

THE PILLIGA

Why is it special?

A place of outstanding conservation significance, the Pilliga Forest covers an area of approximately 500,000 hectares. It is the largest remaining temperate woodland in eastern Australia and the largest forest remnant left in the heavily cleared Wheat-Sheep Belt 'west of Narrabri'. The area has recognised wilderness significance, and more than 117,698 hectares meet the criteria for the National Wilderness Inventory.

Internationally, the Pilliga is an Important Bird Area under the BirdLife International scheme, supporting the largest NSW population of Barking Owls and other declining woodland species in NSW. 'It's a bird lovers' delight, refuge to hundreds of bird species who are attracted by the mix of temperate, semi-arid and sub-tropical climates and the rare native woodlands.

The Pilliga has very high species diversity and forms part of the Brigalow Belt South Bioregion, recognised by the Federal Government as one of only 15 national biodiversity hotspots within Australia. It forms the southern recharge area of the Great Artesian Basin and contributes surface water flows to the Murray-Darling Basin. It also has high cultural significance and is rich in heritage sites, including rock shelters, burials, grinding grooves and scarred trees.

What's the threat?

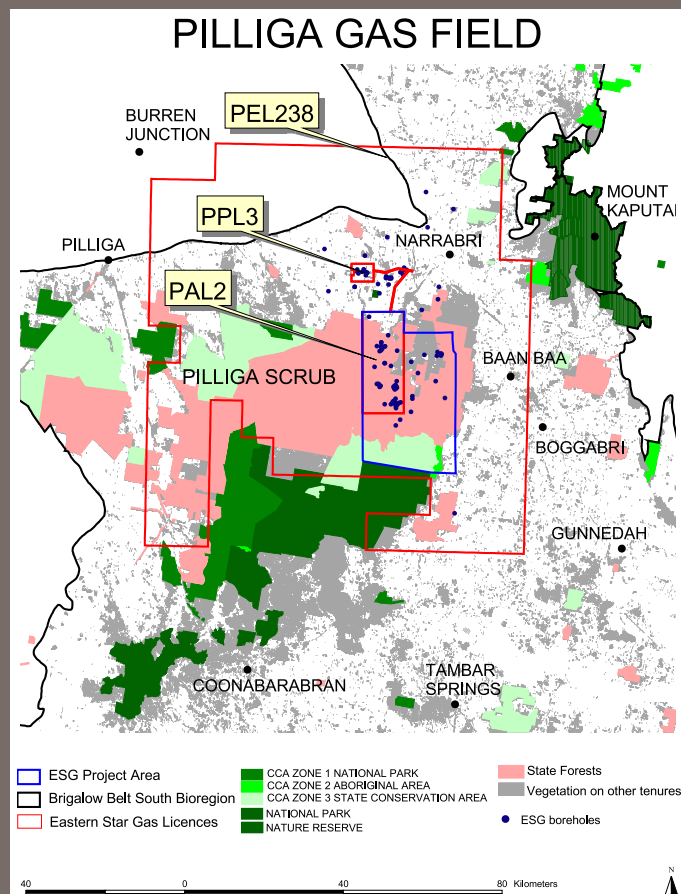
Mining company Santos plans to develop a coal seam gas field within their exploration lease covering over 800,000 hectares of the Pilliga Forest. In 2011 Santos bought Eastern Star Gas who proposed to drill 1,100 gas wells and clear 1,000 km of pipeline, fragmenting 85,000 hectares of Pilliga Forest and turning the iconic and significant habitat refuge into an industrial coal seam gas field.

The 2010 Preliminary Environmental Assessment for the proposed gas field development found all of the following risks to be "probable".

- Increased risk of bushfires
- Reduced habitat availability for State listed threatened species, populations or communities resulting from vegetation clearance
- Loss and/or fragmentation of native vegetation resulting from clearing for wells, gas plant and water infrastructure
- Drawdown of surface aquifers resulting from dewatering of coproduced water during gas extraction
- Contamination of surface waters resulting from storage of saline coproduced water or brine
- Reduced opportunity for recreation in areas of Pilliga East State Forest
- Potential contamination of land resulting from brine storage or disposal
- Erosion and deposition of exposed soils and release of sediment laden runoff into creeks and rivers

Already, the coal seam gas exploration drilling in the Pilliga Forest has caused massive environmental damage. Santos now plans to drill 50 more exploration wells in the region. Over 20 environmental incidents have been reported including a large spill of untreated coal seam gas water: a toxic cocktail of heavy metals (arsenic, lead and chromium), salts and petrochemicals.

Activities to date have also caused ecological problems and directly destroyed at least 150 hectares of habitat. 1,700 hectares of native vegetation has been heavily fragmented, impacting sensitive plant and animal populations and causing weed invasions. Chemical and diesel pollution events have occurred, killing many further hectares of forest. Native wildlife has been found dead at saline drill ponds.



Ready to raze - NSW Government gives green light to coal seam gas

In September 2012, the NSW Government put 22 exploration licences up for renewal, including PEL 238 in the Pilliga Forest. This green light to exploration was given despite a record in NSW of toxic coal seam gas spills and community opposition. These exploration renewals were released the same day as the NSW Government released their Strategic Regional Land Use Policy - a policy that does not protect one square inch of land in NSW from mining. This means that food producing land, water catchments and important ecological areas like the Pilliga Forest are still under threat.

Lessons from QLD – gas leaks likely

The QLD government recently conducted gas well inspections of 2719 wells, resulting in the identification of gas leaks relating to the well casing, the well head and related well head equipment.

Five leaks were found to be risking the safety of workers and the community. A further 29 leaks were above a level where best practice dictates that action should be taken.

The full impacts of leaking methane gas wells in the highly bushfire prone Pilliga Forest are untested. The flammable methane gas, coupled with the drop in groundwater levels from the gas mines' dewatering process, could lead to disaster for the threatened species and ecological communities of the Pilliga Forest.

Locals to the area know the bushfire risks of the Pilliga, as there is a long history of fire to the forest. An extremely dry winter and spring in 2006 saw a number of large fires develop, including a fire which burned out 740 square kilometers on just its first day.



Threatened species at risk

Eastern Star Gas described the importance of the Pilliga as follows, "The remnant has national, state and regional conservation significance for the protection of biodiversity and threatened species". In fact, there are 24 matters of national environmental significance, as defined by the *Environment Protection and Biodiversity Conservation Act 1999* that occur within the gas license areas of the Pilliga Forest.

Sadly, human impacts to this iconic natural area have already taken their toll. More than 14 mammal species are already believed to be extinct in the region—one of the highest extinction rates in Australia. Those species now lost from the area include the Bilby, Brush-tailed Bettong, Western Barred Bandicoot, Bridled Nailtail Wallaby and the Eastern Chestnut Mouse.

The future of the fragile native species left surviving in the region is now very much in the hands of those deciding the actions allowed within the iconic Pilliga Forest.

The habitat loss, increase in fragmentation and predation as a result of the gas development is likely to severely impact the Squirrel Glider, Koala and Eastern Pygmy Possum. Declining woodland birds such as the Diamond Firetail, Hooded Robin and Speckled Warbler will also be impacted, as the Pilliga represents a major refuge area. Migratory species to be impacted include the Regent Honeyeater, Swift Parrot, Great Egret and the Rainbow Bee-eater.

The Pilliga provides habitat for the only known population of the endemic Pilliga Mouse, the largest Koala population in NSW west of the Great Divide (due to the occurrence of some of the Koala's favourite tree species) and one of only two known Black-striped Wallaby populations in NSW. It is also recognised as the national stronghold for the south-eastern Long-eared Bat.



Rainbow Bee-eater

The gas project referral failed to identify the migratory Rainbow Bee-eaters which are known to occur in the area.



Barking Owl

Photo: Robin Ducker

The Pilliga area is recognised as a major stronghold for the Barking Owl in NSW.



Photo: Justin McDowell

Pilliga Mouse

The vulnerable Pilliga Mouse lives only in the Pilliga Forest. The 2011 Narrabri Coal Seam Gas Project referral concluded that, "given the population of Pilliga Mouse in the project area is considered an important population and the potential for impacts described above, the development may have a **significant impact on the species**".



Black-striped Wallaby

The Black-striped Wallaby is endangered in NSW and the northern Pilliga is the only known location of this species in western NSW. Requiring dense vegetation, it is extremely vulnerable to clearing, fragmentation and increased predation.



Malleefowl

The endangered Malleefowl is now possibly extinct in the Pilliga, although the species could be revived through captive breeding and release programs if predation and fire risks decrease.

"Coal seam gas mining and iconic high conservation value areas like the Pilliga are mutually exclusive. It is either one or the other." Jane Judd, Coonabarabran resident.

Recommendations

This proposed gas field development will cause species fragmentation, weed invasion, habitat and heritage loss, noise and increased fire risk. As such, decision makers are strongly encouraged to:

- Reject this gas field proposal, as it is dangerous in nature, poses significant threats to endemic and threatened species and would destroy a key natural icon of NSW.
- Ensure this national icon is safe from future developments which pose such risks to its natural systems and declare the Pilliga a mining free area.
- Resolve the uncertainties and establish scientifically credible measures to avoid or mitigate the high impacts and fire risk of this gas field proposal.
- Publicly release all information regarding the spills, breaches and environmental failures in the Pilliga and prosecute the coal seam gas companies accordingly.

For references, please see the full report: Icons Under Threat <http://nccnsw.org.au/content/icons-under-threat>
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