Banyabba – The next CSG front line?

According to Metgasco's Review of Environmental Factors (REF) mapping, their Banyabba coal seam gas (CSG) well site is situated some 2.3km east of the Summerland Way, some 40km north of Grafton, and is accessed along a 5km bush track off Banyabba Station Road.

The majority of the area contains native forest which has not been burned for a considerable time, and now has a high level of biodiversity in the understorey which, contributes to the high conservation values that are now evident.



Plant species of interest identified in the REF include the vulnerable species, *Hibbertia marginata*, recorded immediately adjacent to the proposed drilling site locations.

Other species of note that are not included in the REF, despite growing within the small study are the RoTAP listed species, *Boronia chartacaea*, a species that probably should be listed as threatened owing to its rarity, and the Woody Pear, *Xylomelum pyriforme*, which we believe represents a new northern limit for the species.

When undertaking any flora and fauna assessment, there are basic requirements that take time and we assert that a one hour wander around the tiny $1\frac{1}{2}$ hectare study area, as identified in the REF, is totally inadequate.



Woody pear, juvenile leaves

Given the REF identifies that the 1½ hectare site contains 14 hollow-bearing trees (Figure 4 of the REF), and will be subjected to a month of continuous high noise levels, as well as floodlighting at night, we believe a fauna survey should have been conducted including call playback and trapping to determine what species might be impacted by the proposed activities. These surveys take days to undertake, not 1 hour.

The fact that 14 hollow-bearing trees have been identified, about 10 per hectare, is evidence of potential for high numbers of arboreal fauna to occur there, including the thirteen tree hollow-dependent threatened species already recorded in the vicinity. To put that number of hollow-hearing trees into context, under the Integrated Forests Operations Approval, Forests NSW is only required to retain half that number to maintain healthy levels of biodiversity.

Despite this clear evidence of potential for high conservation values, ecobiological claims "there is little habitat in terms of mature trees, old growth or woody groundcover", an assessment that is clearly questionable, if you look beyond the 60m by 40m cleared pad.



High conservation value forest with high levels of biodiversity.

It is impossible for us to further critique ecobiological's "Fauna habitat assessment" (Section 1.4.2.4. page 15) because, after just 4 lines of text on page 15, <u>at least one</u>, <u>possibly two</u>, <u>pages are missing from the report exhibited on the Government's web site</u>. The document moves directly from page 15 to page 18.

Table 8 contains a list of 64 threatened species deemed likely to occur on the property, and of those ecobiological identifies 33 species that should require assessment for significant impact. We believe this is a measure of the extremely high biodiversity values of the site, and while the clearing of a ¼ hectare pad for a drill rig might have a low impact, the reality is that the proponent is exploring for gas which, if discovered, will result in the industrialisation of the entire landscape.

It is our opinion, and I'm sure that of many conservationists and ecologists, that prior to minerals exploration taking place, the impact that will be the consequence of finding the resource must be assessed. It is simply not fair to local residents or to the mining company, to allow expensive exploration to proceed if there is a chance that the project might be rejected at a later stage because of unacceptable environmental impact.

It should also be understood that the Banyabba site lies within the catchment of The Broadwater, just a few kilometres away, which is a critical fish breeding ground for the largest commercial fishery on the NSW coast.

We have assessed the individual species' impact assessments contained in Table 8, and make the following comments.

• Grevillea masonii – We do not agree that there is a "low likelihood of occurrence" of this endangered species, as it is known to occur on Pringles Way, less than 10km from the site, not just "at low altitude near Grafton" as claimed. As it is, the drill site is less than 80m altitude, so we are unsure of the significance ecobiological attaches to the "low altitude" comment.



Grevillea masonii

- *Hibbertia marginata* According to ecobiological's assessment, despite actually finding the species growing within centimetres of the drill pad, is: "The study area does not occur within the known distribution of the species". If this was the case, its occurrence at the site would represent a range extension, something that would significantly increase the importance of that sub-population. However, according to the National Parks and Wildlife booklet, "Threatened Species of the Upper North Coast", its known distribution is the Southern Richmond Range between Grafton and Casino. There are numerous small populations of the species in close proximity to the well site, making the property (in our opinion) the most significant area of occurrence for the species. Any future disturbance should therefore be avoided
- **Brown Treecreeper** Contrary to ecobiologial's assessment, we believe the habitat for Brown Treecreeper does occur at the drill site. Table 8 identifies that the species prefers Eucalypt woodland and adjoining vegetation in sub-coastal environments. It also identifies that there are records of the species in the locality, and still ecobiological makes the strange judgement that there is a "low likelihood of occurrence".
- Giant Barred Frog and the Green-thighed Frog ecobiological deems that, despite both species occurring in the district, and the latter recorded within the locality, there is unlikely to be any impact to the species because there is no creek on the site. We point out that the gas drilling is undertaken using toxic drilling fluids, and that this is a high rainfall area, and that all run-off ends up in streams and rivers. If the Glenugie drilling has taught us anything, it is that frequent spillages do occur. Therefore, we believe there is a potential for significant impacts on all threatened frog species known to occur downstream of the Banyabba site, and there are more than the two assessed for the REF.

- Australian Painted Snipe and the Painted Snipe are other species that ecobiological considers does not deserve assessment. The floodplain bordering the Broadwater supports numerous wetland areas that would provide habitat for these species. Again I point out that this is a high rainfall area, there are frequent spillages of toxic drilling fluids during the drilling process, and the site is directly up-slope from those wetlands.
- **Rainbow Bee-eater** ecobiological identifies that there is suitable habitat for the species, and there is a moderate likelihood of occurrence, but determines that there is no need to assess the impacts. I believe that, with the disturbed soils at the site, the Rainbow Bee-eater is very likely to be attracted to the site, and should be assessed for potential impacts.

In conclusion, the site itself is surrounded by high conservation value forest, with at least three rare or significant plant species occurring within 150m of the drill pad, and the threatened *Hibbertia marginata* growing on the very edge of the cleared area.

There are numerous habitat trees across the property, something of a rarity, but logging is currently under way, which is extremely unfortunate, and those remaining habitat trees will be placed under pressure from the elements as surrounding support is removed.

CSG well site before drilling.





Hollow-bearing trees are plentiful.

