

Healthy Rivers Dubbo

Dubbo NSW

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## **Independent Planning Commission Submission – Narrabri Gas Project**

Healthy Rivers Dubbo is a grass roots community group dedicated to providing a strong voice for our local rivers, aquifers and wetlands in the Murray-Darling Basin for the benefit of wildlife, plants and people.

We pay our respects to the Traditional Owners of the lands and rivers where we work and play – the Tubba-Gah Maing Wiradjuri.

We are grateful for the opportunity to make a submission to the IPC about the Narrabri Gas Project.

We are strongly opposed to the project. Our group is concerned that the risk to the waters of the Great Artesian Basin, the GAB, are not adequately addressed in the assessment.

This submission will focus on the risks associated with further depressurisation of the GAB through increased water extraction.

The GAB is considered one of the 7 hydrogeological wonders of the world. The Pilliga Forest is one of the few known groundwater recharge areas for the GAB. Recharge areas are vital in maintaining aquifer pressures and therefore water pressures throughout the GAB.

Over 20 years Santos plans to extract 37.5 billion litres of water from deep below the Pilliga.

The NSW Government have increased the extraction limits in the Southern Recharge ground water sources (which covers the Pilliga) by 30% from the 2008 NSW GAB water sharing plan to the 2020 NSW GAB water sharing plan. The extraction limit in the Eastern recharge GAB water source will increase by 22%.

Increased extraction from this project, and other water extraction industries will cause depressurisation not just in the local areas, but the effects will be widespread. Efforts and investments in capping and piping projects have achieved good outcomes restoring pressure in the artesian basin, only to be compromised by higher levels of take. A case of one hand giving and the other taking away.

GAB springs continue to support the oldest living culture in the history of the Earth. They have watered megafauna dating back over 30,000 years, and continue to sustain internationally recognised Ramsar listed wetlands to this day. The mound springs at Peery Lake are recognised as one of the rarest landforms in Australia.

GAB springs are listed as supporting endangered ecological communities under the Commonwealth Environment Protection and Biodiversity conservation Act 1999, they are

listed as critically endangered ecological communities under the Biodiversity Conservation Act 2016, and some are listed as sites of significance under the Ramsar Convention.

Approximately 1,000 springs have become extinct in the NSW GAB due to overdevelopment. Remaining spring complexes in the GAB provide critical habitat in the harsh conditions of far western NSW.

Stygofauna are any fauna that live in groundwater systems or aquifers. They grow slowly, don't have many young, live long lives and stay close to home. Some are from extremely old lineages, with ancestors dating back about 200 million years. It is because of their characteristics born of their low-energy environment, and their incredible age, a lot of stygofauna species are extremely rare and localised.

Stygofauna contribute important ecosystem services by creating a nutrient cycle, and have been recognised as indicators of groundwater health.

The Pilliga Sandstone Aquifer has been found recently to contain rare species of stygofauna. A survey of 22 sites within the Pilliga Sandstone aquifer conducted in 2016-17 reported a total of eleven taxa of invertebrates, which included ten families from five orders of stygofauna. The results showed stygofauna exist across the entire area.

Stygofauna are vulnerable to extinction from environmental changes and human impacts. They are also classified as of High Ecological Value (HEV) as the area is covered by the Lowland Darling Aquatic Endangered Ecological Community (EEC) listed under the Fisheries Management Act 1994

The climate is drying, a lot quicker than expected. The summer of 2019/20 was extremely dry and hot, a lot of environmental damage was done, and many regional centres, some quite large were at risk of evacuation from running out of water.

More dams are planned in NSW, and if they go ahead will mean only the winners in the top of the catchments will have reliable access to surface water, and those downstream will have to rely on groundwater more and more. Water harvest from our floodplains is greater than ever, and is devastating our rivers.

The pressure on groundwater supplies is increasing, and will only continue to do so. The Narrabri gas project would almost certainly lead to further depressurisation of the GAB, and should not be approved.

For further information,

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