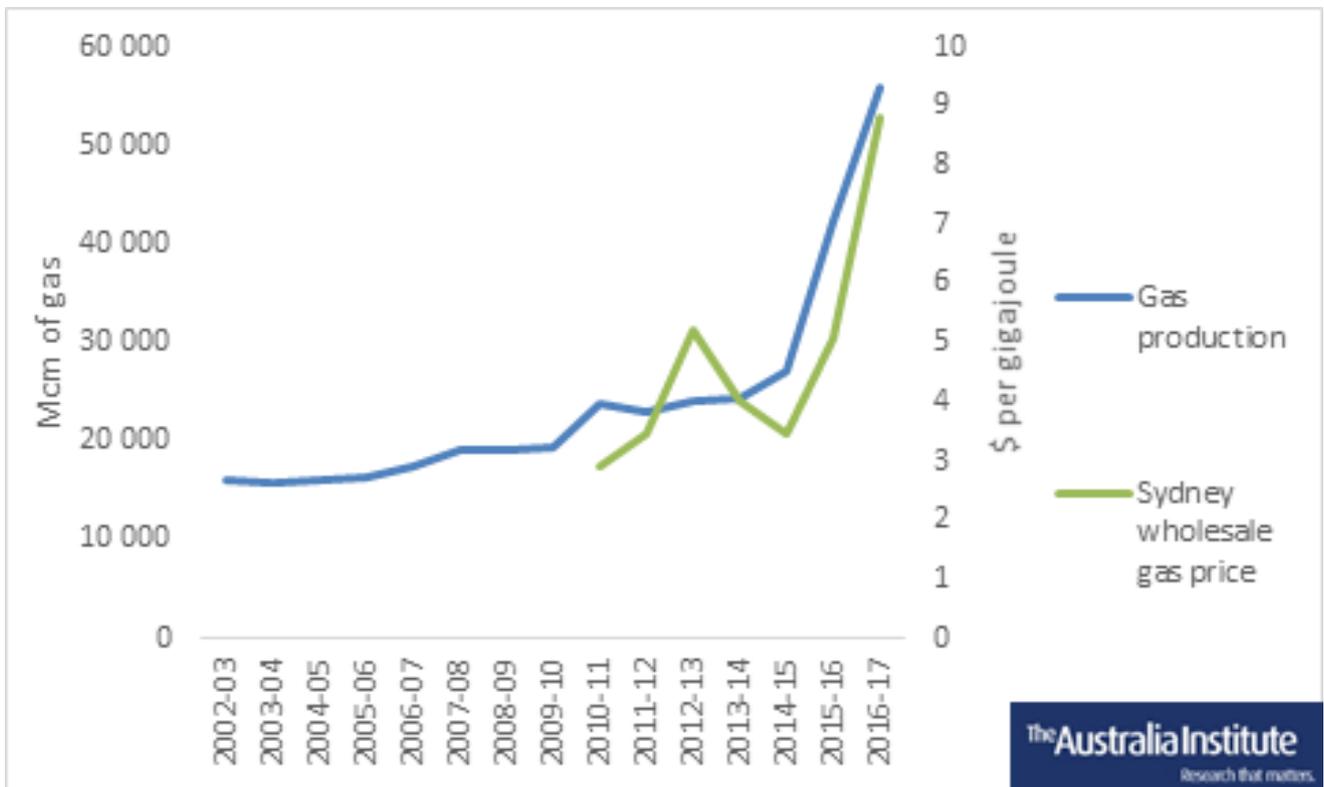
Firstly we continue to hold concerns for the premise of the Report. The question was never raised if the CSG development should go ahead or not, only how to manage the risks from it. We believe this is a fundamental error.

#### **Recommendation 1:**

*That Government make clear its intent to establish a world-class regime for extraction of CSG. This could be articulated in a clear public statement that covers ... the rationale/need for CSG extraction ...*

The Chief Scientist also raises this issue in her first Recommendation where she asks for a statement on the *“rationale/need for CSG extraction.”*

She again raises this issue at the end of Recommendation 12, where she suggests that Government be advised “whether or not other unconventional gas extraction (shale gas, tight gas) industries should be allowed to proceed in NSW and, if so, under what conditions.”



This should be a live an ongoing question as the industry is in constant flux. Recent work by The Australia Institute shows the Narrabri Gas Project will do nothing to reduce gas prices. The development of export LNG terminals in Queensland, has linked the east coast gas market to the international gas market and caused extreme hikes in gas prices<sup>1</sup>.

Gas prices on the eastern seaboard have tripled since 2015 despite gas production tripling – more production will not reduce prices, because of export-parity pricing, a broken market and the high cost of producing CSG.

This price hike was part of a deliberate strategy by Santos, who stated in their 2011 Annual Report that one of the key goals for the organisation was ‘increasing exposure to oil-linked gas’.

Secondary drivers for gas price hikes are the high costs, low-yields of unconventional gas operations compared with conventional gas and a broken market beset by cartel-like behaviour and a lack of competition.

Santos has raided domestic gas supplies which should have be going to Australian manufacturers because they do not have sufficient supplies from unconventional gas fields to fill their Gladstone export terminals.

<sup>1</sup> Independent Pricing and Regulatory Tribunal. 23 April 2014. Fact Sheet: Regulated retail gas prices from 1 July 2014 to 30 June 2016. <https://www.ipart.nsw.gov.au/Home/Industries/Energy/Reviews/Gas/Changes-in-regulated-gas-retail-prices-from-1-July-2014>

The Narrabri gasfield will produce at most 5.2% of the volume of Gladstone LNG exports, so there it will not be able to affect the price of gas on the east coast.<sup>2</sup>

We believe that if the Chief Scientists' recommendation that a rationale for the Narrabri Gas Project be provided, that the project would fail this first hurdle.

**Recommendation 4:**

*That the full cost to Government of the regulation and support of the CSG industry be covered by the fees, levies, royalties and taxes paid by industry, and an annual statement be made by Government on this matter as part of the Budget process.*

Currently Santos is using "appraisal" gas from the Narrabri Gas Project to feed the Wilga Park power station. The energy generated is sold into the Australian electrical grid for a commercial rate (and profit) and yet, as far as we understand it, no royalties on this gas is being paid to the NSW Government.

Furthermore, although a good tax payer compared to other companies in this industry, in the last four years Santos has paid an average of 11.5% corporate tax rate. Of the total income of almost \$15 billion that it has made, it claimed just \$27 million in taxable income and paid just over \$3 million in tax<sup>1</sup>.

We believe that the full cost to Government is currently not being paid by the industry.

**Recommendation 5:**

*That Government use its planning powers and capability to designate those areas of the State in which CSG activity is permitted to occur, drawing on appropriate external expertise as necessary.*

In November 2012, the Namoi Catchment Management Authority released the report *Assessing the cumulative risk of mining scenarios on bioregional assets in the Namoi Catchment: Development and Trial of an interactive GIS tool* (the Namoi Cumulative Risk Assessment Tool -NCRAT). This tool can be used to assess cumulative impacts and hence is described in more detail under Recommendation 11.

The tool uses overlaying maps of natural resource assets to show how many of these assets would be impacted by mining activity, including CSG extraction. It can help identify areas that are suitable for mining and areas that should be made off-limits to mining.

We highly recommend that this tool is dusted off from the back rooms of the government and used to provide a greater level of confidence to the community (and the mining industry). This tool is becoming increasingly important in the Namoi due to huge wave of State Significant Developments proposed for the region. Across the coal and gas industries, huge expansions and new projects are being proposed and no-one is taking a whole of region view of the cumulative impacts of all these projects. This landscape scale planning used to be the role of CMA, however since this was amalgamated into Local Land Services (LLS), they have chosen to not be "involved" with mining projects. This has left a massive void in the assessment and consideration of region wide cumulative impacts.

All of these mining projects target the Gunnedah Oxley Basin for their produced water (i.e removing water from the aquifer that is an inconvenience for their retrieval of gas or coal) and creating depressurisation and reduced recharge to the overlying water aquifers.

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<sup>2</sup> The 1.4 million terajoules cited by the Santos as being exported from Gladstone is more than twice the 581,000TJ cited as the total size of the east coast gas market. The amount of gas expected to be produced at Narrabri is 73,000TJ per annum for 25 years According to Geosciences Australia November 2014 "Upstream Petroleum and Resources Working Group Report to COAG Energy Council on Unconventional Reserves, Resources, Production, Forecasts and Drilling Rates."

We are calling on a full moratorium on new project approvals and expansions in the Namoi Valley until it is clear who is taking these impacts into consideration and how the planning and project conditions fully account for these impacts.

**Recommendation 9:**

*That Government consider a robust and comprehensive policy of appropriate insurance and environmental risk coverage of the CSG industry to ensure financial protection short and long term. Government should examine the potential adoption of a three-layered policy of security deposits, enhanced insurance coverage, and an environmental rehabilitation fund.*

This has not been completed. As outlined in **Attachment One** in Chapter 7, “Landholders have been advised by their insurers that their farm businesses, the associated water resources and/or farm produce are considered “uninsurable” against CSG contamination. Therefore both the likelihood of the risk manifesting, and the severity of the risk, are unacceptably high for an insurer to cover. The insurers are suggesting that a significant adverse impact as a result of CSG operations in the region is considered almost inevitable.

*Furthermore, Meat and Livestock Australia states that “the landholder may still have primary liability in the event of contamination of the soil, pasture or groundwater, neighbouring properties, as well as livestock which, if then processed and consumed, could breach Australian food standards or importing country requirements for meat.”<sup>iii</sup> This is particularly pertinent for landholders who sign a National Vendor Declaration or similar document for their produce. Signing such a document provides the buyer with a guarantee of the food safety status of the animals or crops they are purchasing and puts responsibility of any potential contamination in the hands of the landowner.*

*Being unable to obtain insurance leaves landholders at grave risk, questioning what consequences there may be for food products sold into the future, and whether they may ultimately incur a legal or financial liability. This is precisely why landholders have sought to insure against such an eventuality, and for which cover is not available. Neither Santos, nor its insurance company, nor a NSW Government Bank Guarantee (to an undisclosed amount), can provide certainty of cover for, or remedy, the inability to obtain insurance privately. This will ultimately expose Santos to future claims and legal action on a scale possibly not seen before in this country.”*

Our own members can report personal interactions with their insurers where these statements are upheld.

**Recommendation 11:**

*That Government develop a centralised Risk Management and Prediction Tool for extractive industries in NSW.*

As discussed under Recommendation 5 above, the Namoi Catchment Authority developed the Namoi Cumulative Risk Assessment Tool (NCRAT) precisely for this purpose and, in particular, to assess cumulative impacts.

NCRAT is designed to:

- analyse the cumulative impact of a scenario across a number of asset sensitivity surfaces
- call on respective risk tables that associate sensitivity and likelihood/magnitude with risk, and
- produce a risk report that includes maps, area statistics, single and cumulative risk diagrams, and statement about specific assets impacted.

In other words, NCRAT is an ideal tool for assessing the cumulative risks associated with CSG with respect to the natural resources of the region. NCRAT is housed in the North West Local Land Services office as well as the

office of the Independent Expert Scientific Committee. However, no government, State or Federal, has called upon the program since its development. It would appear to have been quietly “buried”.

Again, we recommend that NCRAT is dusted off and that a reliable government department is given full responsibility for its utilisation and implementation and they are fully resourced to do so.

**Recommendation 12:**

*That Government establish a standing expert advisory body on CSG ... to advise Government:*

...

- *on updating and refining the Risk Management and Prediction Tool*
- *on how best to work with research and public sector bodies across Australia and internationally*

This body has not been established.

There is potential to use the NCRAT tool to help achieve the Recommendation, however it needs to be properly resourced.

The community has grave concerns for the independence of the use of the Gas Industry Social and Environment Research Alliance (GISERA) and would prefer that the science behind this industry is not directed by the industry itself.

We believe some serious changes need to be made around the funding and decision making of GISERA to give it proper credibility and allow it freedom in its results findings.

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<https://www.michaelwest.com.au/companies/tax-dodgers/santos-limited-2019/>