



PO Box 1040  
Milton, QLD 4064

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Research Director  
Agriculture and Environment Committee  
Parliament House  
[aec@parliament.qld.gov.au](mailto:aec@parliament.qld.gov.au)

Dear Chair and Committee Members,

**Re: Submission to Committee on Environmental Protection (Underground Water Management) and Other Legislation Amendment Bill 2016**

Thank you for the opportunity to make this submission to your inquiry into the Environmental Protection (Underground Water Management) and Other Legislation Amendment Bill 2016 (**Bill**).

**Protect the Bush Alliance (PTBA)** is an alliance of 30 NGOs and community groups in Queensland and Australia representing over 30,000 people. Our goal is to implement ways of preventing the continuing loss of areas of high conservation values to inappropriate development. One of the ways we do this is by conducting flora and fauna surveys on properties of high conservation value and on the properties which link them.

Members of PTBA have had, and will continue to have, close association with many land holders and communities affected by the major resource developments planned for Queensland, as and when those developments strategically impact on areas of biological significance and diversity.

In writing this submission on behalf of Nature and members of this Alliance; it is safe to report the observation that many species are struggling to survive with abundance across all fauna groups experiencing major declines. The Queensland landscapes are now so altered and degraded by introduced species and a history of inappropriate fire management, our native species are increasingly threatened and more so after years of drought and altered weather systems, associated with climate change.

The survivability of native species is underpinned by the ecosystem in which they live. This includes not only the physical environment, but also the suite of animals and plants that make up the biodiversity of that site. The inherent biodiversity of an ecosystem is underpinned by the processes and services of that ecosystem and these services in-turn are dependent on the biodiversity within; they are irrevocably linked. Where biodiversity diminishes, endangered species, whose ecology is typically already fragile, are most likely one of the first to suffer. Of crucial importance in this arid country is access to healthy water systems for all of Nature – this web of life.

PTBA brought to the attention of the Minister of Environment;

**The Colton Mine (Colton Coal Pty Ltd Client 641079)** at Aldershot, north of Maryborough in Queensland. Project Number ML 50208/50273/50274.

We believe this to be a totally inappropriate coal mine situated adjacent to a referable wetland, the Mary and Susan River estuaries, an Important Bird Area and a RAMSAR site. These treaties demand

of Governments that they protect the wading and migratory shorebirds which have led to the special status of the Great Sandy Straits Region. Now to be promoted for UNESCO listing by the Queensland Government.

Unfortunately Colton Coal plans to discharge untreated toxic mine water directly to the Mary River. Of particular concern for BirdLife Southern Queensland, Birds Queensland and the Queensland Wader Study Group, is a clause contained in the Northern Energy Application for Colton Coal under Project Services 2.5. I quote:

*Colton Coal has investigated the feasibility of storing excess water on site, relying on evaporation to keep the quantity within manageable bounds. Based on these investigations, Colton Coal has concluded that this is not a practical solution as any evaporative losses would be unlikely to match even rainfall contribution let alone the additional groundwater volumes. Therefore excess water will be removed from the site and discharged in accordance with the EPA 1994 and its subordinate legislation. Site water will be managed by having dams to store both clean and process water from the mine excavation processes.*

An estimated 730ML per annum of surplus water that is expected to be generated, will flow to prescribed high environmental value waters. Dewatering will critically impact on dependent wetland ecosystems classified as 'referable wetlands'. There is a precedent in this matter, in permitting coal mining in close proximity to sensitive coastal vegetation. Further, water being discharged in to such critical habitat for feeding shorebirds is an unacceptable risk. Due to the steep population decline of Australia's migratory shorebirds, particularly in relation to the loss of feeding grounds along the East Asian-Australasian Flyway, every feeding site is an essential stepping stone for their survival. The birds arrive in Queensland exhausted and must rest and feed to successfully return to their breeding grounds each year. These small industrial developments occurring under an 'EA' process, cumulatively compound the threats to the health of river systems; the impacts remain unquantified.

Currently residents of Aldershot have this matter before the Land Court at vast expense to the community. We firmly believe in instances such as this; government through appropriate legislation, should be protecting the health of the Mary River, the IBA and RAMSAR sites, and not every day citizens under huge duress.

In relation to the further development of the Coal Seam Gas industry (CSG) we firmly believe this places perilous demands on all of our natural systems, particularly **'Water'**. Of note;

- In the USA, fracking uses around 10megalitres of water per well. With the announcement of 6100 (Wandoan), 6625 (Glenden) and 24000 (Cooper Creek) wells projected in Queensland, where will this come from. Is it to be provided to this industry 'free' and unquantified?
- Here exists preferential treatment of one sector of our economy, when farmers and all other water users have to obtain a water licence. Is this 'discrimination'?
- Further, there is an average of around 3,000L of "missing" waste water per well, there needs to be a high level of accountability for waste water. Self-monitoring is not adequate.
- There is good documented evidence of escape of fracking fluid and methane into ground water. The fluid used in fracking contains: phosphonium sulphate, acetic acid, guar gum, momoethanolium borate, hemicellulose enzyme carbohydrates.

The Company claims that these are commonly used in household products. However that in no way makes them safe in water that is potentially used for agriculture and human consumption or water on which our wildlife and birds depend. The Company needs to clearly outline how fracking water will be disposed of, especially in the wet season where holding ponds are likely to fill and overflow.

How will this risk be managed? What is the likelihood of overflow and if it happens, what will the consequences be? Who will pay for damage and clean up? CSG Companies need to provide strong evidence that fracking fluid will not escape into and contaminate the aquifers. We do believe they can provide this assurance.

In summary, members of PTBA support our colleagues at EDO who's recommendations are:

- **No resource company should get free, unlimited access to groundwater when extracting coal or gas, because it is risky to the environment and risky and unfair to other water users such as farmers.** The current laws giving such rights to gas companies ought to be changed. The plans of the current and former State governments to create a 'statutory right to take associated groundwater' for mining companies need to be rejected for the same reasons. For openness, transparency and accountability, a licence should always be required prior to groundwater being taken or interfered with, with public submission and appeal rights to an independent Court with powers of final determination.
- **The improvements proposed in the Bill by the current State government to the groundwater impact assessment for projects at the environmental authority stage are good, necessary and supported.** Those improvements include a requirement for the applicant to provide more information as to the proposed impacts from their use of underground water, including detailing each aquifer likely to be affected and analysis of those aquifers, impacts on the quality of underground water, and identification of the environmental values that will or may be affected and proposed strategies to avoid or mitigate these impacts. Functional, clean groundwater resources are essential to many Qld farmers, businesses and ecosystems.
- **The current government's proposal that mines obtain an 'associated water licence' if they have not gone through the improved groundwater impact assessment introduced by the Bill is positive.** This would mean the public submission and appeal rights would continue to apply to large, risky coal mines like Adani Carmichael and Hancock Alpha coal mines. Those proposed mines pose serious potential groundwater impacts that might affect natural areas and landholders who depend on groundwater. However, see above, licensing ought to be required in relation to all mining and gas projects not just older proposals. Also, see below, the licensing needs to be assessed against ESD principles.

**The Bill needs to be amended so that the 'associated water licence' is assessed against the principles of ecologically sustainable development (ESD principles) as necessary for every other water licence assessment.** ESD principles include the precautionary principle –in effect that if we do not understand the likely results of the proposed impacts sufficiently, we do not allow this reckless industry expansion across Queensland. Much forgotten is the value of the nature based tourism industry, where people value country and pay to travel the highways. The fragmentation of forests, destruction of landscapes, creeks and river flows, is in no one's interests save this industry alone.

Yours sincerely



Sheena Gillman. Project Coordinator PTBA

