

## **Submission to the senate inquiry into the impacts of coal seam gas on the Murray-Darling Basin**

I am writing to express my serious concerns about the existing and proposed coal seam gas exploration and production across the Murray-Darling Basin (MDB)- particularly the massive projects in the Maranoa, Condamine and Moonie River catchments in central/southwest Queensland and the Namoi catchment in northwest NSW. This enormous expansion is taking place rapidly and without any thorough investigation of the impacts it will have on the land and water resources that are vital to a very large percentage of Australia's natural environments and population. Some of my concerns about this industry are:

- Coal seam gas mining involves production of large volumes of toxic and saline water from the coal seam that has to be disposed of. This water poses a serious threat to both soils and river systems and could have a major impact on the water quality of many river systems that are already under stress from over-allocation and reduced rainfall and on which our food and fibre production and inland towns rely for their water supply. There is also the threat of overflows of toxic and saline water from storage ponds during flood events that could lead to wide scale toxification of soils and vegetation. Leakage from storage ponds in the Pilliga forest in northwest NSW has already led to death of vegetation in the area.
- Coal seam gas production alienates valuable agricultural land in the Basin from food production and turns the rural landscape into an industrial landscape. It is likely to totally change the fabric of rural communities through the buy up of farmlands, the alienation of farmers from traditional farming practices and the advent of fly-in, fly-out work forces who do not make a contribution to rural communities and who can disrupt the social harmony and change the fabric of these communities.
- Coal seam gas wells and pipelines on bushland and travelling stock routes threaten the already greatly diminished biodiversity of the MDB. In the most cleared landscape on the continent it will lead to more clearing and fragmentation of high conservation value vegetation. This vegetation is vital habitat for threatened fauna that are already in serious decline due to broad scale clearing for agriculture in the MDB. Wildlife is also under threat from drinking or falling into toxic water ponds, which would attract large numbers of wildlife in this environment where open water sources are usually not readily available for wildlife to utilise.
- Increased threats from bushfire from coal seam gas production would impact on both agricultural lands and bushland and would have a devastating impact on stock and native wildlife. Evidence from the USA shows the high incidence of fires associated with wellheads and pipelines.
- Coal seam gas production uses large amounts of water in the extraction processes, which would put increased pressure on water supply in a region that is already under serious pressure from demands for agriculture and environmental flows. It is a major concern that water use for coal seam gas operations is not currently licensed and regulated in the way it is for agricultural users. The possible impacts on the Great Artesian Basin groundwater supply from coal seam gas production have not been investigated. There is the possibility of de-watering and contamination of the GAB and other vital aquifers, which would lead to ever-greater pressures on the MDB for water supply.

As there are so many significant risks associated with this industry, I strongly urge you to stop all coal seam gas exploration and production within the Murray-Darling Basin, as well as on all bushland, prime agricultural land and in areas overlying with important aquifers. The future of the rural industries, communities and remaining natural areas of the MDB are too precious to place at risk from a headlong rush into gas extraction. Please take urgent action to protect these areas,

Your Sincerely,  
Boudicca Cerese (B. Env.Sc.)