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Preserving the Balance of Nature

The Director
Major Infrastructure Assessment
Department of Planning
GPO Box 39, SYDNEY NSW 2001

28 May 2012

Dear Sir/Madam

RE: COALPAC CONSOLIDATION PROJECT: APPLICATION NUMBER 10_0178

The Lithgow Environment Group (LEG) unanimously opposes the Coalpac Consolidation project.

Members are outraged by this proposal to clear 958 Ha[1] of publicly-owned State Forest, including critically endangered Box Woodland, vulnerable Clandulla Geebung and Capertee Stringybark habitat, and internationally recognised pagoda formations of outstanding scenic value.

Never in the history of mining in the Lithgow region, not even during a war-time emergency, has such an environmentally destructive mining project ever been contemplated. Up until now mining companies have at least tried to minimise the environmental and social impacts of their operations. But this proposal maximises the destruction – every tree, log, rock, blade of grass and watercourse will be totally destroyed, and Cullen Bullen village will be degraded into a dust bowl.

The proposed extraction and burning of inferior high-ash content coal found within the project area will generate unacceptably high levels of carbon and fly-ash pollution. And it sets a precedent whereby state-owned Delta Electricity, the only customer for this crap coal, is encouraging suppliers to extract coal by the most environmentally destructive means possible.

And this plan to open-cut mine one of the highest conservation value areas in NSW is being proposed by a company with arguably the poorest environmental record in NSW, having twice been prosecuted in the Land & Environment Court[2,3,4] and featuring in the media[5,6,7] for causing Zinc and Nickel pollution of the Grose River in the Blue Mountains World Heritage Area.

In 2006 the DECCW identified the conservation values of Ben Bullen State Forest as being so significant that it was prioritised as the next area for reservation as a State Conservation Area within the Gardens of Stone National Park. A mere 5 years on its only value is to turn it into rubble?

LEG members have attended 3 public meetings in Cullen Bullen and have spoken to many local residents, and can say with certainty that Coalpac **do not have a social licence** to operate. Based on Coalpac's poor past performance and the concerns raised by key environmental groups across NSW, LEG can say with certainty that Coalpac **do not have an environmental licence** to operate within Ben Bullen State Forest or the Gardens of Stone Stage 2 proposal area.

Lithgow Environment Group (LEG), Blue Mountains Conservation Society (BMCS), and the Colong Foundation are separate organizations and each has ownership of its submission to NSW Planning under letterhead. Nevertheless, there is close cooperation by members of these organizations because each has differing expertise[8] and each has one or more representatives on the Gardens of Stone & Western Escarpment Subcommittee of BMCS. Lithgow Environment Group also has links through representation on BMCS's Lithgow Regional Subcommittee.

Because of the huge size of this EA, the 3 groups have had to focus on separate (though complimentary) aspects of this proposal. **This is emphasised because each group shares the principal concerns of the other two groups and endorses the contents of their submissions.**

- Based on this commonality, the members of LEG request that the three submissions (BMCS, Colong, and LEG) be treated both collectively and individually.
- It is further emphasised that because one submission may refer Planning to the content of another, there is some concern that Planning treats the issue as a single item from a statistical viewpoint. **This should not and must not happen**.

LEG members totally reject the Coalpac Consolidation Project for the following reasons:

1. ADVERSE IMPACTS ON FLORA AND FAUNA BIODIVERSITY
2. INADEQUATE BIODIVERSITY OFFSETS
3. ADVERSE IMPACTS ON PAGODA LANDSCAPES
4. INADEQUATE REHABILITATION STANDARDS
5. ADVERSE IMPACTS ON WORLD HERITAGE VALUES
6. ADVERSE IMPACTS ON INDIGENOUS HERITAGE VALUES
7. UNACCEPTABLE VISUAL IMPACTS
8. UNACCEPTABLE POLLUTION OF WATERWAYS
9. UNCONTROLLABLE WEED INFESTATION
10. INTENSIFICATION OF MINING/WEAKENING CONSENT CONDITIONS AFTER APPROVAL
11. FOREST CLEARING CONTRIBUTES TO GLOBAL WARMING/GREENHOUSE GASES
12. EXCESSIVE GREENHOUSE GAS EMISSIONS
13. INADEQUATE SEPARATION DISTANCES FROM A RESIDENTIAL AREA
15. UNACCEPTABLE DUST LEVELS
16. UNACCEPTABLE NOISE LEVELS
17. UNACCEPTABLE OPERATING HOURS
18. UNACCEPTABLE BLASTING IMPACTS
19. UNACCEPTABLE HEALTH RISKS
20. PROPERTY DEVALUATION
21. PROPONENTS HISTORY OF POOR ENVIRONMENTAL PERFORMANCE
22. NO COAL HAULAGE ON PUBLIC ROADS/UNACCEPTABLE TRAFFIC SAFETY IMPACTS
23. BRIBING THE OEH / BIODIVERSITY IS FOR SALE

1. IMPACTS ON FLORA AND FAUNA BIODIVERSITY

On 8 September 2011 the Department of Planning issued the following Media Release -

Response to media outlets re Coalpac
Response, first provided on 8 September, to a number of media outlets regarding the Department's adequacy review of Coalpac's environmental assessment for its consolidation project at Cullen Bullen:

Prior to allowing a development proposal to proceed to public exhibition, the Department first reviews the proponent's environmental assessment (EA) to ensure it adequately addresses all the necessary requirements (as outlined in the Director-General's Requirements for the project which can be viewed at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=4332).

In the case of Coalpac's consolidation proposal in the Cullen Valley, the Department deemed that the EA did not adequately address a number of issues including the project's potential impacts on:

· biodiversity;
· natural, historic and Aboriginal cultural heritage;
· noise and air quality; and
· groundwater.

Should the proponent wish to proceed with the project, it will need to revise its EA to address the inadequacies and re-submit it to the Department for consideration.

LEG contends that Coalpac's current Environmental Assessment[1] is still inadequate because it again fails to adequately address the potential impacts on flora and fauna biodiversity, World Heritage and cultural heritage values, groundwater, air quality, noise, and blasting vibration.

1.1. Failure to report as required under the EPBC Act (1999) and TSC Act 1995

It is a legislative requirement for developers to accurately report the occurrence of threatened species and ecological communities listed under the EPBC Act (1999) and TSC Act (1995).

In April 2011 LEG volunteers recorded in over 1500 individual *Persoonia marginata* plants, listed as Vulnerable under the EPBC and TSC Acts, growing on and adjacent the Cullen Valley mine site. Samples collected under LEG's Scientific Licence No. S13241 were positively identified by the NSW Herbarium (BIS Inquiry #16486) on 8 April 2011 as being *P. marginata.*

Neither Coalpac nor the prior owners of Cullen Valley Mine reported *P. marginata* in their:

- EPBC Referral No: 2010 5776 to the Commonwealth Government in December 2010[9]
- NSW Department of Planning Application No: 10_1078 in 2010
- Flora Assessments for Exploration Program (Borehole CP113 to CP129) for the Coalpac Consolidation Project Cumberland Ecology, February 2010.
- Cullen Valley Lease Extension Project Flora Survey. Gingra Ecological Surveys (2003). Report prepared for International Environmental Consultants.
- Flora Survey for Feldmast Coal Project. Lembit, R. (1997).

It is inconceivable to LEG that any competent Flora Consultant could possibly have failed to sight at least some of those 1500 plants, as they occur often in great abundance alongside the Wallerawang – Gwabegar Rail Line, Baal Bone Rail Loop, forestry tracks, throughout EL6007, near Exploratory Borehole CP113, and 2 kilometres south adjacent the previously mined ML1488.

This is not the only instance of Flora Consultants failing to identify *P. marginata* in EA's for mining proposals in Ben Bullen SF. LEG volunteers have recorded *P. marginata* in Baal Bone Colliery Long Wall Panels 1, 3, and 25, and along the power line corridors to Licence Discharge Point 3 and the South East Airvent. It is listed on the NPWS Wildlife Atlas as occurring in this very area, and yet *P. marginata* was not identified in any recent EA's for these proposals[10.11].

The flora consultant who claims to have 28 years extensive experience conducting flora surveys in Ben Bullen SF[11], and responsible for many of the omissions of Persoonia marginata said –

"The Wildlife Atlas record close to the Project Site is within Baal Bone Colliery in a valley along a tributary of Jews Creek. As collection details are not available from the Atlas and no herbarium specimen has been lodged it is not possible to verify the accuracy of the Baal Bone record. Based on the known habitat distribution of Persoonia marginata from herbarium records and field observations, the Baal Bone record must be considered dubious."[12]

LEG finds it highly disturbing that despite 28 years of flora survey work in this immediate area, a flora consultant made no apparent effort to verify the existence of a threatened plant species that is listed as Vulnerable under both the EPBC Act and TSC Act.

How many other threatened flora species/ecological communities have been missed in this EA?

1.2 The Proposals Contribution to Species Extinction

The Commonwealth Approved Conservation Advice for *Persoonia marginata*[13] highlights that the distribution of this species overlaps with the EPBC Act-listed threatened ecological community of "White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland" or Grassy Box Woodland, which also occurs within the proposed mine disturbance area.

The main identified threats to *P. marginata,* Box Woodland, and most threatened species and ecological communities include habitat loss, disturbance, modification, fragmentation and degradation; weed infestation; chemicals/other mechanisms used to eradicate weeds; inappropriate fire regimes; diseases, fungi and parasites, and specific to Proteaceae species such as P. marginata - the threat posed by the root-rot disease Phytophthora cinnamomi. LEG would add another major threat - the failure of Flora Consultants to identify ROTAP's in EA's.

This proposal involves all of the above threats, and poses a major threat to species extinction.

1.3 Flora Species NOT identified in the EA

LEG volunteers have conducted a Flora Survey across the Project Boundary. This data, including GPS coordinates, plant associations, and all other pertinent details were forwarded to the OEH Wildlife Data Unit[15] on 23 August 2011, 15 December 2011, and 16 April 2012.

The EA states in Appendix J: Ecological Impact Assessment, Section S3.2 Flora, that: *"More than 400 plant species were recorded in the project boundary, with a high percentage being native".* Those plants are listed in *Table A1: Flora Species Recorded in the Project Boundary Quadrats 1 – 20,* and *Table A2: Flora Species Recorded in the Project Boundary Quadrats 21 – 44.*

An actual count of Tables A1 & A2 equates to 467 plant species, 74 of which are exotic weeds. However some of those plants do not occur in the area, some don't exist at all, many are only identified to genera and not species level, and there are numerous misnomers and typos.

In addition, LEG has identified 123 plant species within the Project Boundary NOT identified in Appendix J. The potential total number of plant species - including Coalpac's 467 species plus LEG's 123 additional species - is in the order of **590 species! This is a very biodiverse area.**

The flora species not identified in the EA are highly relevant, as the EA fails to identify the full range of species that will be lost, and which must be represented in the Biodiversity Offsets.

The species below were not identified in the Ecological Impact Assessment - Appendix J, Figure 2.1: Flora Survey Quadrat Locations 1 – 44. Appendix J lists plants in the confusing format of Trees, Shrubs, Herbs – Fern, Herbs - Dicots, Herbs - Monocots. So LEG has had to do the same.

ROTAP LISTED SPECIES MISSED

- Acacia asparagoides - 2R
- Leionema lamprophyllum subsp. orbiculare - RECOMMEND 2R-P3
- Leucochrysum graminifolium - 2R
- Philotheca obovalis - 3RCa

OTHER SPECIES MISSED

Trees

CASUARINACEAE

- Allocasuarina distyla
- Allocasuarina nana

CUPRESSASCEAE

- Callitris endlicheri

MYRTACEAE

- Eucalyptus eugenioides
- Eucalyptus fastigata

Shrubs

ARALIACEAE

- Polyscias sambucifolia

ASTERACEA

- Cassinia cunninghamii
- Olearia elliptica
- Olearia myrsinoides
- Olearia ramulosa

DILLENIACEAE

- Hibbertia monogyna

ERICACEAE

- Acrotriche rigida
- Astroloma humifusum
- Dracophyllum secundum
- Epacris microphylla
- Epacris pulchella
- Epacris purpurascens var. onosmiflora

FABACEAE

- Acacia asparagoides (2R)
- Acacia hamiltoniana

- Acacia verniciflua
- Bossiaea ensata
- Bossiaea heterophylla
- Daviesia genistifolia
- Daviesia leptophylla
- Gompholobium uncinatum
- Hovea heterophylla
- Indigofera australis (White-flowering form)
- Phyllota sp.
- Sphaerolobium vimineum

LAMIACEAE
- Prostanthera hindii (likely to occur)
- Prostanthera cryptandroides subsp. cryptandroides (likely to occur)
- Prostanthera howelliae
- Prostanthera saxicola var montana
- Prostanthera saxicola var saxicola

MALACEAE
- Cotoneaster glaucophyllus*
- Crataegus monogyna*
- Malus domestica*
- Pyracantha angustifolia*

MYRTACEAE
- Callistemon citrinus
- Callistemon linearis
- Leptospermum arachnoides
- Melaleuca ericifolia
- Ochrosperma oligomerum

PITTOSPORACEAE
- Bursaria spinosa ssp. lasiophylla (critical habitat for vulnerable Purple Copper Butterfly)

PROTEACEAE
- Hakea microcarpa
- Isopogon anemonifolius
- Lomatia silaifolia
- Petrophile canescens
- Petrophile pulchella

RHAMNACEAE
- Pomaderris eriocephala
- Pomaderris lanigera

RUBIACEAE
- Coprosma hirtella
- Coprosma quadrifida

RUTACEAE

- Boronia rubiginosa (occurs nearby, may occur)
- Leionema lamprophyllum subsp. orbiculare (Recommended ROTAP 2R)
- Phebalium squamulosum subsp. ozothamnoides
- Philotheca obovalis (ROTAP 2R)
- Philotheca salsolifolia subsp. salsolifolia
- Zieria compacta
- Zieria laevigata

SALICACEAE

- Salix spp*

SAPINDACEAE

- Dodonaea boroniifolia
- Dodonaea sinuolata
- Dodonaea triquetra

SCROPHULARIACEAE

- Euphrasia spp (likely to occur, found 1.5 km to east at Pine Dale Mine)

SOLANACEAE

- Solanum aviculare

Herbs – Fern

BLECHNACEAE

- Blechnum wattsii
- Doodia aspera

DRYOPTERIDACEAE

- Polystichum proliferum

GLEICHENIACEAE

- Gleichenia dicarpa
- Sticherus lobatus

OSMUNDACEAE

- Todea barbara

Herbs – Dicots

APIACEAE

- Foeniculum vulgare*
- Trachymene composita

ASTERACEAE

- Actinotus helianthi
- Arrhenechthites mixtus
- Chrysocephalum semipapposum
- Coronidium scorpioides
- Helichrysum leucopsideum

- Leucochrysum graminifolium (ROTAP 2R)
- Senecio velleioides
- Xerochrysum viscosum

DIPSACACEAE
- Scabiosa atropurpurea*

GERANIACEAE
- Geranium neglectum

GOODENIACEAE
- Brunonia australis (likely to occur)
- Goodenia ovata

LOBELIACEAE
- Lobelia gibbosa

PAPAVERACEAE
- Papaver rhoeas*

SCROPHULARIACEAE
- Euphrasia spp. (likely to occur, found 1.5 km to east at Pine Dale Mine)

SOLANACEAE
- Solanum aviculare

VIOLACEAE
- Viola silicestris

Herbs – Monocots

ANTHERICACEAE
- Arthropodium milleflorum
- Thysanotus tuberosus

ASPHODELACEAE
- Bulbine bulbosa

CYPERACEAE
- Caustis flexuosa
- Gahnia sieberiana

DROSERACEAE
- Drosera auriculata

IRIDACEAE
- Sisyrinchium spp.

ORCHIDACEAE
- Caladenia dimorpha
- Caleana major

- Acianthus fornicatus
- Caladenia dimorpha
- Caleana major
- Chiloglottis seminuda
- Chiloglottis spp.
- Corybas hispidus (W/Atlas, Cullen Bullen)
- Corybas spp
- Cryptostylis leptochila
- Cyrtostylis reniformis
- Dendrobium striolatum
- Dipodium roseum
- Eriochilus cucullatus
- Prasophyllum/Genoplesium sp
- Paracaleana minor
- Pterostylis truncata
- Thelymitra ixioides

PHORMIACEAE

- Thelionema caespitosum

TYPHACEAE

- Typha orientalis

ZAMIACEAE

- Macrozamia spiralis

1.3.1 Some Obvious Omissions

- *Allocasuarina torulosa* is listed, but does not occur in area. However the EA fails to list *A. distyla* and *A. nana* which do occur throughout the Proposal Area, and provide a vital food source for the Vulnerable Glossy Black and Gang Gang Cockatoo's.
- Brown Barrel (*Eucalyptus fastigata*) is not listed – it is the co-dominant tree in fertile old-growth Montane Gully Forest's[22], a large area of which will be cleared north of Invincible.
- Native Blackthorn (*Bursaria spinosa subsp. lasiophylla)* is not listed – it is the sole food plant for the Endangered Purple Copper Butterfly (*Paralucia spinifera*) and has been recorded by LEG at 4 locations within the Proposal Boundary.
- Indian Hawthorn* – a hedge at entry to Cullen Bullen, invading bushland everywhere.
- *Scabiosa atropurpurea* *- the most common invasive weed along roads and tracks
- *Cytisus scoparius** (Scotch Broom) – Williwa Creek, Hillcroft Biodiversity Offset. Invasion and establishment of Scotch Broom is a Key Threatening Process (KTP). Seed remains viable in soil for 30 years. Massive soil disturbance/movement associated with open-cut mining may spread Broom seed contaminated soil into undisturbed bushland in Ben Bullen State Forest, due to edge the effects of such a huge disturbance perimeter.

1.3.2 ROTAP Species Missed

The Rare or Threatened Australian Plants (ROTAP) list[14] and associated coding system was developed and has been maintained by CSIRO since 1979. It lists taxa that are Presumed Extinct, Endangered, Vulnerable, Rare or Poorly Known at the national level.

It is critically important that Flora Assessment's list all ROTAP species in a disturbance area, because these are the very species most likely to become Extinct, Endangered or Vulnerable in the future unless the factors that lead to species extinction are adequately addressed.

In addition to *Eucalyptus cannonii* (2VCi) and *Persoonia marginata* (2v), four other ROTAP species occurring within the Project Boundary were not identified in the EA –

- Acacia asparagoides - 2R – Bell[16] reports that it is restricted to sandstone plateaus in heath and open forest in the upper and northern Blue Mountains.
- Leionema lamprophyllum subsp. orbiculare - RECOMMENDED 2R-P3 - Bell[16] reports that it is restricted on the western escarpment, and a small population of this subspecies recorded in rocky cliffline habitat in Pokolbin State Forest, over 100 km to the east, is now listed as an Endangered Population in the Hunter Catchment.
- Leucochrysum graminifolium - 2R - Bell[16] reports that it occurs in the Gardens of Stone NP on rocky pagodas and rock shelves. This record is the first for a conservation reserve.
- Philotheca obovalis - 3RCa - Bell[16] reports that it is restricted to montane rocky heath on Newnes Plateau, Mt Jamison, and Point Cameron in Gardens of Stone NP.

The OEH Wildlife Data Unit were provided with location details for all these ROTAP species.

None of these four ROTAP species are likely to occur within any of the Biodiversity Offsets.

1.3.3 Other ROTAP Species likely to have been Missed

It has become an habitual oversight for Flora Consultants to omit the above ROTAP species from mining proposal EA's in Ben Bullen SF. Recent EA' for Baal Bone Colliery omitted them from flora assessments (Umwelt[10], Gingra[11]), as did Invincible Colliery and Cullen Valley Mines (Lembit[18], Gingra[17], Cumberland Ecology[19]), and Pine Dale Mine (GCNRC[20,21]).

It is therefore highly likely that other ROTAP species have been missed. The most likely are:

- *Thesium australe* - occurs 2.8 km south at Pine Dale in similar habitat to the proposed Invincible - Mt Piper Coal Conveyor easement, and Fish River pipeline easement behind Cullen Bullen Cemetery. Plants are parasitic, ruling out 'replanting', 'relocation' options.
- *Banksia penicillata - ROTAP 3RCa* - Recorded 5km north-west of Proposal Area, may occur.
- *Diuris aequlis* – E1 – may occur. LEG recorded an unidentified all-yellow Diuris 3.5 km to the south near Pine Dale mine.
- *Euphrasia spp* – a yet to be identified species found 1.8 km SE at Pine Dale Mine. None are currently recorded for Ben Bullen SF[15] (Euphrasia species make up a sizeable proportion of threatened taxa listed under the EPBC Act. 14 species are listed as Extinct; Critically Endangered; Endangered; or Vulnerable. A reason given for plants of this genus being rare is their parasitic nature. This rules out 'replanting', 'relocation' and probably 'offsets'

- *Genoplesium superba* – E1 – occurs 7.5 km ESE of proposal. In May 2012 LEG recorded an unidentified Prasophyllum/Genoplesium that had just finished flowering near Invincible.
- *Prostanthera cryptandroides* – Vulnerable – Recorded 5km north-west of Proposal Area. Great variation in leaf shape of Prostanthera spp near Project Area indicate it may occur.
- *Prostanthera hindii* – ROTAP 2RCa – Recorded 4km west of Proposal Area and may occur.
- *Prostanthera stricta* – Vulnerable – Recorded 24km north. Great variation in leaf shape and size of Prostanthera's recorded in and near the Project Area indicate it may occur.
- *Pseudanthus divaricatissimus - ROTAP 3RCa* – recorded 4 km west. Likely to occur.
- *Veronica (syn. Derwentia) blakelyi* - Vulnerable - Recorded 1.3 km SE near Pine Dale Mine, in similar Montane Gully Forest occurring over much of Coalpac Disturbance Area.

Few if any of these ROTAP species are likely to occur within any of the Biodiversity Offsets.

1.3.4 Confirmed Identifications

Whilst it has not been possible for LEG to send samples of all 400+ plant species occurring in Ben Bullen SF to the NSW Herbarium for identification, samples that have been confirmed are:

- *Acianthus fornicatus* - Dr P Weston by email. Not previously recorded in Ben Bullen SF
- *Boronia rubiginosa* - BIS 16400: Not previously recorded in Ben Bullen SF
- *Chiloglottis seminuda* - Dr P. Weston by email. Not previously recorded in Ben Bullen SF
- *Commersonia* (syn *Rulingia) dasyphylla* – BIS 16400: New recording for Ben Bullen SF
- *Euphrasia spp* – BIS 17283: Not previously recorded in Ben Bullen SF
- *Leionema lamprophyllum subsp. orbiculare* - BIS 16400
- *Micromyrtus sessilis* - Dr Peter Weston by email. Not previously recorded in Ben Bullen SF
- *Persoonia marginata* – BIS 16486: New record for Ben Bullen SF
- *Prostanthera granitica* – Dr Barry Conn by email
- *Prostanthera hindii* - BIS 16400: Not previously recorded in Ben Bullen SF
- *Prostanthera howelliae* - BIS 15761
- *Prostanthera saxicola var montana* - BIS 16400: New record for Ben Bullen SF
- *Veronica (syn. Derwentia) blakelyi* - BIS 16400: New record for Ben Bullen
- *Zieria compacta* – BIS 16400: Not previously recorded in Ben Bullen SF

Few if any of these species are likely to occur within any of the Biodiversity Offsets.

1.3.5 Unique Vegetation Associations will be lost

Ben Bullen SF contains a number of unique vegetation associations which occur nowhere else, and will be destroyed by this proposal. Few if any occur in the proposed Biodiversity Offsets -

- Vegetation in Ben Bullen SF contains of plants at the western limit of the Sydney Bioregion, eastern limit of the Western Bioregion, and rare Capertee Valley species.

- The DECCW (2009)[23] Plan of Management for the Gardens of Stone National Park identifies 16 threatened or rare species in the park, six (6) of which are listed under the TSC Act (*Apatophyllum constablei, Haloragodendron lucasii, Eucalyptus cannonii, Prostanthera cryptandroides, Persoonia marginata*, *Grevillea obtusifolia* ssp *fecunda)*. Many are likely to also occur in the adjacent Ben Bullen SF and the Proposal Area.
- The DECCW (2009)[23] Plan of Management for the Gardens of Stone National Park identifies that Pagoda communities have the highest conservation significance, and that other significant habitats occur as pocket-like environments such as alluvial gullies, pagoda heaths, and moist forest. Alluvial gullies, moist forest, pagoda heaths are prevalent in the Proposal Area. Only 16 Ha of moist forest is replaced by Offsets.
- Washington[24] identified 440 flora species within the Gardens of Stone National Park, including a number of species at the geographic limits of their known distribution, including *Xanthorrhoea johnsonii, Brachyscome microcarpa, Darwinia fascicularis* ssp. *oligantha*, *Marsdenia viridifolia, Astroloma pinifolium* and *Eremophila deserti*. Many are likely to also occur in the adjacent Ben Bullen State SF and Proposal Area.
- Bell (2008)[16] identified 94 taxa of conservation significance within Wollemi National Park. Ben Bullen SF is contiguous with the Wollemi National Park, and any or all 94 species of conservation significance have potential to occur within the Proposal Area.
- Critically endangered Box Woodland also containing Vulnerable Capertee Stringybark AND Vulnerable Clandulla Geebung is unlikely to occur anywhere else in the world.
- Ben Bullen SF has more Lamiacea species than anywhere else in the region, in particular 9 Mint Bushes including *Prostanthera cryptandroides ssp cryptandroides* (V), *P. hindii (2RCi), P. stricta (2V), P. granitica, Prostanthera howelliae, P. saxicola var montana, P. saxicola var saxicola, P. rhombea, and Prostanthera sp. C sensu Conn (1992).* Few if any of these Prostanthera species are likely to occur within any of the Biodiversity Offsets.

2. INADEQUATE BIODIVERSITY OFFSETS

The EA states "environmental offsets, should as a minimum be commensurate with the magnitude of the impacts of the development and ideally deliver outcomes that are '*like for like*'".

The assessment below clearly shows that the proposed offsets are not representative of the vegetation types and flora biodiversity values that will be lost. They largely involve replanting native vegetation, or assume that natural regeneration will occur on cleared land over time.

Some $23 million will reportedly be spent funding the offset properties, over half of which will be wasted trying to replant cleared grasslands with native species. This money could be better spent buying intact bushland containing the relevant threatened plant species in undisturbed natural habitat, or better still, mining an already cleared site and leaving Ben Bullen SF alone.

2.1 EXISTING OFFSETS:

- Lot 1, DP 180294 "Renown Farm" – 18 Ha of degraded woodland, degraded grassland, degraded waterways, and polluted water storages (ie. The dam downstream of Invincible)

- Lot 112, DP 877190 – 82 Ha of degraded weed infested grassland with a few scattered trees
- Lot 113, DP 877190 – 14.5 Ha of degraded weed infested grassland with scattered trees
- Cullen Valley Mine Habitat Compensation Area – 51.43 Ha including Persoonia marginata in NE cnr of Ben Bullen SF. This is publicly owned State Forest and should not be included

Total Existing Offsets: 114.5 Ha of degraded grassland/waterways/polluted water storages

2.2 PROPOSED BIODIVERSITY OFFSET PROPERTIES

Hillcroft Offset

- 1097 Ha, of which 107 Ha will be open-cut mined, and over 455 Ha of which is grassland
- Williwa Creek is lined with Blackberry, Scotch Broom and a range of other exotic weeds
- Reportedly contains 5530 individual *Eucalyptus cannonii* and 76,676 individual *Persoonia marginata* – for the latter this is gross exaggeration, LEG has counted just 140 plants!
- It is noteworthy that Cumberland Ecology also claim that 17,600 individual *P. marginata* occur in the Cullen Valley Mine Habitat Compensation Area. Yet LEG has walked the entire area along 10 m transects and counted no more than 600 plants – a 3000% exaggeration!
- One Booroolong Frog was allegedly caught and 3 others were heard - it must be a very pollution tolerant frog, because Portland Sewage Treatment Plant dumps into Williwa Ck.
- The EA says *'…only small sections of Williwa Creek contain suitable habitat, as large areas of the creek were degraded and contained vehicle tracks, steep earthen banks, deep pools and very little cobblestone sites. No frogs were detected in Dulhunty's Ck due to degraded habitat."*
- The EA does not mention fencing to exclude stock grazing from the creek banks, undisturbed bushland, proposed 'revegetation' areas, or the proposed 'rehabilitation' areas.

Yarran View Offset

- 450 Ha, over half of which is grazed grassland. The EA says: *'This undulating terrain, on rich basalt soils'*…….Hardly a representative offset for sandstone soil based vegetation??
- Page 6.26 of Appendix J says: *"A dominant shrub layer of 40% or more discounts this vegetation unit as being Box Gum Grassy Woodland listed under the EPBC and TSC Act",* …….but the EA then contradicts this by claiming that Yarran View contains 186 Ha of Commonwealth Listed Box Gum Woodland, and 256 Ha of non EEC native vegetation?

Hillview/ Billabong Offset

- 83 Ha of largely degraded grazing land. They say sheep grazing, but the Munzer's also had Angus Cattle for many years.
- Riddled with feral Radiata Pine, St Johns Wort, Thistles, Blackberry, Cape Broom.
- Polluted waterway flowing from Invincible Main Dam. Salinity tested by LEG at 900+ EC.
- Has coal reserves underneath it, and is next door to Centennial Ivanhoe North open-cut mine. There is no guarantee that Centennial and/or Coalpac won't mine it in future.

Hyrock Hartley Offset

- 240 Ha of non EEC vegetation (E. sieberi – E. piperita) plus an area of EPBC listed Temperate Highland Peat Swamps on Sandstone, TSC listed Blue Mountains Swamps of the Sydney Bioregion.
- Does contain 16.16 Ha of Montane Gully Forest, the only replacement 100+ hectares of Montane Gully Forest that will be lost north of Invincible.

Total Proposed Offsets: 1000 Ha of apparently intact bushland, and 870 Ha that will either be open-cut mined, or has been grazed to death grassland, drained by polluted waterways.

2.3 NET BIODIVERSITY LOSS

No Flora Assessment appears to have been done for these Biodiversity Offsets, however:

- At best 958 Ha[1] of pristine publicly-owned Ben Bullen State Forest will be turned into rubble, and be offset with at best 1000 Ha of apparently intact bushland.
- Much of that 1000 Ha of intact bushland is non-EEC vegetation, with assumptions made that critically endangered Grassy Box Woodland, and Vulnerable Capertee Stringybark and Clandulla Geebung will naturally regenerate in time – a huge unproven assumption.
- Only 16.16 Ha is Montane Gully Forest, yet large areas will be cleared North of Invincible.
- No offset is likely to contain Pagoda Daisy (*Leucochrysum graminifolium*) – ROTAP 2R
- No offset is likely to contain *Acacia asparagoides* - ROTAP 2R
- No offset is likely to contain *Philotheca obovalis* – ROTAP 3RCa
- No offset contains *Lieonema lamprophyllum ssp orbiculare* - RECOMMEND ROTAP 2R-P3
- No offset for *Acrotriche rigida*. The only known populations in Ben Bullen SF will be lost.
- No offset is likely to contain *Astroloma humifusum.* Best populations in Ben Bullen SF lost
- No offset is likely to contain *Prostanthera cryptandroides* (V), *P. hindii (2RCi), P. stricta (2V), P. granitica, Prostanthera howelliae, P. saxicola var montana, P. saxicola var saxicola, P. rhombea,* or *P. sp. C sensu Conn (1992).* Net loss of rare Mint Bush species.
- No offset is likely to contain She-oaks to replace *Allocasuarina littorlalis, A. distyla* and *A. nana*. Huge net loss of food sources for Vulnerable Gang Gang's, Glossy Black cockatoo's.
- No offset (other than maybe Hillcroft) is likely to contain *Bursaria spinosa ssp lasiophylla* to replace 4 populations that will be lost. Net loss of endangered Purple Copper Butterfly
- No offset for *Coopernookia barbata* - best known populations/habitat in Ben Bullen SF lost.
- No offset is likely to contain *Coprosma quadrifida* or *C. hirtella* (Montane Gully Forest).
- No offset is likely to contain *Correa reflexa* (Red flowering form) - the only known populations we know of in Ben Bullen SF and the Lithgow LGA will be lost.

- No offset for *Daviesia genistifolia* (only known populations in Ben Bullen SF will be lost)
- No offset is likely to contain *Dodonaea boroniifolia*, *D. multijuga* or *D. sinuolata*. The only known population of *D. sinuolata* in Ben Bullen SF will be lost.
- No offset is likely to contain *Macrozamia spiralis.* The only known plant in Lithgow LGA lost.
- No offset is likely to contain *Melichrus erubescens,* rare in Ben Bullen SF and Lithgow LGA.
- No offset is likely to contain *Ochrosperma oligomerum,* which has a restricted range.
- No offset is likely to contain *Phebalium squamulosum ssp. ozothamnoides,* restricted range.
- No offset for *Philotheca myoporoides ssp. myoporoides.* 1 of only 2 known populations lost.
- No offset is likely to contain *Pomaderris eriocephala* or *P. lanigera.*
- No offset is likely to contain *Rulingia (syn Commersonia) dasyphylla* - the only known population in Ben Bullen SF may be lost if highwall mining causes cliff falls above Invincible.
- No *Styphelia triflora* – the best known populations/habitat in Ben Bullen SF will all be lost.
- The offsets are not likely to contain any of the huge range of 20+ Orchid species that will be lost. The best known orchid populations/habitat in Ben Bullen SF will be lost.
- No offset for *Thysanotus tuberosus* - the best populations/habitat in Ben Bullen SF lost.
- No *Zieria aspalathoides* – the best known populations/habitat in Ben Bullen SF will be lost
- No *Zieria compacta* - 1 of just 2 known populations in Ben Bullen SF may be lost.
- Probably no Superb Lyrebird's *(Menura novaehollandiae)* or suitable habitat.

3. ADVERSE IMPACTS ON PAGODA LANDSCAPES

Despite hollow reassurances that highwall mining in multiple coal seams beneath cliff lines and pagodas will be strictly controlled by the Subsidence Management Plan process, LEG members are only too familiar with how the Subsidence Management Planning Process has failed before.

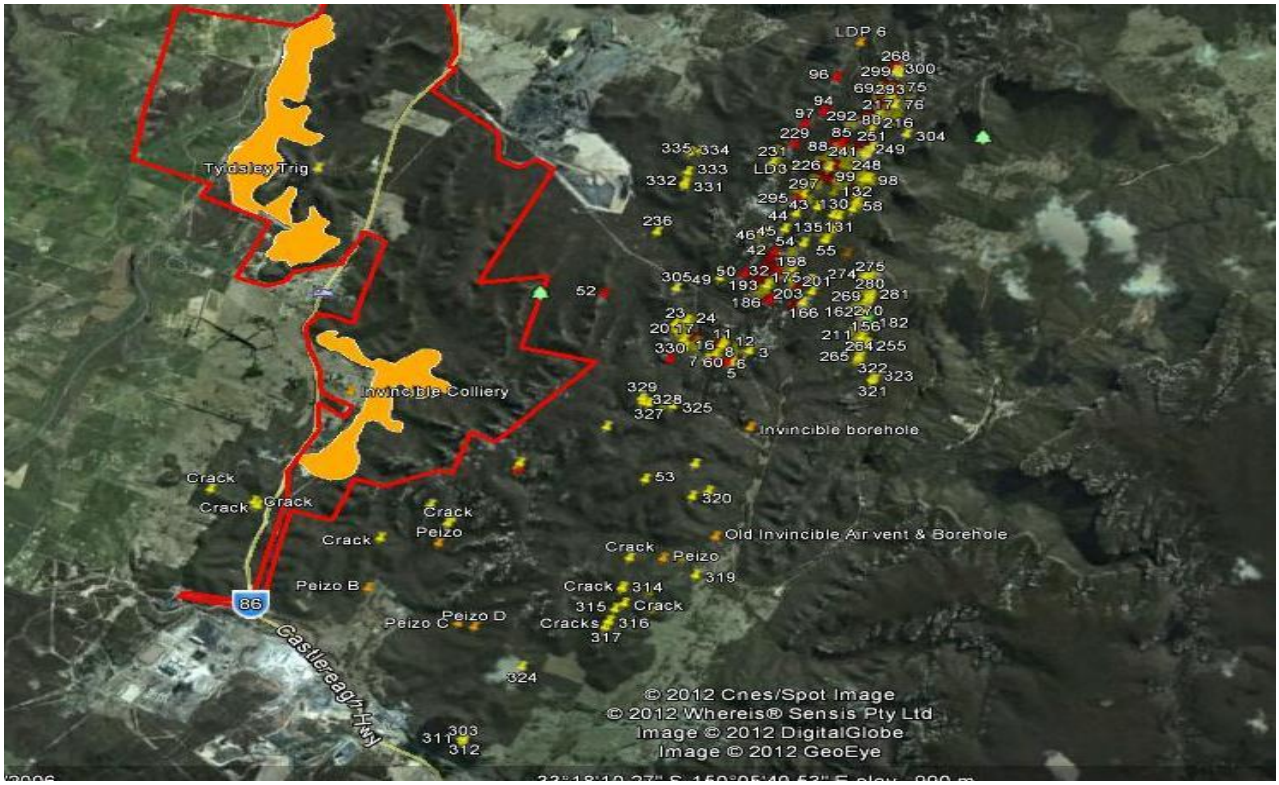
100's of cliff falls and 1000's of surface cracks were allowed to occur above Baal Bone Colliery Long Wall Panels in Ben Bullen SF. Similarly many cliff falls, cracks, and nationally endangered swamps were allowed to die on Newnes Plateau above Springvale and Angus Place Collieries.

LEG has recorded numerous cracks above the old Invincible Colliery 'bord & pillar' operations, and are of the view that the Proposal Area is already far too unstable to sustain more mining.

The cumulative subsidence already unstable old mine workings, PLUS blasting vibration, PLUS highwall mining in up to 5 coal seams, PLUS dewatering of the old mine workings - may all lead to far greater subsidence damage than has occurred in the past. LEG does not accept the EA's prediction of just 2cm of subsidence movement attributable to mining.

Only 3% of the total coal resource or 1.9 MT is proposed to be extracted by highwall mining. This technique is far too dangerous for workers and machinery, and should not be attempted in such a scenic and biologically diverse area, nor in such a geomorphologically unstable area.

Map: Location of Cliff Falls (Red Place marks) and Surface Cracks (Yellow Place marks) recorded by LEG near proposal area



Washington and Wray[25] report that 'platy pagodas' are a '*uncommon and significant geomorphic landscape feature, and are distinguished by the extent and regularity of their ironstone banding*.' The authors are 'not aware of any other rock formations in Australia or overseas that mimic the geomorphology of platy pagodas' that are '*distinct and significant geomorphological features, even by world standards'* (Washington and Wray, page 141).

Much of the core pagoda area occurs outside protected areas, principally on Newnes Plateau and in Ben Bullen SF. The authors are concerned that the scenic, cultural and geoheritage values of the pagoda landscapes have not been officially recognised and conclude that platy pagodas '*deserve full and expanded recognition as a significant part of the geodiversity and geoheritage of the Blue Mountains region' (Washington and Wray, page 142).*

The EA makes only passing reference to pagodas, and fails to accurately map their full extent in the Proposal Area. LEG does not believe that these pagoda formations will be protected by the proposed 50 metre set-back from open-cut mining and the 100 metre monitoring zone.

There is no adequate control of vibration from blasting. <u>Blasting is proposed 4 times/week, 20 times/month, 240 times/year, or a total of 5040 blasts over 21 years – all just 50 metres from the pagodas and cliff lines!!!</u> The mine void being so close to the cliffs and pagodas may increase the stresses and vibration movement from blasting due to reduced lateral support.

Instead of the proposed 50 metre set back and highwall mining under pagodas, open-cut operations should not be allowed to intrude into the gullies below the escarpment as the slopes act as buttresses for these cliff and pagodas. Open-cut mining should not occur on these steep areas in anyway, because the resultant open-cuts are far too steep to effectively rehabilitate.

4. INADEQUATE REHABILITATION STANDARDS

Despite hollow reassurances from Colapac in the EA, the company's past record of rehabilitation at Cullen Valley Mine is very poor. Mining commenced in 1998, and 14 years later less than 10% of the 4 kilometre scar along the western side of Tyldsley Hill has any greenery on it whatsoever.

Canyon Colliery has featured in the media on numerous occasions[5,6,7]. No one can blame Coalpac for avoiding its rehabilitation responsibilities when the DII's has such lax standards of compliance and enforcement. However the community cannot be blamed either for believing that Coalpac and the DII's 'do nothing' approach at Canyon Colliery will apply equally to the current Proposal.

In any event, the proposed open-cuts are so steep in places that they are likely to exceed the angle-of-draw, where nothing including soil can be prevented from slipping downslope.

These proposed mining areas can never be rehabilitated to anything that will remotely resemble the original hydrology, biodiversity and geodiversity of the Gardens of Stone Reserve Proposal.

Appendix J reviews the existing rehabilitation and actually includes the limitation: "*The native vegetation communities in surrounding lands has favoured specific geologies and hydrological preferences over very long periods of time, and the preparation of the rehabilitation sites after mining is unlikely to support entirely consistent landforms. As such the complexity derived from native vegetation remnant can only be an indicative target.*"

In other words, the rehabilitated areas have absolutely no chance of ever matching the complexity and diversity of the original native ecosystems.

Because of the inadequacies of the Flora Assessment previously alluded to, Coalpac actually do not have any reliable pre-mining assessments of biological diversity for previously mined areas upon which to base the quality of the current rehabilitation performance. The benchmarks used do not provide an accurate measure of lost floristic diversity. Assessments of other communities or sites that were not mined can only give an approximate guide.

The targets used for species diversity in Appendix J are based on data generated from surveys of just two undisturbed reference sites nearby. This poor sampling means that pre-mining plant diversity has been grossly underestimated. In any case the restoration does not even restore half the original diversity of these two small reference sites. If properly assessed, the actual biological diversity of the rehabilitated areas is likely to be far less than these estimates.

Plant species diversity for the rehabilitation sites decline in the oldest age class (year 2002). An alternative explanation to that given for this observed decline may be that the Acacia over storey in the oldest age class has begun to die off, with adverse consequences for species diversity. LEG is concerned that when the Acacia over-storey does die-off, aggressive weeds like Genista, Scotch Broom, Blackberry, and St John's Wort will take over the rehabilitation areas.

Lack of rehabilitation is a sore-point for almost everyone LEG has spoken to in Cullen Bullen. A little greenery can work wonders – but no amount of spin will quell community anger about apparent inaction on mine rehabilitation. Quality rehabilitation must be a very high priority.

5. IMPACT ON WORLD HERITAGE VALUES

The Greater Blue Mountains World Heritage Area (GBMWHA) was inscribed on the World Heritage List in 2000 for its "outstanding natural values including the biodiversity of its plant and animal communities, and its vegetation dominated by Australia's unique eucalypts."

The GBMWHA Advisory Committee has long recommended that it be renominated to the World Heritage List for the geodiversity, cultural heritage and scenic values for which it was originally nominated, but did not get listed. The Federal Government supports such a proposal and has included the GBMWHA and a number of adjacent reserves, including the Gardens of Stone Stage 2 proposal, on the 'Priority List' for National Heritage List re-assessment.

Mr Keith Muir of the Colong Foundation for Wilderness has advised that in 2006 the NSW Department of Environment and Conservation considered Ben Bullen State Forest for addition to the national park estate, and that the NSW Office of Environment has since identified this state forest as its first priority for reservation in the region.

Protecting the geodiversity, cultural heritage and scenic values of Ben Bullen SF is therefore an important initial step in the World Heritage re-nomination process. The creation of a huge scar from open-cut mine will clearly detract from the scenic value of this gateway to the GBMWHA.

Open-cut mining in Ben Bullen SF, including the Coalpac Project, is therefore contrary to Commonwealth, State and GBMWHA Advisory Committee long-term plans for this unique area.

Recent media exposure[5,6,7] regarding Zinc and Nickel pollution of the Grose River within the GBMWHA from Canyon Colliery is highly relevant, because Coalpac are the owners of Canyon Colliery and are responsible for this pollution.

The 'Do nothing' approach of Coalpac, the OEH, and the DII at Canyon Colliery is nothing less than gross environmental negligence. If this is how they have treated a World Heritage Area in the past, then it sets a frightening precedent for the western entry to the Gardens of Stone.

6. IMPACT ON INDIGENOUS HERITAGE VALUES

LEG has serious concerns about the accountability of previous Heritage Assessment's for mining proposals in Ben Bullen SF. In January 2010 LEG found an Aboriginal Hand Stencil site in a cave overhang east of Baal Bone Colliery, and decided to check with the then DECCW whether this site had previously been recorded.

It was in fact a new find – the site had not previously been registered on the Aboriginal Heritage Information Management System (AHIMS) database.

This Rock Art site was in the north-east corner of the Baal Bone Colliery mine lease, and within the subsidence zone of Long Wall Panels 20-24. No less than eight (8) archeological surveys had been undertaken since 1989, the most recent in 2009, four in the NE corner (Brayshaw 1989, Kohen 1995, Kohen 1996, Ozark 2009). Yet this site remained unreported!

Key surveys were–

1. Brayshaw and Haglund surveys from (Stone 1989) Brian Stone Environmental Services, *Environmental Impact Statement, Baal Bone Colliery*. Report to Wallerawang Collieries.
2. Kohen (1992 a). Archaeological Survey of the Proposed Open Cut extension to the Baal Bone Colliery. Report to Coalex.
3. Kohen (1992 b). The impact of longwall mining on Aboriginal sites. The southeast extension to the Baal Bone Colliery. Report to Coalex.
4. Kohen (1995). Archaeological Survey of the Proposed Open Cut extension to the Baal Bone Colliery. Report to Coalex.
5. Kohen (1996). Archaeological Survey of the Proposed Northern extension to the Baal Bone Colliery. Report to Wallerawang Collieries.
6. OzArk (2007 a). Indigenous Heritage Assessment for Subsidence Management Plan over three proposed longwalls (LW29 – 31) Baal Bone Colliery Ben Bullen State Forest, Cullen Bullen, NSW. Report for Xstrata Coal.
7. OzArk (2007 b). Indigenous Heritage Assessment for Proposed 1.7 km, 11kV powerline easement and ventilation fan compound, Baal Bone Colliery Ben Bullen State Forest, Cullen Bullen, NSW. Report for Umwelt Pty Ltd.
8. OzArk (2009) Indigenous and non-Indigenous Heritage Assessment of areas within and adjacent to Baal Bone Colliery. Report for AECOM Pty Ltd.

LEG can only conclude that this Cave Art site was detected but not reported, to simplify the approvals process. If subsidence did cause this cave overhang to collapse and the Cave Art to be lost, there would be no record of it ever having existed. This is similar to the trend of submitting erroneous Flora Assessments to Commonwealth and State agencies – if a threatened species is lost, there will be no record of these plants ever having existed.

LEG has little confidence Coalpac or the current crop of Aboriginal Heritage Consultants. Indigenous heritage is non-renewable. Cave art cannot be rehabilitated, relocated or offset. Aboriginal people have cared for the Gardens of Stone area for at least 12,000 years.

The only hope is for the NSW Government to call for a comprehensive independent Heritage assessment before approving the destruction of these cliffs, cave overhangs, and pagodas.

7. VISUAL IMPACTS

LEG members are sickened by the erroneous claims that this Proposal will have negligible visual impact. Invincible Colliery claimed exactly the same in 2006 (App. No. 05/0065) – yet a huge ugly scar is now visible to all who travel 2km of the Castlereagh Hwy from the top of the Great Dividing Range to Cullen Bullen.

The huge scars at Cullen Valley Mine are visible from as far away as Portland! No doubt the EA for that mine also said there would negligible visual impact, but the fine print probably said *"Not visible to the visually impaired on a pitch black night".*

The Coalpac Consolidation Project proposes to clear a further **958 Ha**[1] of pristine publicly-owned Ben Bullen State Forest, and will scar the landscape for 6 km of the Castlereagh Hwy from the top of the Great Dividing Range west to red Sp[rings Road. No amount spin can alter that.

8. POLLUTION OF WATERWAYS

Below is an extract from LEG's submission on 30 October 2007 opposing the Invincible Colliery Modification for Coal Augering (MP 05_0065 MOD 2). This is once again highly relevant, because once again Coalpac are claiming that this Proposal will have no impact on the Coxs River, but they make no commitment to close the 2 boreholes in Long Swamp, Ben Bullen State Forest.

SEPP 58 - IMPACT ON SYDNEY DRINKING WATER SUPPLY

As in the previous application in May 2006 for the Extension of Invincible Colliery (05_0065), the proponent deliberately misled the consent authority by downplaying the fact that this proposal will have an impact on the Sydney drinking water catchment, and therefore SEPP 58 should apply.

Whilst the mine may be in the Macquarie River catchment, the underground mine workings extend underneath Long Swamp, birthplace of the Cox's River and part of Sydney's drinking water supply. Any dirty minewater dumped into these old mine workings will be discharged through a drainage borehole approved by the EPA in May 2007 (LD01) into the Cox's River catchment.

On 4th May 200 LEG lodged a submission on the Extension of Invincible Colliery (05_0065). LEG objected to plans to dump dirty mine-make water into old underground mine workings, as this had potential impact on Sydney's drinking water supply. The highly saline mine water could also damage the endangered ecological community (EEC) of Montane Peatlands & Swamps in Long Swamp.

The Sydney Catchment Authority (SCA) advised LEG in writing that they it not lodge a submission to that proposal at that time, because they too were misled into believing that this mine would have no impact on the Sydney water catchment.

In approving that proposal on 13 September 2006, the DoP said in the Response to Submissions that due to concerns raised by Lithgow Environment Group (LEG), Blue Mountains Conservation Society (BMCS), and the Nature Conservation Council (NCC) about this issue, that the Proponents had agreed not to dump their mine make water into underground mine workings or Long Swamp.

Yet just 6 months later, on 23 March 2007, CoalPac lodged a Licence Variation with the EPA to recommence pumping up to 4 ML/day from LD01 into the Cox's River. The EPA approved that licence variation, and pumping commenced in June 2007.

That decision shows the complete and utter contempt that Coalpac, the DoP, DECC, and the EPA have for the genuine concerns of LEG, BMCS, NCC, SCA, the drinking water supply of 4 million Sydney residents, and the environment in general.

Since Invincible Colliery's borehole (LD01) in Long Swamp commenced pumping in June 2007 salinity levels in the Cox's River downstream jumped virtually overnight from 30 to 1400 µS/cm. The ground in the swamp below the borehole is covered in a dense layer of toxic Iron and Manganese deposits, virtually all groundcover vegetation is dead, several young Eucalypts and Leptospermums have since died, the remaining Leptospermums are covered in black sooty mould (a certain indication of environmental stress), and no frog calls have been evident despite rain.

Photo 1 & 2: Iron & Manganese deposits - Invincible Colliery Drainage Borehole, Ben Bullen SF

Photo 3 & 4: Green/rust coloured algae which has dominated the Cox's River 2km downstream of Invincible Colliery Drainage Borehole in Ben Bullen SF since it commenced pumping in June 2007.

RECOMMENDATIONS:

LEG believes that it is in the best interests of protecting Sydney's drinking water supply, endangered ecological communities of Blue Mountains Swamps, aquatic life and the ecological integrity of the upper Cox's River catchment - that any approval must contain Conditions of Consent requiring that:

1. *All Invincible Colliery mine drainage boreholes in Long Swamp within Ben Bullen State Forest be immediately closed and permanently capped;*
2. *All mine water from Invincible Colliery be diverted into creeks flowing west into the Turon River and Macquarie River catchment, not into the Cox's River, or*
3. *To preferably pipe all mine-make water to Mount Piper Power Station just 3km away for use as cooling water, after treatment in Delta's reverse osmosis plant.*
4. *No POEO Licence variations to be approved afterwards that deliberately flout and weaken Conditions of Consent, as occurred after approval of the Extension of Invincible Colliery (05_0065) on 13 September 2006.*

LEG has since learned that mining companies in NSW are exempt from SEPP 58, just as they are exempt from almost all legislation designed to protect water quality and the environment.

LEG has also since learned that Coalpac re-opened the old Borehole LD1 in Long Swamp at the request of Delta Electricity as they needed the water because of the drought at that time.

This again raises questions about the relationship between local coal mines and Government-owned Delta Electricity. Coal mines are being forced by Delta to extract coal using the most environmentally destructive methods possible, and in this case were asked to ignore the dire implications of water pollution on an endangered swamp community and Sydney water users.

The EA identifies that eco-toxic effluent will continue to discharge at a rate of 4.25ML/day through the now decommissioned Baal Bone Colliery. This will lower groundwater levels in the interconnected Invincible and Old Invincible workings that are an unstated part of this open-cut proposal. These discharges damage Jews Creek Swamp and the Turon River. Coalpac must be required to take over monitoring of Baal Bone Colliery Licence Discharge Points LD3 & LD6.

The groundwater impact assessment and water balance assumes continued discharge via the Baal Bone Colliery (page 46, Appendix O). Without pumping, it will not be possible to access the coal pillars in abandoned workings of the Old Invincible and Invincible Collieries. The water levels in the old underground workings for the Baal Bone, Invincible and Old Invincible mines are to be kept low to permit mining of the Lithgow Seam within the proposed open-cut mine.

These workings must should kept flooded, as greater surface instability is known to occur once underground mines are dewatered, increasing the subsidence damage to cliffs and pagodas.

LEG also points out that water quality at Baal Bone Colliery's LD3 and LD6 is atrocious, and has worsened since mine closure. Salinity levels at LD3 averaged 1100 µS/cm from 2006 – 2011, but since mine closure the salinity has climbed to 1700 µS/cm. Iron and manganese levels remain high. This adversely impacts on aquatic life in Jews Ck, the Turon River, and Macquarie River.

LEG once again questions the EA's findings on the likely impacts on water quality. Despite the rhetoric, water quality at Coalpac mines is likely to be similar differ to Baal Bone, Ivanhoe North, Pine Dale, Lamberts Gully and all other local mines operating in the Lithgow Coal Seam. Regardless of whether this minewater is released into the Cox's River or the Turon River, the environmental implications for aquatic life and water consumers is exactly the same.

LEG strongly recommends that the **Sydney Drinking Water Catchment Audit 2010** be taken into consideration as part of this proposal. http://www.environment.nsw.gov.au/water/sdwc2010.htm

It provides the most recent comprehensive analysis of the current condition of the Coxs River catchment, and contradicts many of claims made by Coalpac. The most relevant sections are:

- Chapter 3: Land Use and Human Settlement, pages 30 - 32;
- Appendix C: Sub-Catchment Summaries, pages 9 - 20;
- Chapter 7: Audit Recommendations.

Chapter 3: Land Use and Human Settlement -

Case study 2: Upper Coxs River licensed discharges

Local environment groups and the Environmental Defenders Office have publicly raised concerns about unnaturally high concentrations of heavy metals in the Upper Coxs River and its tributaries. These metals were claimed to be present at elevated concentrations with respect to environmental guidelines and were suggested to be having a negative impact on both the river environment and the quality of Sydney's drinking water. The environment groups claimed that the elevated metals were directly attributable to the coal mining industry and to the two Delta Electricity power stations.

In July 2008 and February 2009 the DECCW and the SCA undertook a joint sampling program of the Upper Coxs River. The samples were analysed for an extensive range of contaminants including heavy metals. The results of this sampling indicated that a number of heavy metals were present in water samples at concentrations greater than ANZECC/ARMCANZ (2000) guideline values. These metals included aluminium, boron, copper, nickel and zinc. Articles in *The Sydney Morning Herald* (SMH, 2 December 2008, p.5; SMH 18 June, 2009, p.1; SMH, 19 June, 2009, p.1) highlighted potentially toxic concentrations of other heavy metals, for example arsenic and fluoride, from the Wallerawang Power Station discharge (often referred to as the 'blowdown'). Follow-up water quality and macroinvertebrate

sampling by DECCW in September–October 2009 confirmed a number of areas where contaminant levels were relatively high.

It is understood that in response to these concerns, Delta Electricity has implemented a number of improvements aimed at reducing salt loads and contaminants in its discharges to the Coxs River catchment. Delta is also currently in the process of constructing a reverse osmosis plant at Wallerawang Power Station and a pipeline to Mt Piper Power Station for treatment (Delta Electricity submission 2010a). DECCW has also been working closely with industry to try and address these issues.

The following sections provide a summary of the results of analyses of water quality and macroinvertebrates in the Upper Coxs River catchment (DECCW 2010b).

Water quality in the Upper Coxs River sub-catchment

Heavy metals

Analysis of total and dissolved metal levels in water samples collected from the Upper Coxs River catchment identified 4 distinct clusters of sites:

1. sites associated with and downstream of Wallerawang blowdown discharge
2. sites associated with Neubecks Creek
3. sites associated with Sawyers Swamp Creek below the ash dam
4. all other sites (with generally lower dissolved metal levels).

The water quality analyses indicated that dissolved metals and total metals were generally higher in waters downstream of the Wallerawang blowdown discharge, in Neubecks Creek and in Sawyers Swamp Creek below the ash dam. Relatively increased metal levels in water samples could be identified for at least 6–7 km downstream from the Wallerawang blowdown source (DECCW 2010b).

Salinity

Salinity is also an important issue in the Upper Coxs River and there are concerns about saline discharges affecting the aquatic ecology above and below Lake Lyell. Salinity has previously been shown to have an impact on species retention rates in Victorian and South Australian streams (Kefford et al. 2010) with species retention rates often decreasing as salinity levels increased. Wallerawang blowdown discharges are currently around 2500 µS/cm conductivity, while those of the minewater discharges are typically around 1200 µS/cm.

Streams high up in the Catchment typically have much lower conductivity levels (often between 20 and 100 µS/cm). If the major salt ions (sodium, calcium, magnesium and potassium) are considered, then the blowdown discharge and Neubecks Creek sites are identified as having elevated salt ion levels. The salt signature of minewater discharges is also very similar to that of the blowdown discharge. This is not surprising since minewater is currently transferred from Centennial Coal's operations to Delta Electricity and subsequently used for cooling water purposes. Some concentration of salts in the blowdown discharge is expected simply due to evaporation.

Investigation of historic water quality data generally indicated that, since the 1960s–1990s, salinity levels have noticeably increased in the Coxs River at locations upstream of the Wallerawang Power Station, downstream of the Great Western Highway, at Lake Lyell and downstream of Lake Lyell as far as Duddawarra.

Nutrients

In contrast to the metals and salt data, the nutrient data indicate alternative sources for the majority of nutrients in the Coxs River catchment. Sites in Farmers Creek downstream of Lithgow township and the Lithgow STP have elevated nutrient levels compared to most other sites in the catchment. Nutrient levels in Lake Lyell are also often elevated as a result of inflows from both Farmers Creek and the Upper Coxs sub-catchment. While recent improvements have been made to the Lithgow STP, this remains an important source of elevated nutrients in the Coxs River catchment. In addition, the urban areas around Lithgow are also potential contributors to elevated nutrients in Farmers Creek and Lithgow Council has recently undertaken an assessment of the environmental impacts of the sewerage collection systems (Aurecon 2009b).

Macroinvertebrates in the Upper Coxs River sub-catchment

Elevated contaminants in water were considered to be having an effect on the aquatic biota, including macroinvertebrates. DECCW sampled a large number of sites for macroinvertebrates in the Coxs River catchment in September–October 2009. The fauna assemblages at most sampled sites in the Coxs River catchment were dominated by pollution-tolerant taxa such as worms and chironomids. This was particularly evident in the Coxs River between the Neubecks Creek confluence and Lake Lyell; Farmers Creek downstream of the STP and Lithgow township; Neubecks Creek; and Sawyers Swamp Creek. The site on Kangaroo Creek downstream of the Angus Place discharge was found to have a depauperate macroinvertebrate community.

Analyses indicated that the invertebrate assemblages were influenced by the elevated salinity levels, with the assemblages of sites with elevated conductivity and salts being more similar to each other than to other sites with lower conductivities. There were two caddisfly genera, three mayfly genera and two dipterans that were collected only from sites of lower conductivity. Dragonflies and damselflies were less common at sites of higher salinity, and the total number of taxa collected from each site was generally lower with increasing conductivity. The invertebrate fauna collected from Farmers Creek downstream of the STP were indicative of nutrient pollution, having low diversity and being dominated by dipterans and oligochaetes.

Conclusion

The major conclusions of the DECCW (2010b) assessment were that:

- salinity and metals were elevated in river reaches of the Upper Coxs River subcatchment as a result of power station and mine water discharges, mine water runoff and re-use
- nutrients were elevated downstream of Lithgow township and STP
- these water pollutants were having a detrimental effect on the aquatic biota.

As a result of the above conclusions the Auditor considers that a reduction in the salt and metal loads in the Upper Coxs River sub-catchment is highly desirable and necessary. While efforts by industries have been made to reduce the level of contaminants in their discharges, at this stage this is not sufficient to protect the ecosystem health of the waterways. The Auditor therefore recommends that the Environmental Protection Licence limits for these discharges be reviewed with a view to reducing the heavy metal and salinity concentrations and loads being discharged to the Coxs River catchment.

Recommendation 4: DECCW review licence limits in the Upper Coxs sub-catchment for all licensed discharge points with a view to reducing the heavy metal and salinity concentrations and loads being discharged to the Coxs River catchment.

Appendix C: Sub-Catchment Summaries[29], pages 9–20

The Audit further states that:

One of the largest swamps in this area is Long Swamp in the Upper Reaches of the Coxs River. Long Swamp has been impacted by mine water discharges and 4WD tracks and is potentially threatened by longwall mining altering groundwater levels adjacent to the swamp (Aurecon 2009). Many areas of Long Swamp are still in good condition and giant dragonflies (Petalura gigantea) have been recorded in its upper reaches. Some areas of Long Swamp are experiencing increased desiccation for an unknown reason.

Chapter 7: Audit Recommendations[29]

All of the Audit Recommendations are relevant to this Referral, but specifically the following -

Recommendation 2: The Department of Planning should undertake detailed consideration of the potential cumulative impacts of all mining activities within the SCA Special Areas.

Recommendation 3: Where significant streams and wetlands in the Catchment are impacted by longwall mining there should be a requirement that these impacts are remediated at the expense of the mining company.

Recommendation 4: DECCW review licence limits in the Upper Coxs River subcatchment for all licensed discharge points with a view to reducing the heavy metal and salinity concentrations and loads being discharged to the Coxs River catchment.

Recommendation 6: The SCA continue to undertake follow-up monitoring at macroinvertebrate monitoring locations that have scored an AusRivAs rating of significantly impaired, severely impaired or extremely impaired where there is no obvious driver for an impacted rating. (eg. Nuebeck's Creek and Coxs River Lidsdale are rated 'significantly impaired" with "a consistent decline in macroinvertebrate health")

Recommendation 9: Lithgow City Council and Centennial Coal should ensure that water transfers from the Clarence Water Transfer Scheme are piped around, rather than flow through, Farmers Creek Swamp.

Recommendation 10: DECCW finalise its Draft Upland Swamp Environmental Assessment Guidelines in order to achieve consistency in the application of risk assessment methodology for swamps over areas of longwall mining in the Catchment.

Recommendation 11: DECCW and the SCA should finalise their classifications of wetlands to produce a complete and consistent coverage of wetlands in the Catchment.

Recommendation 20: The operators and regulators of sewage treatment systems in the Catchment should continue efforts to reduce nutrient loads.

Recommendation 26: The SCA in cooperation with other state and local government agencies explore ways to integrate individual monitoring programs into a broader ecosystem health monitoring program for the entire Catchment.

Recommendation 28: The SCA ensure these combined databases are readily available to be used in future catchment audits and/or other programs relying on assessments of catchment health.

9. UNCONTROLLABLE WEED INFESTATION

The EA and LEG record 3 Weeds of National Significance within the Proposal area - Blackberry (*Rubus fruticosus aggregate),* Scotch Broom *(Cytisus scoparius),* and Willows *(Salix spp).*

Disturbance by open-cut mining is likely to spread these weeds deep into Ben Bullen State Forest. The occurrence of Weeds of National Significance should be of concern to the DoP.

WEED INVASION AS A KEY THREATENING PROCESS

Two (2) Key Threatening Processes relating to weed species affect the proposal area -

- *Invasion and establishment of Scotch Broom* – LEG has identified Scotch Broom (*Cytisus scoparius)* in the Hillcroft Biodiversity Offset, and it probably occurs elsewhere. The Cullen Bullen area has a long history of infestation with Scotch Broom, a fact that could easily be checked by contacting the Upper Macquarie County Council (UMCC), the agency responsible for Noxious Weed Control in the Lithgow LGA. Regardless of whether the Proponent claims that Scotch Broom can be controlled, the seed remains viable in soil for 30 years or more, long after mine closure in 21 years. Massive soil disturbance and movement associated with open-cut mining will spread of Broom seed contaminated soil into previously undisturbed bushland of Ben Bullen State Forest.

- *Invasion of native plant communities by exotic perennial grasses* – African Lovegrass (*Eragrostis curvula*) occurs within the Proposal area. African Lovegrass is a Declared Noxious Weed in NSW. The DECCW final determination[1] for this KTP states that African Lovegrass is *"Invasive in disturbed areas, especially grasslands. Dominates the groundcover on low-nutrient soils. Has invaded heathlands, woodlands and grasslands in Victoria."* Massive soil disturbance by mining over 220 Ha will spread this highly invasive exotic grass into undisturbed areas of Ben Bullen SF.

[1] http://www.environment.nsw.gov.au/determinations/ExoticPerennialGrassesKTPListing.htm

Other weeds in the Coalpac area include but are not limited to *Crataegus monogyna* (English Hawthorn)*, Echium plantagineum (*Patterson's Curse), *Genista monspessulana* (Cape Broom), *Hypericum perforatum (*St Johns Wort*), Ligustrum sinense (Small-leaf Privet), Scabiosa atropurpureum, Cotoneaster franchetti*, *Pyracantha angustifolia*, *Rosa rubiginosa*, *and* feral Pines.

Below is an example of the likely management of open-cut mined areas and Biodiversity Offsets. A contractor is blanket-spraying St John's Wort along Angus Place – Mt Piper Haul Road, adjacent endangered *Thesium australe* and Purple Copper Butterfly populations. This occurs annually.

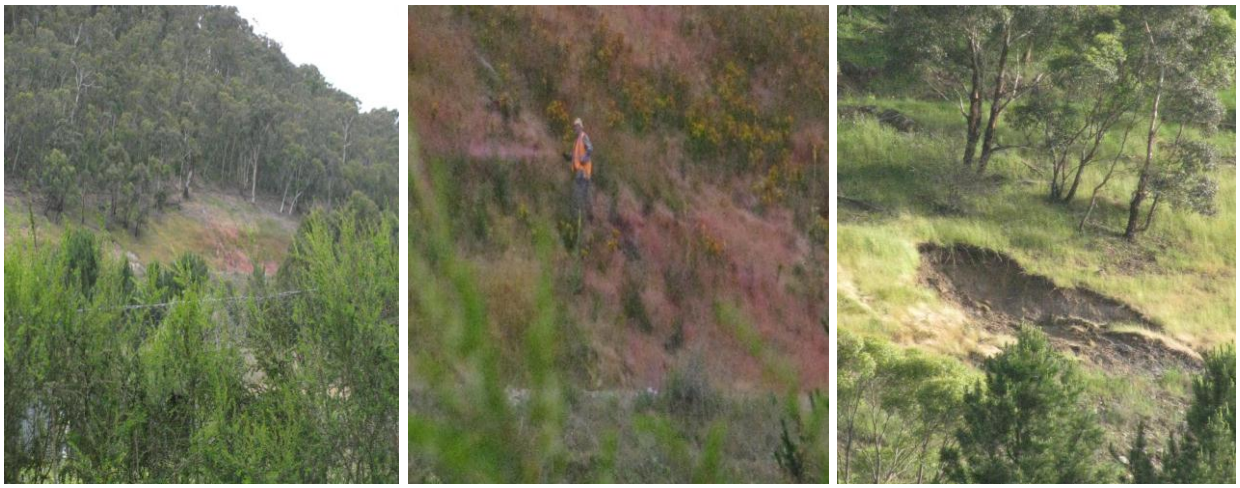


Photo: Spraying adjacent Angus Place-Mt Piper Haul Road December 29/12/2012. Landslip in same area 5/12/2010

There appears to be no attempt to avoid off-target damage to native plants. Any *Thesium australe, Derwentia blakelyi, or Bursaria spinosa ssp. lasiophylla* occurring along this section of the Haul Road will have been poisoned. The only recorded *Leptosperum rotundifolium* in the Lithgow LGA was killed by this spraying in December 2011. This steep slope has been sprayed so often that all the deep-rooted plants holding the slope together are dead, and a landslip occurred in 2010.

All of the above can he avoided by not allowing mining companies to open-cut large tracts of high conservation value State Forests such as Ben Bullen SF, and permanently protecting these priceless natural areas by appropriate reservation!

10. FOREST CLEARING AND GREENHOUSE GAS IMPLICATIONS

LEG refers to submissions from BMCS and the Colong Foundation and the following article -

Forests soak up third of emissions: study

http://www.theage.com.au/environment/climate-change/forests-soak-up-third-of-emissions-study-20110715-1hhl2.html#ixzz1SBO1m3Pk

The Age, *July 15, 2011 - 5:07PM*

Forests play a larger role in the earth's climate system than previously suspected for both the risks from deforestation and the potential gains from regrowth, a benchmark study has shown.

The study, published in *Science* on Thursday, provides the most accurate measure so far of the amount of greenhouse gases absorbed from the atmosphere by tropical, temperate and boreal forests.

"This is the first complete and global evidence of the overwhelming role of forests in removing anthropogenic carbon dioxide," said co-author Josep Canadell, a scientist at CSIRO, Australia's national climate research centre in Canberra.

"If you were to stop deforestation tomorrow, the world's established and regrowing forests would remove half of fossil fuel emissions," he told AFP, describing the findings as both "incredible" and "unexpected".

Wooded areas across the planet soak up fully a third of the fossil fuels released into the atmosphere each year, some 2.4 billion tonnes of carbon, the study found.

At the same time, the ongoing and barely constrained destruction of forests - mainly in the tropics - for food, fuel and development was shown to emit 2.9 billion tonnes of carbon annually, more than a quarter of all emissions stemming from human activity.

Up to now, scientists have estimated that deforestation accounted for 12 to 20 per cent of total greenhouse gas output.

The big surprise, said Canadell, was the huge capacity of tropical forests that have regenerated after logging or slash-and-burn land clearance to purge carbon dioxide from the atmosphere.

"We estimate that tropical forest regrowth is removing an average of 1.6 billion tonnes of carbon each year," he said in an email exchange.

Adding up the new figures reveals that all the world's forests combined are a net "sink" for 1.1 billion tonnes of carbon, the equivalent of 13 per cent of all coal, oil and gas burned across the planet annually.

"That's huge. These are 'savings' worth billions of euros a year if that quantity had to be paid out by current mitigation (CO2 reduction) strategies or the price of carbon in the European market," Canadell said.

The international team of climate scientists combined data - covering the period 1990 through 2007 - from forests inventories, climate models and satellites to construct a profile of the role global forests have played as regulators of the atmosphere.

In terms of climate change policy, the study has two critically important implications, said Canadell.

The fact that previous science underestimated both the capacity of woodlands to remove CO2, and the emissions caused by deforestation, means that "forests are even more at the forefront as a strategy to protect our climate", he said.

It also follows that forests should play a larger role in emerging carbon markets, he added. "The amount of saving which are up for grabs is very large, certainly larger than what we thought," Canadell said.

The UN-backed scheme known as REDD - Reduced Emissions from Deforestation and Degradation - allots credit to tropical countries in Latin America, Asia and Africa that slow rates of forest destruction.

It also provides a mechanism for rich countries to offset their own carbon-reduction commitments by investing in that process.

Two decades was not enough to discern possible long-term trends due to year-on-year variability due to fluctuations in weather, insect attacks and other factors.

But the tropics did show a clear decline in the capacity to soak up CO2 due to a so-called "once-in-a-century" drought in Amazonia in 2005.

The region suffered an even worse drought in 2010, beyond the time frame of the study.

The breakdown over the last decade for CO2 removal was 1.8 billion tonnes each year for boreal forests at high latitudes, 2.9 billion for temperate forests, and 3.7 billion for tropical forests.

Once deforestation and regrowth are taken into account, however, tropical forests have been essentially carbon neutral.

The clearfelling of a further **958 Ha**[1] of pristine publicly-owned Ben Bullen State Forest by Coalpac will add significantly to the already high total greenhouse impacts of this proposal.

11. INADEQUATE SEPARATION DISTANCES FROM A RESIDENTIAL AREA

This Proposal is far too close to sensitive receivers in the township of Cullen Bullen, and to children attending Cullen Bullen Primary School. The adverse environmental, amenity, and human impacts of noise, dust, blasting, and heavy coal truck transport on the residents of Cullen Bullen residents have been poorly managed in the past, and are likely to continue.

This is evidenced by a public petition presented to the Bathurst Electorate Local Member Mr Paul Toole opposing the mine, which contains **120 signatures from residents of Cullen Bullen** (population 198 in 2006); 99 from elsewhere in the Lithgow Local Government area and only 32 from outside the Local Government Area.

It is widely accepted that industrial emissions of noise, dust, and odours are less likely to exceed acceptable amenity levels the further they are located away from sensitive receivers – industrial impacts decrease with increasing distance from the source of the emissions.

The 2005 Western Australia Environment Protection Authority document ***"****EPA Guidance No 3 - Separation Distances between Industrial and Sensitive Land Uses"* provides detailed advice on the use of generic separation distances (buffers) between industrial and sensitive land uses to avoid conflicts between incompatible land uses. The recommended separation distance between an open-cut mine and a school is a minimum of **1.5 kilometres**

The South Australian EPA *"Guidelines for separation distances"* recommends separation distances between a residential area and coal handling and storage facility of **1 kilometre**, and **3 kilometres** for extractive industries.

The Central Council Natural Resources and Energy Policy Committee of the National Party of Australia (NSW) in its submission to the NSW Government's draft Strategic Land Use Strategy requested **a 5 kilometre buffer zone between towns and villages and open-cut coal mining**.

The only way to adequately, fairly and safely manage the adverse impacts of this Proposal is to ensure that adequate separation distances are maintained between sensitive receivers in the Cullen Bullen community and Coalpac's mining activities.

Based on the separation distances recommended by the WA EPA, SA EPA, and the National Party of NSW, this should be **a minimum of 3 kilometres, but preferably 5 kilometres.**

12. UNACCEPTABLE DUST LEVELS

The adverse health and amenity impacts of dust emissions from Cullen Valley and Invincible Mines on the residents of Cullen Bullen have been very poorly managed. Cullen Valley Mine was prosecuted $30,000 plus $15,000 in 2003 for causing dust emissions.

Coalpac are now proposing 4 blasts/week, 20 blasts/month, 240 blasts/year, or 5040 blasts over the 21 year mine life. Each of these blasts results in huge dust plumes which can't be managed by water trucks or other traditional methods. The only safe way to manage this dust is to require adequate separation distances as recommended by the WA EPA, SA EPA, and National Party of NSW, which are **a minimum of 3 kilometres, but preferably 5 kilometres.**

13. UNACCEPTABLE NOISE LEVELS

The adverse health and amenity impacts of noise from Cullen Valley Mine, Invincible Colliery, and heavy coal trucks hauling coal along the private haul road and Castlereagh Highway on the residents of Cullen Bullen have been very poorly managed in the past.

The only safe way to manage this noise is to require adequate separation distances as recommended by the WA EPA, SA EPA, and National Party of NSW, which are **a minimum of 3 kilometres, but preferably 5 kilometres.**

14. UNACCEPTABLE BLASTING IMPACTS

Coalpac are proposing 4 blasts/week, 20 blasts/month, 240 blasts/year, or 5040 blasts over the 21 year mine life. LEG would like to know whether anyone in the DoP has ever experienced first hand a single blast within a kilometre of their home? Then multiply that by 5040!!!

This is an obscene impost on the residents of Cullen Bullen, many of whom have already suffered damage to their homes from previous blasting at Cullen Valley and Invincible Mines.

Each of these blasts results in huge dust plumes which can't be managed by water trucks or other traditional dust suppression methods.

The only safe way to manage adverse impacts of blasting on the homes and residents of Cullen Bullen is to require adequate separation distances as recommended by the WA EPA, SA EPA, and National Party of NSW, which are **a minimum of 3 kilometres, but preferably 5 km.**

15. UNACCEPTABLE HEALTH RISKS

The adverse health from coal mining should be well known to the DoP. If not we recommend that you Google the NSW Department of Health website, the Doctors for the Environment website, and numerous public health reports that have emanated from the Hunter Valley.

The only safe way to manage adverse health impacts of open-cut coal mining on the residents of Cullen Bullen abd the children of Cullen Bullen Primary School is to require adequate separation distances as recommended by the WA EPA, SA EPA, and National Party of NSW, which are **a minimum of 3 kilometres, but preferably 5 kilometres.**

16. PROPERTY DEVALUATION

Australian culture traditionally favours land use that keeps heavy industrial activity out of residential neighbourhoods. The reasons range from safety to aesthetics and property values. A home represents a family's most valuable asset. In legal terms a home title deed equates to certain rights such as the air space above, views, a secure haven to raise kids…. the 'serenity'.

Coalpac's residential open-cut mining proposal challenges all of those values. The only way to manage this is to keep Coalpac **a minimum of 3 kilometres, but preferably 5 km from homes.**

17. UNACCEPTABLE OPERATING HOURS

Coalpac's residential open-cut mining proposal is seeking approval to operate 24 hours a day, 7 days a week. This is an obscene and totally unacceptable burden on Cullen Bullen residents.

Cullen Bullen is Zoned a Residential Village, not a heavy Industry or Extractive Industry Zone. Open-cut mining activities are incompatible with a Residential Zone.

The operating hours must not be extended beyond what they are currently.

18. PROPONENTS HISTORY OF POOR ENVIRONMENTAL PERFORMANCE

On 17 May 2012 Coalpac's Canyon Colliery again featured on ABC Lateline for causing toxic levels of Zinc and Nickel to pollute the Grose River and Greater Blue Mountains World Heritage Area.

On 20 June 2010 Coalpac featured in The Land with the headline ***"****One man approves his own project, another man's dream dies"*. In the article part-owner Mr Noel Craven gave a telling account of this company's attitude towards the environment, neighbours, the law, boasting that ''you don't even have to be qualified to write an environmental impact statement for an open-cut mine". ''Is that a problem?'' the Reporter asked. ''Well, it's not a problem for me,'' he said.

On 25 September 2008 Coalpac was fined $200,000 plus $55,000 in prosecution costs for producing 80% more coal at Invincible Colliery than their consent approved.

On 25 August 2008 Coalpac's Canyon Colliery again featured on ABC Catalyst for causing toxic levels of Zinc and Nickel to pollute the Grose River and Blue Mountains World Heritage Area.

On 5 May 2008 Coalpac featured in the Sydney Morning Herald with the 'Headline Disused mine leak is killing life in river', relating Canyon Colliery polluting the Grose River and GBMWHA.

In the 2006 Response to Submissions for Invincible Colliery, Coalpac claimed that the open-cut would not be visible from the Castlereagh Highway. Now look at it.

In the 2006 Response to Submissions for Invincible Colliery, Coalpac said a Borehole in Long Swamp had not been used since 1998 and they had no intention of using it. Within 6 months of approval Coalpac applied for an EPL Licence variation and commenced pumping 4 ML/day of the most eco-toxic water LEG has encountered locally into the Coxs River headwaters.

In July 2003 Cullen Valley Mine fined $30,000 plus ordered to pay the EPA's $18,000 costs after pleading guilty to allowing fine particle mining dust to be emitted from the Cullen Valley Mine.

These are just a few of many items which LEG has documented in the past 10 years. Cullen Bullen residents have many more reports. Our point being that this company appears to have walked a tight line between acceptable and unacceptable behaviour in the past.

The abrogation of responsibility in relation to pollution Coalpac was responsible for in the Grose River and a World heritage Area must certainly erodes any confidence that LEG or Cullen Cullen residents have for the rehabilitation plans the company has for Ben Bullen SF.

LEG members are unsure taht a leopard can change its spots – but too unleash it in one of the highest conservation areas in NSW is a gamble our group cannot support.

22. NO COAL HAULAGE ON PUBLIC ROADS/UNACCEPTABLE TRAFFIC SAFETY IMPACTS

LEG members believe that Cullen Bullen residents will have emphasised this point. The mud and dirt tracked onto the highway from Cullen Valley Mine and Invincible Colliery has been a major source of dust since 1998, yet only now is the company admitting to the problem. No further mining or coal transport should be approved until the Coal Conveyor to Mt Piper Power Station has been constructed.

23. BRIBING THE OEH / BIODIVERSITY IS FOR SALE

LEG members are outraged by the statement in the EA – *"Coalpac will support the progressive establishment of the GoS2 by providing a monetary contribution to OEH (or other relevant body) of $0.015 per tonne of coal sold throughout the life of the Project".*

Our members regard this as an attempt to bribe a government agency, or to put it another way to sell biodiversity for price. It is not dissimilar to Centennial paying $1.45 million disguised as an 'enforceable undertaking' to knowingly destroy the EPBC listed East Wolgan Swamp. What will be next – pay to BBQ a Tassy Tiger, or auction off Wollemi Pine's to chop down for a price?

We sincerely hope that this proposal does not set a precedent, and the OEH rejects it outright.

CONCLUSION

The members of Lithgow Environment Group believe we have provided a compelling body of evidence to demonstrate why the Coalpac Consolidation Project must be rejected.

Our group has not made any political donations that need to be disclosed.

We trust that our submission meets with your favorable consideration.

Yours sincerely,

Chris Jonkers
Natural Area Project Officer
on behalf of Lithgow Environment Group Inc.

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