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Nature Conservation Saves for Tomorrow

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Mining and Industry Projects
NSW Department of Planning & Infrastructure
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Coalpac's Invincible Mine Extension (07_0127 MOD 4) and Cullen Valley Mine Extension (DA 200-5-2003 MOD 2)

BMCS Comments on 'Coalpac's Response to Submissions' in Hansen Bailey Reports, June 2014

1. BMCS' position

BMCS remains strongly opposed to these modifications (C-Mods) and totally rejects them.

The original Coalpac Consolidation Proposal (CCP), of which the current modifications are part, was rejected by the Planning Assessment Commission Review Report, and by the Director-General's Report (NSW Department of Planning & Infrastructure – DP&I)¹. It was also deemed a Controlled Action under the federal government's *EPBC Act*. The reasons for its rejection have not changed and are equally applicable to the C-Mods.

The Society firmly contends that should the C-Mods be approved, it will make a mockery of the DP&E assessment processes and could seem to involve a political deal following the courageous rejection of the CCP.

2. Hansen Bailey's Report(s) (HBR)²

2.1 Comments on methodology

Hansen Bailey is to be congratulated on its comprehensive analysis of the responses to the two C-Mods. The reports, located in the separate listings for the Invincible and Cullen Valley modifications on the Department of Planning's website, are identical. This is perhaps a good thing as each amounts to about 66.5 MB.

¹ Director General's Assessment Report, Coalpac Consolidation Project (10_0176), 4th October 2013
https://majorprojects.affinitylive.com/public/d378f3a9a670ed3cc49f6c1e8c0a339d/1.%20Coalpac%20Consolidation%20Project_%20Director-General%27s%20Report_Summary.pdf

² It is notable that some of the submissions to which the HBR is responding are not yet (09/07/14) on both the Cullen Valley and Invincible entries on the Planning website.

It is unfortunate that such an analysis is undertaken because, although exhaustive in its detail, the pattern of responses largely amounts to reiteration of previous statements, rejection or disregard of issues raised (particularly by Special Interest Groups – SIGs), and a similar (but somewhat more polite) approach to government instrumentalities. In effect, the *modus operandi* is as follows:

- Applying a crude filter to responses such that: Regulator submissions are accepted where practicable, or courteously rejected by detailing efforts to avoid/comply/compromise, as backed up by the appropriate expert consultant; SIG submissions are invariably disputed because they are the main force opposing the C-Mods – it would seem that the consultants felt challenged and have responded emphatically; ‘Private individual’ submissions were in most cases ‘taken very seriously’, and treated courteously by giving extensive explanations of avoid/comply/compromise measures – there were no ‘significant’ changes.
- Dismissing ‘general comments’ because (HBR p67): “*The objective of this section is to respond to specific issues raised in relation to the Environmental Assessment process and documents prepared in support of the Modification applications.*”

This assumes that the general comments have no pertinence to the Environmental Assessment (EA) process and its contained statements. **The assumption is rejected.**

Section 2.1 in BMCS’ submission showed the magnitude of Coalpac’s miscalculations over the level of opposition to the outrageous CCP, and the spin placed on this in the C-Mods proposal, particularly with respect to the rehabilitation of past open-cut mining activities. Section 2.2 demonstrated the disproportionate treatment of companies versus volunteer envirogroups in relation to response times and financial limitations; the simple fact is that the whole process is loaded in the company’s favour, particularly in respect of ‘consultant over-kill’.

Section 2.3, to which HBR actually responded, deals with whether or not the C-Mods should have been a controlled action. The consideration was justified within the current political framework. BMCS does not resile from its original contention and notes Coalpac’s additional ‘discussions’ with the Department of Environment (DoE) in relation to the additional data provided by several SIGs³; the SIGs were not asked to elaborate.

- Selectively citing statements in order to refute them by reiterating what was in the EA documents and then providing further backing by the consultants who supplied the original ‘opinions’.

BMCS has spent many long hours examining the EA documents, including the supporting appendices. BMCS points out deficiencies including situations where a consultant’s ‘support’ is overly enthusiastic. The objective is to ensure that Planning (or a PAC) is aware of this. And now the objective is to ensure that, no matter how many additional dollars have been spent on fancy reports, reiteration does not constitute additional evidence.

- Using ‘significant’ *ad nauseam*, as in ‘there will be no significant impact’!

BMCS has yet to work out what this phrase means. If there is no significant impact, it follows that there must be some impact and the critical point is where the threshold is between insignificant and significant. It is within this grey area that the consultant errs in favour of ‘he who pays the piper’, whereas BMCS prefers to err in the interests of the environment.

BMCS notes that such ‘significance’ statements are typically made when the consultant is giving a ‘considered opinion’ having made a value-judgement.

- Practising reductionism by breaking a criticism down into discrete parts which are addressed in isolation and refuted in detail such that the relative importance of the parts is lost. There is little attempt to see the parts within an integrated whole.

Partly reflecting the above dot-points, but concurrently acknowledging the limited time available to make a response, BMCS will not attempt to cover all the responses refuted by the HBR. Rather, BMCS will focus on key issues which may have the capacity to be ‘project-stopping’. To do this, BMCS will be partly guided by

³ *Oh to have been a fly on the wall!*

the HBR Executive Summary and the responses made to the BMCS submission. However, in the next subsection (2.2), BMCS will briefly comment on the Private submissions summary.

2.2 Private submissions summary

The analysis of the submissions received by DP&E offers few (if any) surprises. In general terms, for 724 individual submissions the opposing/supporting ratio was ~3.6, but this tells nothing about the polarisation of results as a function of the Local Government Areas (LGAs). Support was focused in the Lithgow and Bathurst LGAs, whereas opposition was focused in the Blue Mountains and Greater Sydney LGAs.

HBR p10 concluded that “...*those communities most directly impacted by the Modifications are also those who provided the strongest level of support for the approval of the Modifications.*” But this is only part of the story because those supporting the C-Mods saw jobs and local business activity as positive impacts, whereas those opposing the C-Mods were concerned with the negative environmental, health and heritage impacts.

Regrettably, the remaining adult residents and children of Cullen Bullen were drowned by the self-focused beliefs of the less negatively-impacted residents of the Lithgow LGA. **Those anticipating short-term ‘black-dollar’ gains for Lithgow were seemingly little concerned with the health and lifestyle of those living in Cullen Bullen and closest to the proposed C-Mods.**

3. Reservation of Ben Bullen State Forest (BBSF)

The HBR Executive Summary ppiv-v and HBR pp16-24 (a response to a submission by OEH) expend much effort on this.

The objective of the response is obviously to combat statements that BBSF was the next part of the Gardens of Stone Stage 2 (GoS2) proposal to be reserved. This position has been articulated by OEH in a range of written communications going back to the 2006 Assessment of the GoS2 Proposal by DEC. It is again spelled out in the OEH response to the C-Mods (pp4-5)⁴:

“The proposed project footprint encroaches further on Ben Bullen State Forest, which previously has been identified by OEH as being of suitably high conservation value for future reservation under the National Parks and Wildlife Act 1974...OEH has been working with other agencies to maximise positive reservation outcomes in the Gardens of Stone area, including Ben Bullen State Forest.”

In response, HBR pp16-20 focus on the creation of the Gardens of Stone National Park over the period from 1986-1995. Based on this HBR p20 notes that: the original proposals did not include BBSF in view of current and future mining operations, and that further expansion of the Gardens of Stone National Park should not impact on current or future colliery operations.

The above paragraph is an excellent summary of the situation at that time. **But the situation changed with the introduction of the SCA form of reservation in 2002 and HBR p22 (top) is wrong to state otherwise, and also wrong to cite the letter from the Minister as supporting his contention.** This is elaborated upon below.

The *Review of State Conservation Areas*⁵ carried out by DECC (Department of the Environment and Climate Change) in 2008 states (p4):

SCA “...*is a category of reserve under the National Parks and Wildlife Act 1974 (the NPW Act). SCAs protect natural and cultural heritage values and provide recreational opportunities...unlike other reserves such as national parks and nature reserves, they also provide for other uses including mineral exploration and mining...*

⁴<https://majorprojects.affinitylive.com/public/33dc71ce7e78f123b90c6018c1a5a259/OEH%20Response%20to%20EA%20for%20Coalpac%20Expansion%20Modifications.pdf>

⁵ <http://www.environment.nsw.gov.au/resources/parks/08516SCAreview.pdf>

*These new reserves...may have previously been State forests, Crown land or private land...Each reservation of an SCA follows the finding by the Department of Primary Industries (DPI) that the area's mineral values warrant its reservation as a **dual-purpose** reserve."*

The introduction of SCAs in 2002 facilitated the 2005 GoS2 proposal over areas in which there were State forests, old inactive underground mines, and currently active underground mines. It enabled DEC (Department of the Environment and Conservation) to state in its 2006 Assessment Report on the GoS2 proposal that (p24) because of underground mining beneath BBSF (and Wolgan State Forest) an SCA would be the appropriate reserve category. It is also why the Minister for the Environment indicated that **GoS2 as a whole** had complex considerations involving mining, forestry, recreation, tourism and Aboriginal interests, and why a staged approach (starting as it happened with Mugii Murum-ban SCA) was envisaged in the 2006 Assessment report.

The Minister also indicated that the substantially open-cut Coalpac Consolidation Project was subject to a separate planning process which needed to run its course. **As we all know, it did and it was comprehensively rejected. Far from proving that mining should have first claim on the area, it proved that an outrageous open-cut and highwall mining proposal, which would exclusively and destructively use publicly-owned State forest, could be rejected on environmental grounds.**

And now we are back with the 'son of CCP' proposal. HBR pp22-23 cites the change to the Mining SEPP as proof that the 'current' government's policy is to treat the resource significance and economic aspects as key factors in any planning decision. **So what? There is nothing new in this, as was clearly demonstrated by the substantial involvement of Treasury and DRE (Division of Resources and Energy) in the CCP assessment and the current C-Mods assessment.**

BMCS is firmly of the view that in any triple bottom line assessment there are necessarily value-judgements and these are unfortunately influenced by lobbying and politics. In any non-politicised rational system, when Planning and a PAC have rejected the development on environmental grounds, this 'son of CCP' with its 9 Mt of poor quality coal would be shown the door. Unfortunately, perhaps reflecting 'agreements' to which we have no easy access, sanity may not prevail. Such is life!

4. Escarpment landforms, the Tablelands Grassy Woodland Complex Unit (TGWCU) and the Ben Bullen Pagoda Land System (BBPLS)

The above items are grouped under the one title because they are inter-related. The escarpment landforms (don't mention the pagodas!) which are within the Ben Bullen Range Pagoda Unit (BBRPU) and TGWCU are parts of the BBPLS. The 'smoke and mirrors' which characterises the HBR's methodology (see Section 2.1) is well demonstrated in that emphasising what has been done to avoid the escarpments takes the focus away from the damage inflicted on the TGWCU and therefore the integrity of the BBPLS.

4.1 Risks to the BBRPU including pagodas and cliff-line escarpments

The pertinent sections are the HBR Executive Summary pi and HBR Sections 4.2.4-4.2.6 pp24-29; this section includes BMCS' comments on blasting and highwall mining concerns.

HBR pi states that:

"No Escarpment landforms will be disturbed by the proposed open cut mining, nor impacted by highwall mining at Invincible Colliery."

"No Escarpment landforms will be disturbed by the proposed open cut mining at Cullen Valley Mine...limited highwall mining is proposed beneath some Escarpments."

"In summary no noticeable impacts are anticipated to occur to the Escarpments."

These are nothing more than claims based on consultants' assumptions about rock-mass behaviour and, in the case of blasting, the application of trial and error analyses such that the risk is taken by the environment. Conversely, the company says 'Oops', has its fingers smacked, and attempts ineffectual remediation.

BMCS pointed out the deficiencies of the approach advocated by Terrock to blasting (see Section 4.2.5) and the problems related to FoS analysis in submissions about the CCP and will not repeat them here. Nevertheless, it is worth emphasising **that a major collapse of a pagoda or cliff-line is not the only concern, even if it is the principal concern from the company’s operational viewpoint. Smaller rock-falls can be triggered by the envisaged amounts (~20 mm) of subsidence and also by blasting.** These damage scenic values and can compromise habitat; and they are noticeable, irrespective of the company’s ‘anticipations.

In response to OEH, HBR pp24-29 states:

“No Escarpments will be disturbed by open cut mining” and there will be no **‘significant’** subsidence or damage to overlying or adjacent escarpments; the highwall design and risk management aspects will be subject to a DRE-approved Subsidence Management Plan (SMP)⁶ (Section 4.2.6) and blasting instability will be handled through a modelling and review process (Section 4.2.5). Comments upon subsidence and blasting damage are made in the previous paragraph. **Of course, ‘significant’ from the company’s viewpoint may differ from environmental significance; this is another deficiency of risk management analysis which tends to be oriented towards maintaining production.**

The 300 m stand-off from escarpments (pagodas and cliff-lines of the BBRPU) of the highwall mining face of the open cut, as recommended by OEH to the CCP PAC and proposed by BMCS in CCP submissions, has been rejected on the basis of OEH confusing it with the Broad-headed Snake (BHS) buffer. This is despite OEH in its response to the C-Mods clearly recommending that (p6)⁷: *“DP&I note the potential for damage to scenic features associated with the proposal...no open cut mining occurs within 300 m of mapped Geodiversity Features...[and] no underground highwall mining occurs beneath the mapped Geodiversity Features...”* **OEH seems to know precisely what it is recommending!**

BMCS takes the view that a 300+ m stand-off is necessary to avoid undermining by a highwall miner with a 300 m reach from the face, and that the BBPRU must not suffer highwall undermining. BMCS notes the HBR pp 28-29 arguments on the stability of the highwall mining design, but (even if taken at face value) it still doesn’t stipulate that there will be no subsidence and the simple fact is that cliff-lines and pagodas are very sensitive to slight instabilities. **The whole system may not have collapsed and buried the highwall miner but the damage may still be ‘noticeable’ and ‘significant’ from an environmental viewpoint.**

Turning to the dot-points (HBR p29) offered in justification of highwalling beneath the Cullen Valley escarpment; this is really scraping the bottom of the barrel. **The fact is that the escarpment is a substantial component of the BBRPU and should not be undermined.**

Finally, BMCS draws attention to Sections 4.1.1 dot-point 5, 4.1.2 dot-point 1 and 4.2 dot-point 2 from its submission⁸; it is to these that the HBR is responding. They emphasise verbally and visually the fact that the C-Mods are compromising the BBRPU (part of the BBPLS) in the Cullen Valley and Invincible C-Mod proposals. **Highwalling is unacceptable in these stipulated parts of the Cullen Valley and Invincible areas; these parts (at least) should be excised from any approval by DP&E.**

4.2 The TGWCU – its importance and how much is lost?

The pertinent sections are the HBR Executive Summary piii, HBR Section 4.2.8 pp32-33, and HBR Appendix A8 pp33-36.

Although the main responses to BMCS’ matters of concern are in the body of the HBR, they are mainly derived from Appendix A8 by CE. Some of the comments in the following subsections could be construed as critical of CE; this is not the principal intention. Rather, there are differences of opinion and these may reflect such things as differing scales of observation, the unfortunate flexibility of what is **‘significant’** when based on

⁶ Now termed a NSW Extraction Plan – BMCS notes that such ‘plans’ didn’t stop substantial damage at Baal Bone Colliery and Sugarloaf Colliery; also the whole risk management approach is cumbersome and has too much in-built lag time to do anything beyond closing the stable door after the horse has bolted.

⁷ <https://majorprojects.affinitylive.com/public/33dc71ce7e78f123b90c6018c1a5a259/OEH%20Response%20to%20EA%20for%20Coalpac%20Expansion%20Modifications.pdf>

⁸ <https://majorprojects.affinitylive.com/public/57b2a69db2013d28b7c2a2d047bcfe07/BMCS%20Submission.pdf>

different perceptions, the protracted involvement of CE with Coalpac such that it has engendered a level of ‘ownership’, and perhaps being too emphatic when the limited evidence does not permit certainty.

4.2.1 TGWCU – its importance

- First and foremost it is a unit within the unique BBPLS. Any destruction of a unit within the BBPLS reduces the extent of the BBPLS. It is sufficient to note this here, because this aspect will be further developed in **Section 4.3 below**.
- Second, it is a unit on soils mainly derived from Permian sedimentary rocks. OEH notes (p7)⁹ that: “Permian geology largely occurs on a north-south line from Rylstone to Katoomba, predominantly on the valley floors and slopes. This landscape is largely cleared in the region and poorly represented in the National Parks and Reserves System... Consequently, the vegetation types to be cleared have a higher conservation status than might otherwise be expected.” OEH (pp6-7) also considered that, of the Permian vegetation types, *Ribbon Gum grassy forest on alluvial flats*, *Mountain Gum Apple Box Blakely’s Red Gum grassy forest on small drainage lines and foot-slopes*, and *Broad-leaved Peppermint Brittle Gum Red Stringybark grassy forest on small rises* were particularly significant because of their high level of clearing and low level of reservation.

Somewhat peremptorily, HBR Executive Summary pii takes the view that OEH’s three “Permian” vegetation communities are not listed as Endangered Ecological Communities (EECs) and therefore have no particular conservation significance and can easily be offset. BMCS takes issue with this because the communities are poorly reserved and have extensively been cleared and the *Mountain Gum Apple Box Blakely’s Red Gum grassy forest on small drainage lines and foot-slopes* could include a variant of the ‘*Box Gum Grassy Woodland*’ Critically Endangered Ecological Community (CEEC) (see two paras below). **Furthermore, although the communities may be present on an offset property, the relationships within the unique BBPLS cannot be offset; and this is a major reason for the CCP being rejected.**

- Third, although to some extent contentious, Cumberland Ecology (CE) originally mapped *MU20 Capertee Rough-barked Apple - Red Gum - Yellow Box Grassy Woodland*, a local variant of *Box Gum Woodland* and a CEEC, **within the Invincible Colliery Modification Boundary**. OEH disagreed and suggested that it was a form of *Tableland Grassy Forest*. CE then reclassified it as *MU35 Tableland Gully Mountain Gum - Broad Leaved Peppermint Grassy Forest*.

BMCS asked an independent ecologist (Dr Steven Douglas) to provide an opinion¹⁰. He concluded that irrespective of whether the contentious vegetation¹¹ is *MU20*, *MU35* and/or a variant of ‘*Box-Gum Grassy Woodland*’, it clearly has **at least** State significance due to it being of a class that is over-cleared, under-conserved, and significantly threatened. He furthermore emphasised that although OEH views the broader unit in which the *Blakely’s Red Gum Woodland* occurs as *Tablelands Grassy Forest*, this **does not preclude the Blakely’s Red Gum Woodland from being a form of the threatened ‘Box-Gum Grassy Woodland’ (Commonwealth status – CEEC; NSW status – EEC) at a suitable scale of mapping.**

- Fourth, CE claims in HBR Appendix E p22 that the open-cut mine design has avoided populations of *Box Gum Woodland* within the Modification Boundaries (these being the outer boundaries marking the limit of highwall activity as opposed to the inner open-cut ‘disturbance’ boundaries); **this is just not true**. First, there is the admittedly debatable *Box Gum Grassy Woodland* within the Invincible Modification Boundary; and second, there is an occurrence of *MU20 Capertee Rough-barked Apple - Red Gum - Yellow Box Grassy Woodland* **within the Cullen Valley Modification Boundary**, that is in areas proposed for highwall mining. CE reports (HBR Appendix E p23): “...the highwall mining method will ensure that no surface subsidence of greater than 20 mm occurs within areas mined. As a result, no impacts to surface

⁹<https://majorprojects.affinitylive.com/public/33dc71ce7e78f123b90c6018c1a5a259/OEH%20Response%20to%20EA%20for%20Coalpac%20Expansion%20Modifications.pdf>

¹⁰ Dr Douglas’ full report is included as Appendix D in the BMCS Submission about the C-Mods on the DP&E website at: <https://majorprojects.affinitylive.com/public/57b2a69db2013d28b7c2a2d047bcfe07/BMCS%20Submission.pdf>

¹¹ Described by OEH as *Mountain Gum Apple Box Blakely’s Red Gum grassy forest on small drainage lines and foot-slopes* and being a variant of *Tableland Grassy Forest*; but termed *Blakely’s Red Gum Woodland* by Dr Douglas.

topography, landform or hydrology will occur. Moreover, the negligible surface subsidence predicted as a result of highwall mining is not considered likely to adversely impact any species occurring within the Modification Boundaries.” CE has learnt its lines well and provides a statement of belief which BMCS rejects!

BMCS has in several submissions emphasised that: 20 mm of subsidence can and does affect topography and landform (these are inevitable consequences); the existence of an open cut with a highwall mining face must influence the hydrologic regime; and between the web and barrier pillars are closely spaced rectangular holes, up to 300 m long, from which the coal has been removed – this forms an excellent drainage system which influences the groundwater regime to the potential detriment of floristic values.

- Fifth, is the potential presence of the *Tablelands Snow Gum, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland EEC*. Dr Douglas recognised this and presented his reasoning in pp7-8 of his report (see footnote 10). CE saw fit to mention it (HBR Appendix A.3.2 p23) as being in LEG’s submission opposing the C-Mods (for some reason CE seemingly overlooked the full report in BMCS’ submission), but placed emphasis on the fact that the previous mapping (CE and OEH) did not identify the EEC.

Because the EEC is important and CE implied that its presence is unlikely by stating that (HBR Appendix A.3.2 p24) *“The EEC will not be impacted by the Modifications...”* BMCS provides an additional quote from Dr Douglas:

“Small, linear areas of Tablelands Snow Gum, Black Sallee, Candlebark, Ribbon Gum Grassy Woodland are arguably present in the area proposed to be cleared for the open-cut mine. One such area is described above in the transition from MU35 to the Red Gum grassy woodland. It is unlikely to be evident from aerial photo interpretation, and lacks one or more components typical of the community, but still warrants consideration as an example of the EEC. It is noteworthy that CE does not appear to have dealt with this community in its ecological assessment, perhaps because its extent in the subject area is very small, and it can’t be mapped remotely. However, investigation of the extent of this community in the area of the proposed mine is warranted using ground-truthing.

I recommend that BMCS highlight the potential direct loss of Tablelands Snow Gum, Black Sallee, Candlebark, Ribbon Gum Grassy Woodland, and that it consider any indirect effects of the proposal on this community where it occurs offsite (downstream/downslope).”

By presenting this information, BMCS is indeed highlighting the concern and enhancing justification for aspects commented upon in Section 4.3.1 (below).

4.2.2 TGWCU – how much is lost?

Forgive the levity, but this is akin to being asked if you would prefer to have your heart or just its valves removed!

The full extent of the loss is hard to quantify in ha-terms, bearing in mind the damage done to the continuity of the TGWCU and its contribution to the unique BBPLS. Nevertheless, if one assumes that: (i) the value of the TGWCU is at least the ha-sum of its vegetation types, and (ii) the existing open cut approvals will not go ahead should the current proposal be refused, then the effective saving of native forest and woodland is $(150 + 514) = 664\text{ha}$ ¹². **This equates to the damage to habitat by the rejected CCP final contracted project; and only for 9 Mt of poor quality coal. Perhaps even economic advisors can see that sanctioning the C-Mods would be totally irrational?**

OEH has adopted a different approach to the extent of not disregarding mine-closure should the C-Mods proposal be rejected. OEH (p7)¹³ indicates that although the C-Mods are much smaller than the CCP, *“...most of the vegetation impacted has been mapped by OEH as occurring on Permian sediments (100 ha out of 150.5) and that 45 ha of this is comprised of the three higher conservation value vegetation types...”* as referred to in

¹² The basis for this was presented in Section 3.2.1 and Table 1 of the BMCS Submission opposing the C-Mods at <https://majorprojects.affinitylive.com/public/57b2a69db2013d28b7c2a2d047bcfe07/BMCS%20Submission.pdf>

¹³<https://majorprojects.affinitylive.com/public/33dc71ce7e78f123b90c6018c1a5a259/OEH%20Response%20to%20EA%20for%20Coalpac%20Expansion%20Modifications.pdf>

Section 4.2.1 dot-point 2. HBR p33 responds to this by invoking the distribution of Permian throughout the much larger region, within Offset Areas, and as part of the rehabilitation program.

BMCS rejects the HBR response because: the existence of Permian geology does not mean the original ecology still exists – it may have been (and probably has been) extensively cleared for agricultural purposes; even if preserved, the native vegetation due to abiotic parameters may not comprise one or more of the three types most at risk (see Section 4.2.1 dot-point 2); **and even if the vegetation is original and is one of the ‘at-risk’ vegetation types on Permian derived soils, it is unlikely to be in full association with the other units of the BBPLS.**

In relation to offsets, BMCS emphasises that the Permian vegetation systems are complex, as demonstrated by the discussion in Section 4.2.1 dot-points 3-5, and there may be no like-for-like equivalence. **If EEC’s are being destroyed, offsetting them with a different vegetation type has little merit¹⁴.**

The other proposition is that the rehabilitation program will in some way compensate for the destruction. **This is nonsense: the rehabilitation process is ecologically inadequate and existing rehabilitation is part of the conditions related to previous approvals. This could be construed as ‘double dipping’, provided that cosmetic veneers are deemed adequate replacements for ecosystems fashioned by natural processes; BMCS does not accept that they are!**

4.3 The unique BBPLS

This will comprise three subsections, one bringing together some findings in Sections 4.1 and 4.2 and their implications for the BBPLS, the second looking at attempts to discredit the BBPLS, and the third briefly summarising the situation with the BBPLS.

4.3.1 Implications for the BBPLS from Sections 4.1 and 4.2

HBR p89 indicates (almost verbatim from HBR Appendix 9 p37) that:

“Colong Foundation and BMCS in their submissions on the Modifications have published a map of their BBPLS with the CCP mine plan overlaid on it, which incorrectly implies removal of the majority of the Tablelands Grassy Woodland Complex by open cut mining.”

This is wrong but of little consequence. The map in the BMCS main submission opposing the C-Mods and labelled as Fig. 2 did not show the BBPLS. It showed the C-Mods open cut and highwall proposals as of **March 2014**, the western limit of BBSF, and **as of May 2013** the CCP boundary, the existing Invincible and Cullen Valley workings, and the contracted highwall and open cut areas. This was clearly stated in the legend. **Figure 2 did not imply that the C-Mods open cut mining would remove all the TGWCU.**

HBR p89 also indicates (again verbatim from HBR Appendix 9 p37) that:

“...the Modifications will have no direct impact at all on the other two components of their BBPLS, and as a result, the interaction between the three pagoda land system units of their BBPLS will not be significantly impacted.”

This is also wrong but of greater consequence. In elaboration:

- Section 4.1 (above) emphasises that the BBRPU is environmentally impacted (‘noticeably and significantly’) by highwall mining in the context of stability – the BBRPU is part of the BBPLS.
- Section 4.2.1 dot-point 4 (above) also deals with impacts to the BBRPU and the groundwater regime; this might locally impact the western limit of the Cullen Plateau Unit (CPU) – the BBRPU and CPU are parts of the BBPLS.

The essential point is that the three units on the BBPLS are not independent entities, even though the destructive impacts of mining principally affect the TGWCU.

¹⁴ BMCS appreciates that like-for-like is not considered the only way of offsetting destruction of an ecosystem, but it is an exceedingly sensible starting point.

Other matters pertinent to the TGWCU and therefore the BBPLS are:

- Based on Section 4.1, there is an absolute need for highwalling to maintain a 300 m stand-off from the BBRPU's Pagodas and cliff-lines.
- Section 4.2.1 dot-point 2 shows that the main vegetation types on Permian-derived soils must be protected – the similarity between *Mountain Gum Apple Box Blakely's Red Gum grassy forest on small drainage lines and foot-slopes* and the *Blakely's Red Gum Woodland* of Dr Douglas (which is arguably a form of 'Box-Gum Grassy Woodland' CEEC/EEC) is of note.
- Section 4.2.1 dot-points 3 and 4 establish that areas subject to highwalling and perhaps open cut contain the *MU20 Capertee Rough-barked Apple - Red Gum - Yellow Box Grassy Woodland CEEC* and a variant of *Box Gum Grassy Woodland CEEC/EEC*.
- Section 4.2.1 dot-point 5 shows that a case may be made for the *Tablelands Snow Gum, Black Sallee, Candlebark, Ribbon Gum Grassy Woodland EEC* being in the open cut mine area.

BMCS notes that despite the various uncertainties emphasised above and the unfailing capacity of HBR and CE to in part observe them and then to deny their significance, **there can be no question about the ecological importance of the TGWCU and its contribution to the BBPLS. With such issues unresolved, BMCS again asks why the C-Mods were not made a controlled action, and how in such circumstances any approval can be granted to destroy portions of the TWGCU and its encompassing BBPLS.**

4.3.2 Attempts to discredit the unique BBPLS

In Section 3.1 of the BMCS submission opposing the C-Mods¹⁵, the PAC Review Report and Director-General's report on the CCP were evaluated in terms of the basis on which the CCP was rejected. Several aspects were identified, but the over-riding factor was deemed to be the uniqueness of the BBPLS (refer to footnote 15 Section 3.1.4).

CE attempted to discredit the BBPLS by presenting a map of what it termed the BBPLS and concluding that the BBPLS is far more widely spread than claimed¹⁶. BMCS comprehensively rejected this¹⁷ and in its submission opposing the C-Mods (see footnote 15) noted that CE's map (reproduced in BMCS' submission Section 3.1.4 as Fig. 2 – see footnote 15) affirmed that the three land units are only juxtaposed in the vicinity of the CCP.

HBR p69 and CE (HBR Appendix A.9 p37) now state: "*Colong and BMCS have incorrectly attributed this mapping data to CE, when in fact CE simply reproduced the Benson and Keith vegetation map...*" The significance of this is strange, because the map in question was captioned 'Cumberland Ecology Mapping of the Ben Bullen Pagoda Land System in the Region' and the three BBPLS units were identified in the legend. **Presumably CE wished to 'own' the map when it was thought to support its position, but wishes to disown it now that the map has been used to support the limited distribution of the BBPLS.**

BMCS firmly believes that CE has become confused as the concerns about this map (BMCS Submission Fig. 1) are immediately followed by incorrect statements about BMCS Submission Fig. 2 (Refer to Section 4.3.1 paras 1 and 3 above).

Regardless, CE is now insisting that the "*...Benson and Keith (1990) vegetation map cannot be relied upon as an accurate representation of the vegetation communities and formations in the area. As such, to describe all vegetation types in the slopes and valleys below the Escarpment, Colong and other SIGs are incorrectly using the name Tablelands Grassy Woodland Complex.*" CE notes that its detailed mapping shows 10 different forest and woodland vegetation communities in the region below the escarpment, while Dr Douglas has made even more detailed observations and suggested more subdivisions. BMCS contends that Benson and Keith

¹⁵ <https://majorprojects.affinitylive.com/public/57b2a69db2013d28b7c2a2d047bcfe07/BMCS%20Submission.pdf>

¹⁶ <https://majorprojects.affinitylive.com/public/06f5db0334cdebc6d53d6963c07656a1/Coalpac%20Response%20to%20PAC%20Review%20Submissions.pdf>

¹⁷ https://majorprojects.affinitylive.com/public/71bb8f1cd841a5126162f44fb6af9d94/Coalpac%20Consolidation%20Project_%20Part%201%20of%204%20Joint%20Response%20from%20BMCS%20and%20LEG%20on%20the%20Coalpac%20Response%20to%20the%20Further%20Submission.pdf

(1990), at a relatively small mapping scale, established broad vegetation divisions which are suited to landscape analysis. **Further subdivision of vegetation communities is possible, so it follows that Tablelands Grassy Woodland Complex is a useful encompassing term at the particular scale of observation. As used by Colong and BMCS it is identifying a broad unit (the Tablelands Grassy Woodland Complex Unit) within a land system; the term is not solely a function of vegetation and was defined in the original submission¹⁸. BMCS rejects any suggestion that, as so defined, it is incorrect.**

4.3.3 In summary

- **The *Tablelands Grassy Woodland Complex* should and must be protected as it is poorly reserved in its own right and, at a more detailed scale, contains many poorly reserved vegetation mapping units.**
- **The *Tablelands Grassy Woodland Complex Unit* is an essential component of the BBPLS, of which little remains, so compromising the *Tablelands Grassy Woodland Complex Unit* correspondingly compromises the BBPLS.**
- **Any destruction of the *Tablelands Grassy Woodland Complex Unit* and the ‘unique’ BBPLS is tantamount to environmental vandalism.**
- **The notion that it might be an acceptable ‘compromise’ to excise (by open cut mining) small parts of the *Tablelands Grassy Woodland Complex Unit* and therefore degrade that portion of the BBPLS is totally rejected; it may be a political solution but it certainly isn’t environmentally sound.**

5. Flora and fauna considerations, set-backs and edge effects

5.1 Flora and fauna

HBR pi indicates that the C-Mods “...will not result in significant direct or indirect impacts to Rare or Threatened Australian Plants or to key threatened species listed under the Threatened Species Conservation Act 1995, or Environmental Protection and Biodiversity Conservation Act 1999. This conclusion is based on careful consideration of each specific species noted in submissions from the Office of Environment and Heritage and a number of Special Interest Groups.”

The same emphatic response is made in relation to comments about flora (by BMCS, LEG and OEH). Bearing in mind that the Cullen Valley open cut will destroy a significant portion of a viable population of *Persoonia marginata*, that Dr Douglas raised concerns about several other species including *Thesium australe*, and that little attention was originally paid to ROTAPS, it is disappointing that so much is dismissed with platitudinous statements about ‘no significant impacts’, and the comprehensive nature of the investigation.

The only fauna to gain much attention is the Broad-headed snake (BHS), perhaps because OEH pushed hard in terms of a suitable buffer and the existence of the snake in the area has been substantiated. OEH (p6)¹⁹ gives reasons why a buffer of 300 m should be allowed, but HBR pp29-30 only provides it where convenient and justifies lesser distances by redefining the concept of a buffer in terms of area rather than linear distance.

The question must surely be why do we have government departments which are there to counteract the bias of ‘rusted on’ consultants, when their advice is seemingly disregarded?

5.2 Edge effects

¹⁸https://majorprojects.affinitylive.com/public/66d22a9c94ef429ffc0304b88c2ce6e/Coalpac%20Consolidation%20Project_Special%20Interest%20Submission%20on%20PAC%20Merit%20Review_Env%20NGOs.pdf

¹⁹<https://majorprojects.affinitylive.com/public/33dc71ce7e78f123b90c6018c1a5a259/OEH%20Response%20to%20EA%20for%20Coalpac%20Expansion%20Modifications.pdf>

The lack of attention to edge effects was raised by OEH and others. The response was to outline various measures which had already been factored in (in fact before the concern was raised), but yet again the response is disappointing. **HBR and CE work on the basis that any concern must be met by a response, no matter how oblique that response might be.**

6. Rehabilitation

BMCS has regularly condemned the spin which is placed on so-called rehabilitation. Submissions have emphasised the impossibility of rehabilitating geological structure and the hydrologic regime when one is dealing with an open cut mine. BMCS has also commented upon the time-frame required to establish a decent canopy, understory and soil profile, and has described the outcome of rehabilitation as a cosmetic veneer which will never equate with the natural system that preceded mining.

HBR pp70-76 provides information from the consultant monitoring and assessing the existing rehabilitation together with a series of photographs. **They should be compared with the rehabilitation photographs presented in the BMCS submission Appendix C.** BMCS notes that the dot points (pp70-71) comprise a series of positive statements but there is no information on the nature of the destroyed vegetation communities, the extent to which the plantings approximate those communities, the nature of the pre-mining fauna and whether this is matched by the 'new' fauna, and whether there is any similarity between the before and after landforms. **In other words, the information is all superficial, perhaps in keeping with rehabilitation comprising a cosmetic veneer.**

BMCS fully recognises that once an open cut is created it must necessarily be rehabilitated; it is obviously better to do this than abandon the open cut. However, BMCS deplores the current trend, as exemplified in the C-Mods proposal, of making unjustified claims about the outcomes. BMCS fears that, because of the protracted time needed to generate anything related to an ecosystem (not the original one!), the monitoring will decrease in frequency (there is usually provision for this) and the areas will become 'forgotten'.

In the case of the C-Mods, the existing pits from past open cut activities still need to be rehabilitated. The argument being made is that approving a small amount of additional mining (9 Mt) will enable a better rehabilitation outcome. **The reality is that such rehabilitation should never feature as a factor in a development proposal; it becomes a distortion of process. There will always be rehabilitation to complete for years after the mine has run out of reserves, or the coal-price falls and the company goes into liquidation. And when that happens and/or any bond has run out, who will the government prosecute?**

HBR p76 explains the need to mine in order to achieve the 'best' rehabilitation outcomes as follows:

“Coalpac experienced unforeseen delays in the assessment and determination of its earlier application for the CCP to continue mining...the rehabilitation of the existing mining voids is possible, and provided for, however, it should be noted that this would not provide the best final landform and rehabilitation outcome for the area in the long term. The proposed mine plan...would allow for material to be handled and placed to ensure no final voids remain at the completion of mining. The Modifications would also provide for a free draining final landform that would be compatible with the surrounding landscape.

In accordance with regulatory requirements, Coalpac maintain a substantial bond in place with the NSW Government until final rehabilitation is completed to the satisfaction of DRE. DRE review the level of bond required on an annual basis.”

BMCS finds this fascinating:

- The funds for rehabilitation exist by virtue of the bond – the obvious question becomes how realistic is the bond?
- As final rehabilitation has to be completed to the satisfaction of DRE, it follows that DRE must approve the rehabilitation plan, so what plan exists should the C-Mods be refused?
- Who in DRE, if anyone, has assessed the 'best final outcome' versus the 'current outcome' if the C-Mods are rejected – or do we just accept what Coalpac is saying?

- Bearing in mind the limited environmental merits of rehabilitation, has anyone compared the ‘best final’ and ‘current’ plans to see whether or not the difference is significant?
- As Coalpac is under voluntary administration, what documents/understandings exist and is government in any way party to them?

In the absence of any clear answers to any of the above, BMCS is of the view that Coalpac is using the rehabilitation argument to promote the outcome best suited to its economic interests.

7. Bio-offsets

HBR p76 notes that BMCS is opposed to the use of biodiversity offsets as a mechanism for mitigating environmental impacts of development proposals and taking the biodiversity value of offsets into account in the determination process. **This is correct!** BMCS is fully aware that the offsetting mechanism to mitigate residual ecological impacts of development proposals remains a current key policy of the relevant NSW and Commonwealth regulatory bodies; whenever possible BMCS makes submissions opposing the practice.

Here is not the place to make extensive counter arguments, but the following points are pertinent:

- A development should be approved/rejected on its merits when assessed in terms of the direct environmental, social, heritage and economic factors – offsetting should not be part of this assessment, but should be a subsequently applied ‘levy’ (akin to a royalty) to fund outcomes reflecting the nature of the development’s principal impacts.
- Independent of dot-point 1, many environmental impacts cannot be offset – destruction of a CEEC/EEC should not be countenanced – the argument that it can be offset by enhancing the CEEC/EEC elsewhere is false to the extent that the number of examples of the CEEC/EEC have been reduced.
- **The BBPLS is unique and therefore priceless – there is no sensible way of offsetting the total/partial destruction of such an irreplaceable land system. Would it be possible to offset destruction of Sydney’s estuary, or the Heads, or Bondi beach, or even the Opera house?**

8. Mining methods, coal resources and incorrect statements

BMCS is aware of the Colong Foundation’s responses in relation to HBR pp85-89 and endorses them *in toto*.

HBR p85 indicates that the mine plan provides the best balance “...*between accessing the remaining coal resources adjacent to approved mining areas while concurrently avoiding areas in proximity to the site that are deemed to be most sensitive to environmental impacts.*” **This sounds the part but the reality is that the BBRPU is impacted by highwall mining, the TGWCU is fragmented by open-cut mining and there is a substantial impact on plant species and EECs, and the unique BBPLS is compromised.**

HBR p85 also refers to the merits of being able to fully rehabilitate the area; provided that it is allowed to create more damage. The matter has been addressed in Section 6 above.

HBR p86 considers that there is “...*no issue in the product coal from the Modifications meeting MPPS coal quality requirements.*” HBR then cites Energy Australia (EA) saying that: “...*the Mt Piper Power Station has been designed to deal with coal from these local seams and so it is appropriate for Power Station usage. This is demonstrated by the fact that coal has been supplied from the Invincible Colliery and Cullen Valley Mine for more than 10 years.*”

BMCS notes that the coal from the C-Mods will be of lower quality than that obtained from Centennial, but that EA is happy to have it because the price is low enough to more than compensate for the lower calorific value; it improves EA’s profitability. **BMCS also observes that EA is far from being a disinterested party, so its statements are likely to favour its self-interest.**

HBR p87 draws attention to the limitations on coal supply from Centennial’s mines. This is factually correct, but Centennial has already received approval to truck coal to MPPS from Clarence Colliery, has the capacity

to supply coal from Airly Colliery, and could rapidly progress its activities at the Neubecks Project. Furthermore, whereas environmental groups will do their best to ensure Springvale and Angus Place practise low-impact underground mining, there is negligible likelihood of their proposals being rejected entirely. **In other words, Coalpac is using the Centennial matter to promote its own ‘micky mouse’ proposal. Or perhaps it is not so ‘micky mouse’ if, as BMCS suspects, approval of the 9 Mt is likely to be followed by further applications by whoever has obtained beneficial ownership of Coalpac.**

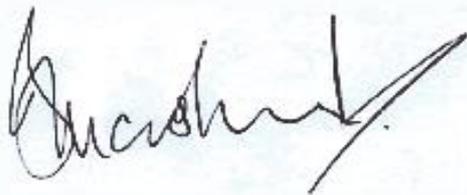
On HBR pp87-88, the Colong Foundation and Colo Committee (and by implication BMCS) are criticised for promoting Centennial’s ability to meet the needs of the MPPS, whilst concurrently opposing Springvale’s and Angus Place’s current development applications. To this, HBR could have added opposition to some of the modifications being sought at Airly.

BMCS in no way resiles from its nuanced position on these matters. In the context of climate change, coal-fired power stations should be phased out as they reach their use-by dates and/or when they are superseded by renewable technologies. But currently, while coal remains a major source of the State’s power supply, BMCS will work to ensure that coal mining is done in the least environmentally-destructive way possible. This involves opposing open cuts which, in the case of Coalpac, will progressively destroy a unique land system and in general are the most environmentally-destructive form of coal mining. It also involves trying to ensure underground mining is done using low-impact methods in terms of subsidence and avoidance where it threatens matters of national environmental significance.

HBR p88 indicates that DRE notes the “...potential for Centennial Coal to have a ‘virtual monopoly’ on coal supply to MPPS if the Modifications are not approved...” and that this “...would be expected to lead to further electricity price increases and be in conflict with NSW Government policy with respect to lower electricity pricing for consumers.” This is an amazing statement coming from a Government seemingly committed to privatisation of power generation and supply. However, it is emphasised that Centennial has a well-established export market such that MPPS is a minor part of its operations. Furthermore, if government is concerned, it could make any approvals for Centennial contingent upon protecting supply at specific rates to MPPS. **And regardless, the MPPS is just one part of the State’s power supplies, such that its influence on overall electricity pricing is minimal.**

9. Aboriginal heritage

This is contentious at the present time. BMCS is seeking independent assessment and has also requested assessment by OEH and the local Mingaan community. Additional information will be provided when it becomes available.

A handwritten signature in black ink, appearing to read "Brian Marshall", with a long horizontal stroke extending to the right.

***Dr Brian Marshall,
For the Management Committee.***