

Public Submission Narrabri Gas Project

To Whom It May Concern,

My name is Lucy Burke, and I completely object to the development of the Narrabri Coal Seam Gas Project in the Pilliga Area.

If you are unaware, the temperate forest of the Pilliga is an extremely valued heritage and cultural area for the local Narrabri community as well as for the wider New South Wales. It is an important Aboriginal spiritual icon for the Gomeroi/Gamilaraay peoples as well as a vital nature reserve, conserving over 80 000 hectares of prehistoric land and unique Australian biodiversity. The development of Santos' project will, with no doubt, lead to the fragmentation, destruction and loss of this beautiful land and wildlife. With Santos planning to drill, frack and mine into the Pilliga, is it our time to drill *back* into the company's head with every single environmental cost the project will have. If you are curious, here are just a few:

Methane gas: The extraction of coal seam gas leads to the leakage of methane gas from pipelines, well heads, processing plants, in water produced from the extraction as well as the gas escaping through underground systems [1]. It is an extremely toxic and flammable liquid which not only directly affects the local waterways in the area [2] but also is a leading greenhouse gas warming the earth's atmosphere [3] and bringing about the detrimental effects of climate change.

Habitat fragmentation and loss: The Pilliga is home to the critically endangered Regent Honeyeater bird and Pilliga Mouse, as well as a variety of other native Australian species including the beloved Koala [4]. The gas fields and wells of CSG will require large portions of the Pilliga forest to be cleared, fragmenting and degrading the habitats to these species and putting more pressure on their survival.

Salt excess/salinity: water used and treated during the CSG project will produce 115 tonnes of salt per day. What will be done with this salt/where it'll be placed is unknown [5], another detail failed to be outlined by Santos. Salt in excess levels has a direct negative impact on surrounding plant germination and growth [6,7] and if CSG were to happen in the Pilliga, we will see this impact unfold within the forests.

Degrading air quality: the flares from CSG wells release uncombusted hydrocarbons ethane, propane, butane, pentane, hexane, octane as well as methane, nitrogen and carbon dioxide. In addition are toxic airbornes, air particles and burnt dust which can all be inhaled by organisms (including *humans*) living in the area [8]

Water loss: Santos' CSG project will require the diversion and utilisation of precious and jurassic water around and from the ancient Great Artesian Basin, which will decrease the water resources for all animals and plants within the forests as well as for the Narrabri locals.

Being an environmental conservation and management student, this extensive list of environmental impacts is a main driver for my opposition against CSG. But wanting to maintain the beauty and diversity of this area is not the only contributor, it is the complete lack of Santos' acknowledgement of the Narrabri community that is also making me leap onto my laptop and furiously type up this submission. Comparative studies in QLD and the US show that CSG produces many health impacts. A main one is the drinking and agricultural water contamination from the chemicals involved in fracking [9], as well as the decline of air quality and the loss of water as mentioned above. If Santos' possessed any consideration for the public health of the community, the implementation of this project will eliminate it completely. The project will produce no benefits, no matter what Santos claims. The gas extracted will be expensively shipped off across the world to places such as Japan, leaving the remaining gas to be high in price, low in quality and quantity, and just overall not economically beneficial at all for the Narrabri community. Instead of gaining from the industry, the people living in the Narrabri area will lose. Agriculture businesses, owned and sustaining families in the area for decades, will be put in immediate danger with pipelines running through their backyards and toxic water and air being exposed to their cattle and crops. CSG is also clearing and cutting its way through the Pilliga Forests, which will simultaneously clear and cut the cultural, historical and family ties the Gomeroi/Gamilaraay peoples have with their country.

There are so many costs to this project, but for what reasons? For a dwindling, non-renewable fuel supply? The leaders of Santos remain quiet with their justifications as well as with their plans. There is a lack of detail provided to the Narrabri community as to where the wells, pipes and gas fields will be placed in the Pilliga, which is disrespectful especially to those families who live in the direct area of the planned site. While I am not a resident of the Narrabri area, I am still impacted by this project as is the rest of NSW, Australia and even the world. It is not just the loss of biodiversity and climate change that worries us all, it is the absence of humanity in companies such as Santos, who ignore people's rights and voices, which is going to lead this planet into chaos. I really do hope you took the time to read this and I ask you to seriously consider these impacts in which Coal Seam Gas produces.

Public Submission Narrabri Gas Project

References aka another list of sources that outline the negative impacts of CSG.

- [1] <http://stop-csg-illawarra.org/csg-risks/leaking-methane/>
- [2] <https://www.youtube.com/watch?v=NvJAKVnK4qM> footage of the Condamine River in QLD on fire, less than one kilometer away from a CSG fracking site, language warning.
- [3] <https://www.edf.org/methane-other-important-greenhouse-gas>
- [4] <https://www.wilderness.org.au/campaigns/pilliga-forest>
- [5] <http://www.smh.com.au/environment/coal-seam-gas-industry-faces-salt-overload-20131204-2yqx8.html>
- [6] <http://www.environment.nsw.gov.au/salinity/basics/naturalenvironment.htm>
- [7] http://www.chiefscientist.nsw.gov.au/__data/assets/pdf_file/0017/44081/OCSE-Final-Report-Stuart-Khan-Final-28-May-2014.pdf
- [8] <http://www.epa.nsw.gov.au/resources/epa/2564-gas-flaring-fact-sheet.pdf>
- [9] <http://www.smh.com.au/environment/santos-coal-seam-gas-project-contaminates-aquifer-20140307-34csb.html>