1. The Narrabri Gas Project risks precious water sources, including the Great Australian Basin—Australia's largest groundwater aquifer

The Narrabri gasfield poses a real risk to our two most precious water resources: the Great Artesian Basin and the Murray-Darling Basin. The area of the Great Artesian Basin with the highest recharge rates is almost entirely contained within the Pilliga East forest. In a worst-case scenario, the water removed for CSG extraction could reduce water pressure in the recharge areas—potentially stopping the free flow of waters to the surface at springs and bores across the whole Great Artesian Basin.¹

Creeks in the Pilliga run into the Namoi River—a part of the Murray Darling Basin. This system is vulnerable to contamination from drilling fluid spills and the salty treated water produced from the proposed 850 wells.

2. The Gamilaraay Traditional Custodians are opposed

There are hundreds of cultural sites as well as songlines and stories connecting the Gamilaraay to the forest and to the groundwater beneath. Gamilaraay people are deeply involved in the battle against CSG, and have told Santos they do not want their country sacrificed for a coal seam gas field.

3. Farmers and other local community reject the project

Extensive community surveys have shown an average of 96% opposition to CSG. This stretches across a massive 3.2 million hectares of country surrounding the Pilliga forest, including 99 communities. Hundreds of farmers have participated in protest actions unlike any previously seen in the region.

4. The Narrabri Gas Project has a long history of spills and leaks of toxic CSG water—Santos cannot be trusted to manage the project safely

Santos has already contaminated a freshwater aquifer in the Pilliga with uranium at levels 20 times higher than safe drinking water guidelines, as well as lead, aluminium, arsenic and barium². In addition, there have been over 20 reported spills and leaks of toxic CSG water from storage ponds, pipes and well heads. Santos cannot be trusted.

5. The Pilliga is a haven for threatened wildlife

The Pilliga is one of 15 nationally listed 'biodiversity hotspots' and is vital to the survival of threatened species like the Koala, Spotted-tailed Quoll, Black-striped Wallaby, Eastern Pygmypossum, Pilliga Mouse and South-eastern Long-eared Bat. The forest is home to over 200 bird species and is internationally recognised as an Important Bird Area². The Santos gasfield would fragment 95,000 hectares of the Pilliga with well pads, roads, and water and gas pipelines—damaging vital habitat and threatening the survival of endangered species.

6. Coal seam gas fuels dangerous climate change Methane is by far the major component of natural gas, and is a greenhouse gas 72 times more powerful than CO². CSG fields contribute to climate change through the leakage of methane during the production, transport, processing and use of coal seam gas.

7. Human health is compromised by coal seam gas

A range of hydrocarbons and volatile organic compounds can be released into the air from coal seam gas operations, including flaring of gas wells. The effects of volatile organic compounds vary, but can cause eye, nose and airway irritation, headache, nausea, dizziness and loss of coordination. These impacts have been documented in human populations nearby to existing gasfields in Queensland, Sydney and in America.

- 8. The nation's premier optical astronomical observatory is at risk
- The Siding Springs Observatory, situated in the Warrumbungles and adjacent to the Pilliga, is under threat from the Narrabri Gas Project due to light and dust pollution. The area has been internationally recognised as a 'dark sky park' and the 50m high gas flares proposed by Santos threaten the viability of the facility.
- 9. Thousands of tonnes of salt waste will result from the project Santos has no solution for disposing of the hundreds of thousands of tonnes of salt that will be produced. Between 17,000 and 42,000 tonnes of salt waste would be produced each year. This industry would leave a toxic legacy in NSW.
- 10. Risk of fires would increase throughout the Pilliga's tinder-box conditions

 Methane flare stacks up to 50m high would be running day and night, even on total fire ban days.

 The Pilliga is prone to severe bushfires. The project would increase ignition sources as well as extracting, transporting and storing a highly flammable gas right within this extremely fire-prone forest.

¹SoilFutures Consulting 2014, Great Artesian Basin Recharge Systems and Extent of Petroleum and Gas Leases. http://www.gabpg.org.au/wp-content/uploads/2014/11/GAB-Report1.pdf ²http://www.smh.com.au/environment/santos-coal-seam-gas-project-contaminates-aquifer-20140307-34csb.html

³BirdLife International (2017) Important Bird Areas factsheet: Pilliga http://www.birdlife.org Marion Carey Doctors for the Environment Australia (DEA), Air pollution from coal seam gas may put public health at risk The Conversation, November 20, 2012

https://www.theguardian.com/science/2014/oct/21/siding-spring-observatory-threat-coal-seam-gas-light-pollution

http://darksky.org/first-dark-sky-park-in-australia-designated/