P O box 317 Katoomba 2780 22 May 2017

Executive Director Resource Assessments Department of Planning and Environment GPO Box 39 Sydney NSW 2001

Dear Sir/Madam,

Objection to the Narrabri Coal Seam Gas Project (SSD 6456)

The Great Artesian Basin (GAB) aquifers have intake areas in the Pilliga forest that must be protected. This coal seam gas project must be rejected for the very high risk that the great Artesian Basin will be damaged or contaminated by CSG produced water or the contaminants which are used to extract the gas. This is critical to the NSW and Australian economy.

Recharge of the Pilliga aquifer will become impossible due to the proposed quantities of water extraction required for coal seam gas (CSG) development. The GAB and the integrity of the intake bed strata must take priority over CSG production in the Pilliga. Fracking of the coal seam will compromise the GAB strata. It fracking is a contingent part of the proposed project, and Santos must be refused consent. Damage to the GAB will have dire consequences, such as loss hydrostatic pressure in the artesian wellheads of the GAB. The Central West NSW region is heavily dependent upon access to the GAB for grazing and agriculture. The GAB is also essential to the survival of unique mound spring ecosystems located further west. Any disruption to the fine balance of groundwater and its replenishment has ripple effects well beyond calculation or modelling by Santos. The regional economy and ecology are dependent on the GAB and the GAB must not be jeopardised.

The Pilliga Forest is the largest temperate woodland remaining in Australia. It comprises woodlands of Narrow-leaf Ironbark, Broad-leaf Ironbark, Pilliga Box and Bimble Box, as well as many other plant communities including Brigalow, Green Mallee and Broombush scrublands that have been cleared from other parts of the Central West of NSW.

The Pilliga woodlands are home to more than 900 plant species, including at least 12 rare and threatened plants. There are 14 frog species, 32 mammals (including 12 bats) about 50 reptiles and over 200 bird species. Pilliga woodlands support 22 threatened animal species (Glossy Black Cockatoo, Regent Honeyeater, Gilbert's Whistler, Painted Honeyeater, Turquoise Parrot, Barking Owl, Masked Owl, Malleefowl, Square-tailed Kite, Black-breasted Buzzard, Bush Stone Curlew, Eastern Pygmy-possum, Squirrel Glider, Koala, Black-striped Wallaby, Rufous Bettong, Pilliga Mouse, Greater Long-eared Bat, Yellow-bellied Sheathtail Bat, Little Pied Bat, Large-eared Pied Bat, Eastern Cave Bat). It's not a suitable place for coal seam gas (CSG) field development.

It's inappropriate to fragment and degrade the Pilliga's woodlands with CSG infrastructure and roads as proposed by Santos. A network of intersecting roads and pipelines, water extraction, lines of wells, chemical intrusions, structures, work sites of the proposed gas field will bring ruin the Pilliga woodland ecosystems.

After considering the environmental constraints of the Pilliga forest and hazards related to CSG production and the GAB, I request that the NSW Department of Planning and Environment recommends refusal of development consent of this Santos proposal in the Pilliga.

There should be no CSG infrastructure in the Willala Wilderness Area; areas of old growth woodland must be protected, as well as all endangered ecological communities, and threatened plant and animal species habitats. Adequate protection of these and other heritage values of the Pilliga woodlands will be impossible if this CSG proposal is approved.

As well, the natural dark night sky will be compromised by light pollution from gas flares and CSG lighting infrastructure. Dark night skies are essential for the effective operation of the internationally renowned Siding Springs Observatory nearby.

The CSG industry has proven itself unable to effectively rehabilitate the very extensive areas it has mined, leaving many clearings and infrastructure in forests and farmlands across NSW and Queensland. The industry has shown itself to be incapable of removing its fence lines, tanks, dams, quarries, access roads, accommodation and clearings should also be removed from the mined out areas. Santos must be refused development consent.

I hope you will give my representations serious consideration and I thank you for the opportunity to comment.

Yours sincerely,

Madi Maclean